Inflation Report
February 2010

National Bank of Poland
Monetary Policy Council

Warsaw, February 2010

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 Director General of the Economic Institute, Mr. Mateusz Pipień. 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.

Cut - off date for the data in the *Report* was 18 February 2010.

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.

Contents

Summary

In the second half of 2009 the global economy entered a recovery phase. This recovery was stimulated by expansionary fiscal and monetary policy. Incoming data point to a gradual recovery in developed economies. At the same time, activity in emerging economies increased significantly. The improvement in global economic activity in 2009 H2 was accompanied by a gradual rise in inflation in the world economy, which was driven mainly by the base effects connected with energy price developments in the world markets in 2008 and 2009.

In the recent period the situation in international financial markets has been stable and the main measures of risk have ranged at a relatively low level. Share price rises continued until the middle of January 2010. However, in recent weeks a strong selloff occurred on equity markets. At the same time, increasing fears about the fiscal standing led to a pronounced rise in yields on Treasury bonds in some euro-area countries as well as in some developed countries outside the euro area. Increased fears about the fiscal stability of some euro-area countries also contributed to a significant depreciation of the euro against the US dollar since December 2009. In the analysed period major central banks have continued to pursue easy monetary policy, including continued purchases of financial assets with the aim to support credit markets, while gradually reducing the scale of the purchases.

The improvement of global economic outlook contributed to the rising tendency in oil prices, observed in the global markets since March 2009, being maintained also in 2009 Q4 and at the beginning of 2010. Following a slump in 2009 Q4 and stabilisation in 2009 Q1-Q3 last months of the previous year saw a rise also in agricultural commodity prices in the world markets.

The annual growth of prices of consumer goods and services in Poland, following a decline in October 2009 to 3.1% y/y, rose gradually, reaching (according to GUS preliminary data) 3.6% y/y in January 2010, thus running slightly above the upper limit for deviations from the NBP inflation target. The growth of annual inflation in the analysed period was driven by the positive base effect connected with a strong decline in fuel prices a year before. Heightened annual inflation was also driven, to a large extent, by past increases in administered prices and by the earlier excise tax hikes. Inflation remained at an elevated level also because of the rapid, albeit weakening, growth in prices of food and non-alcoholic beverages and the earlier depreciation of the zloty.

The rise in headline CPI inflation was accompanied by a slight decline or stabilisation of the majority of core inflation measures. Core inflation has remained relatively high, which indicates that the past weakening of demand has not offset the increase in administered prices and excise tax rates as well as the effects of the earlier exchange rate depreciation. At the same time, the annual growth of producer prices (PPI) declined further in 2009 Q4 and at the beginning of 2010. On the other hand, the annual growth of import prices was running at a high level, albeit due to the zloty exchange rate appreciation a decline (in quarterly terms) in the zloty-denominated import prices deepened significantly in 2009 Q3.

Despite heightened headline CPI inflation, since the beginning of 2009, analysts' forecasts of inflation over an 11-month horizon have remained relatively stable at levels slightly lower or equal to the NBP inflation target. On the other hand, the objectified measure of inflation expectations of individuals remains close to current inflation.

Available data indicate an improvement in economic activity in Poland. In 2009 Q3 GDP in real terms increased by 1.7% y/y (as compared to 1.1% y/y in the previous quarter) and based on preliminary GUS data on GDP in 2009 it may be estimated that GDP growth increased to 2.9% y/y in 2009 Q4. In 2009 Q3 and Q4 net exports had the largest contribution to GDP growth. Moreover, the annual growth of GDP was driven by a rise in total consumption and in 2009 Q4 most likely also by a rise in investment in year-on-year terms. Following four quarters of strong inventory reduction, in 2009 Q4 this trend was significantly curbed, which resulted in the change in inventories having only minor negative contribution to GDP growth.

Private consumption growth in 2009 H2 accelerated slightly, yet remained markedly weaker than the multi-year average. Slow consumption growth was mainly the result of low growth in household disposable income, connected to a deterioration in the labour market situation, and clearly slower growth in consumption loans as compared with the previous years. Consumer sentiment surveys indicate a possible recovery in consumption demand in 2010 Q1.

In 2009 Q3 a decline in investment eased off and 2009 Q4 probably brought a rise in investment in year-on-year terms. Investment decline in the economy was limited throughout the whole year by a very strong increase in investment expenditure in the public finance sector. According to the business condition survey of the NBP, the outlook for corporate investment in 2010 is only slightly better than in 2009. The persistently low level of investment is driven i.a. by a relatively low degree of production capacity utilisation.

According to Ministry of Finance estimates the general government deficit in relation to GDP according to ESA95 doubled in 2009 and reached 7.2%. The growing fiscal imbalance is, on the one hand, the consequence of the slowdown of economic growth which has led to a significant deterioration in the sector's revenues, and, on the other hand, of the rise in the structural deficit in 2008-2009. The central budget deficit in 2009 reached PLN 23.8 billion (as compared to PLN 24.4 billion in 2008), which constitutes 84.9% of the annual plan following the amendment of the *Budget Act for 2009*. The decrease in the central budget deficit was, however, affected by a number of factors which did not occur in recent years. The analysed period brought a deterioration in the financial situation of local government entities and of the special purpose funds.

Following a strong decline at the turn of 2008 and 2009, connected with a slump in external demand, Polish exports have been gradually growing since 2009 Q2 as the global economic climate has been improving. The increase in the growth rate of Polish exports was supported by a continued recovery in the export sector of the euro area as well as a slower pace of inventory reduction in this economy. At the same time, the volume of imports increased in 2009 Q3, which was driven by a recovery in Polish exports that are characterised by relatively high import intensity and the appreciation of the zloty since March 2009.

The growth in gross value added in 2009 Q3 resulted mainly from the growth in the sector of market services and - to a lesser extent - in the construction sector. A minor negative contribution to the value added growth was recorded in industry. It is estimated that in 2009 Q4 the largest contribution to the value added growth was recorded in industry and in market services, accompanied by a still positive contribution of value added in construction.

Despite improved economic climate in the second half of 2009 the unfavourable situation persisted in the labour market which responds to changes in economic activity with some delay. In particular, the analysed period saw a further rise in unemployment rate. The past few months, however, have brought some signs of a gradual deceleration of negative tendencies in this market, i.a. in 2009 Q3 the reduction in the number of working hours decelerated and 2009 Q4 brought a stabilisation of employment in the enterprise sector. At the same time, following a decline started in 2008 Q4, the growth rate of nominal and real wages in the economy stabilised in 2009 Q3 and Q4. The rise in labour productivity growth, however, led to a further decline in the growth of unit labour costs.

Following a cut in June 2009, the NBP interest rates have remained unchanged. Likewise, interest rates in the interbank market have also been stable. The liquidity and credit risk premium included in the 3M WIBOR rate remained at a heightened level. The yields on Polish bonds have not changed significantly since the time of publication of the previous *Report.* Heightened differences have persisted between yields on long- and short-term bonds. The rises in Polish equity prices, initiated in March 2009, have continued over the past few months but lost momentum towards the end of 2009 and at the turn of January and February 2010 - similarly as in the world's major markets - a strong selloff occurred. In the second half of 2009 asking prices of flats in the primary and secondary markets, and sale prices in the secondary market in Poland’s largest cities were stable or displayed a slight falling tendency. Since the publication of the previous *Report* the nominal exchange rate of the zloty appreciated against the euro and the Swiss franc and depreciated slightly against the US dollar.

After falling in October-December 2009 the volume of loans to enterprises increased in January 2010, which was primarily connected with an increase in short-term loans. Growth in housing loans to households stabilised in the analysed period at levels which were only approx. 50% lower than in the period of a very strong surge in lending in 2007-2008. At the same time, consumer loans have slid down in month-on-month terms over the recent period, which may be primarily attributed to the fact that credit standards for granting such loans were tightened by most banks. After a sharp fall in the growth rate of broad money M3 in the first half of 2009, in the period September 2009 - January 2010 the annual growth of broad money M3 remained at a stable level of 7-8%.

Following a considerable improvement in the current account balance in 2009 Q1, mainly connected with a strong reduction in imports of goods, subsequent quarters saw a deepening of the current account deficit. On the other hand, according to preliminary estimates the current account deficit (in terms of four quarters) decreased to 1.6% of GDP at the end of 2009 (as compared to 5.1% at the end of 2008), while a small surplus of 0.1% of GDP was observed in the total current and capital account (as compared to a deficit of 4.0% of GDP at the end of 2008).

Minutes of the Monetary Policy Council decision-making meetings held in October, November, December 2009 and January 2010 together with the *Information from the meeting of the Monetary Policy Council* in February 2010 are presented in the chapter ”Monetary policy in October 2009 - February 2010”. Minutes from the MPC meeting held in February will be published on 18 March 2010 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 constant interest rates, there is a 50-percent probability that projected inflation will lie within the range of 1.3–2.2% in 2010 (compared to 0.8–2.2% in the October projection), 1.7–3.1% in 2011 (compared to 1.1–3.2%) and 2.6-4.6% in 2012. According to the February projection, annual GDP growth will remain, with a 50-percent probability, within the range of 2.1–4.1% in 2010 (compared to 0.8–2.8% in the October projection), 1.8–4.0% in 2011 (compared to 2.2–4.2%) and 1.9–4.3% in 2012.

Chapter 1.

External environment of Polish economy

1.1. Global economic activity

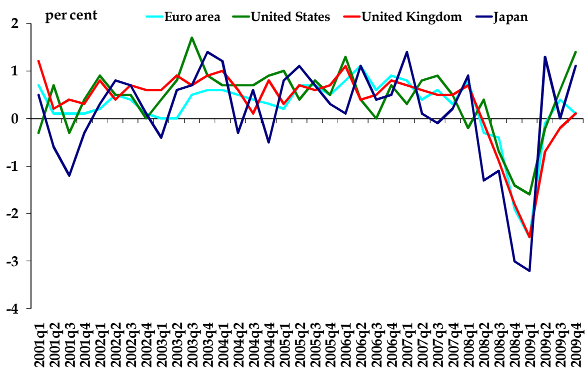
In the second half of 2009 the global economy entered a recovery phase[1]. This recovery was stimulated by considerable fiscal stimulus packages and expansionary monetary policy. Improvement in the global economic situation was also connected to a slower pace of decline in inventories, strongly reduced by enterprises in the previous quarters. Global business sentiment indicators point to further upward trend in global economic activity in 2009 Q4 and at the beginning of 2010[2].

Progressing recovery in the global economy was reflected in the growth of global trade. Following a slump in 2009 Q1 and a slight increase in 2009 Q2, the volume of global trade rose in 2009 Q3 by 4.0% q/q[3].

The recently released information, including GDP data, points to a gradual recovery in developed economies.

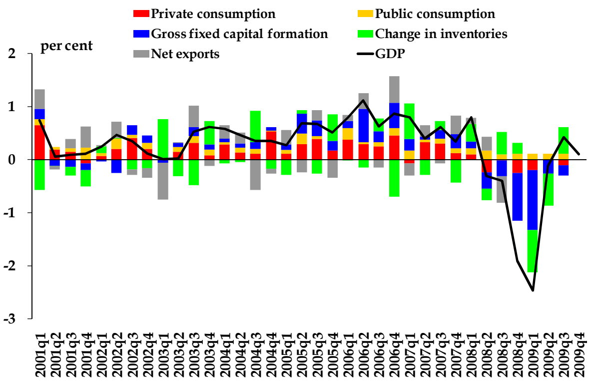
In the United States GDP grew in 2009 Q3 following four quarters of decline. Moreover, preliminary data for 2009 Q4 point to acceleration in GDP growth in this economy to the highest level since 2003 (Figure 1.1). The improvement in economic activity in the United States was driven by a considerable easing in inventories decline and revival in household consumption, partly supported by

Figure 1.1
Economic growth in selected advanced economies (q/q).



Source: Eurostat and IMF data (seasonally adjusted).

Figure 1.2
Euro area GDP growth (q/q).



Source: Eurostat data (seasonally adjusted).

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[1] According to IMF estimates of January 2010, global GDP in 2009 Q3 recorded annualized growth of 4.7% q/q as compared to the increase of 3.0% in 2009 Q2.

[2] The JPMorgan Global All-Industry Output Index, showing business sentiment of entrepreneurs in manufacturing and services, in January 2010 rose to 53.2, for the six consecutive month running above the level of 50 points.

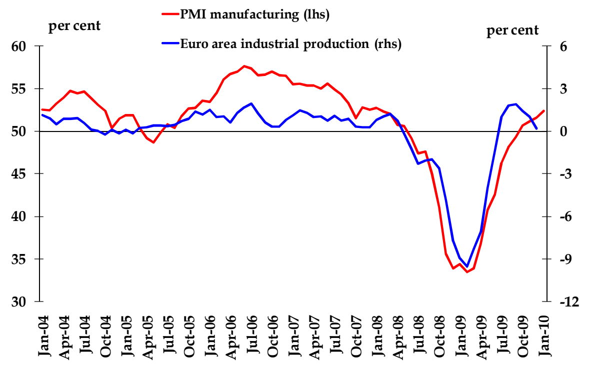
[3] CPB Netherlands Bureau for Economic Policy Analysis data.

government stimulus packages. The second half of 2009 brought also a recovery in US exports, which, amidst relatively weaker imports growth, translated into positive contribution of net exports to GDP growth in this economy. Moreover, 2009 Q4 saw a considerable rise in corporate investment. Yet, in the analysed period unfavourable situation in the US labour market persisted and private loans continued to decline.

Following five quarters of decline, 2009 Q3 saw GDP growth also in the euro area (0.4% q/q in seasonally adjusted terms as compared to a decline of 0.1% q/q in 2009 Q2; Figure 1.2), which was mainly driven by a slower pace of inventory reduction. Following five quarters of decline, 2009 Q3 brought a rise in the euro area exports and imports. Due to a slightly smaller increase in imports than in exports, contribution of net exports to GDP growth in the euro area was insignificant in this period. 2009 Q3 saw continued growth in public consumption in this economy, while household consumption decreased slightly, following an increase in the previous quarter. In the analysed period the investment decline persisting since 2008 Q2 continued, yet, its scale was further reduced.

Preliminary data for 2009 Q4 point to a slowdown in improvement in euro area economic activity at the end of 2009 - GDP grew in this period only by 0.1% q/q (in seasonally adjusted terms)[4]. Industrial production growth abated as compared to the previous quarter (Figure 1.3). Moreover, this period saw continued downward trend in construction output. At the same time, retail trade decreased slightly in comparison with the previous quarter, which together with a further deterioration of the labour market situation (Figure 1.4) and the phasing out of fiscal incentives for car purchases indicates that household consumption in the euro area remained subdued in 2009 Q4. In addition, corporate lending decreased in the analysed period and growth in household loans was significantly lower than in previous years. On the other hand, 2009 Q4 and the beginning of 2010

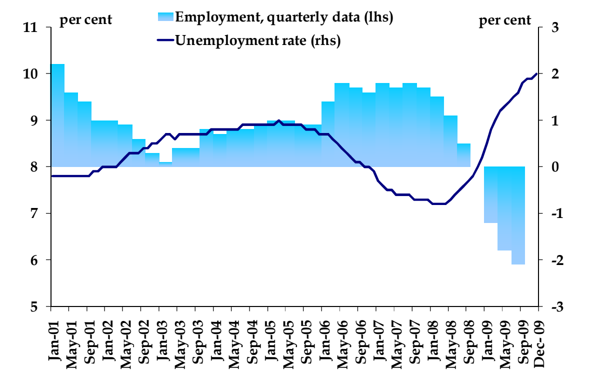
Figure 1.3
Euro area industrial production growth* and PMI for manufacturing.



Source: Eurostat, Markit data.

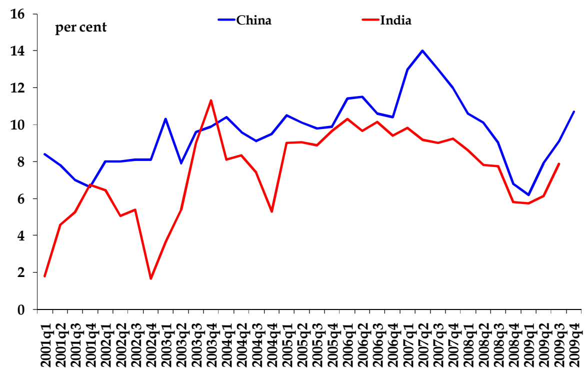
*Percentage change of the three-month moving average of the industrial production index against the corresponding average three months earlier.

Figure 1.4
Euro area employment (y/y) and unemployment rate.



Source: Eurostat data

Figure 1.5
Economic growth in China and India (y/y).



Source: Reuters data.

[4] According to preliminary data for 2009 Q4, among countries that are major consumers of Polish exports GDP growth rate in Germany amounted to 0.0% q/q (as compared to 0.7% q/q in 2009 Q3), in France to 0.6% q/q (as compared to 0.2% q/q) and in Italy to -0.2% q/q (as compared to 0.6% q/q).

brought further improvement in economic activity indicators that reflect business sentiment in manufacturing (Figure 1.3) and expectations of households.

Among other advanced economies, Japanese GDP grew again in 2009 Q4 following stabilization in the previous quarter. At the same time, GDP increased slightly in the United Kingdom for the first time in six quarters (Figure 1.1).

The analysed period also saw further strong growth in activity in emerging economies.

Annual economic growth in China continued to rise (Figure 1.5) and in 2009 Q4 again exceeded 10%. In the second half of 2009 fast growth in investment, including public investment, persisted in the Chinese economy. At the same time, retail sales growth remained at a high level which points to continued considerable growth in household consumption. Against the background of robust demand and fast credit growth Chinese authorities tightened monetary policy at the beginning of 2010.

Strong demand for imports accompanying relatively high growth in domestic demand in China was a factor contributing to relatively high GDP growth persisting in 2009 Q3 (in quarterly terms) in the other economies of Southeast Asia.

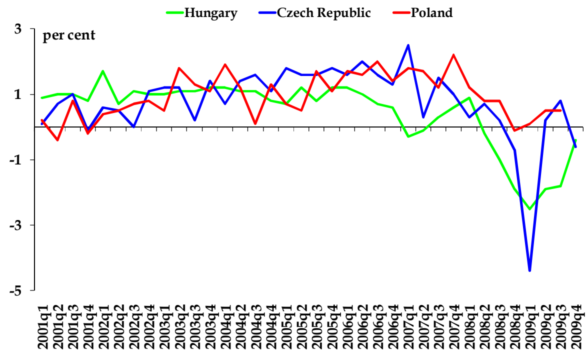
In 2009 Q3 GDP grew considerably in comparison with the previous quarter also in many countries of Latin America.

Among Central and Eastern European countries outside the euro area, in 2009 Q3 and Q4 GDP increased (in quarterly terms) in Lithuania and in Poland[5] and in 2009 Q4 also in Estonia. At the same time, GDP declined in 2009 Q4 in the Czech Republic following two quarters of growth, and it continued to decrease in Latvia and Hungary (Figure 1.6).

1.2. Inflationary processes abroad

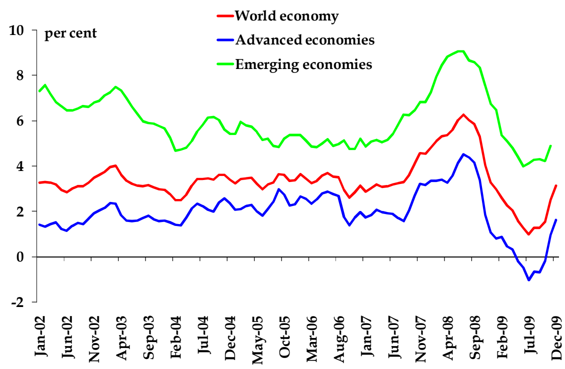
In the second half of 2009 inflation in the world economy increased, yet it ran close to the average level of inflation over the last years (Figure

Figure 1.6
Economic growth in selected Central and Eastern European countries (q/q).



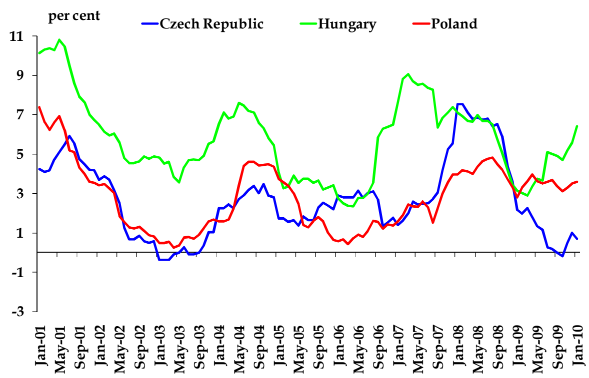
Source: Eurostat data (seasonally adjusted).

Figure 1.7
CPI inflation in the world economy (y/y).



Source: IMF data.

Figure 1.8
CPI inflation in selected Central and Eastern European countries (y/y).



Source: National CSO's data.

[5] Data for 2009 Q4 for Poland are NBP estimates based on the GUS estimate of GDP growth in Poland in 2009.

1.7). The rise in inflation observed in the global economy was driven by the base effects connected with energy price developments in the world markets in 2008 and 2009, including, in particular, the slump in 2008 Q4. These effects translated into a rise, in year-on-year terms, in the overall price level of consumer goods and services in developed economies in 2009 Q4. In particular, following the decline in the overall price level of consumer goods and services observed until October 2009, inflation in the United States increased to 2.7% y/y in December 2009, and to 0.9% y/y in the euro area, respectively. At the same time, amidst low capacity utilization and persistently weak consumption demand, core inflation continued to decline in the euro area. On the other hand, in the United States core inflation rose slightly over this period, yet remained below its long-run average.

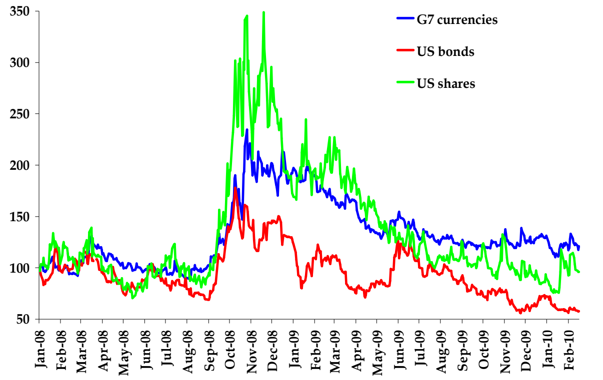
2009 Q4 brought a rise also in current inflation indicators in emerging economies, which was connected – in addition to the effects of energy prices developments – with a rise in food prices in the largest of those economies.

Among Central and Eastern European countries positive base effects translated into a rise in inflation in the Czech Republic, following a slump to a very low level in 2009 Q3, and in Hungary, where inflation remains at a heightened level also due to the VAT rate increase effective since July 2009 (Figure 1.8). Amidst the weakening of demand and the wage pressure driven by low economic activity in the Baltic States, in 2009 Q4 and at the beginning of 2010 the general price level declined in Latvia and Estonia, and in January 2010 also in Lithuania.

1.3. International financial markets and monetary policy abroad

In the recent period the situation in international financial markets has been stable and the main measures of risk in equity, bond, foreign exchange and money markets have ranged at a relatively low level (Figure 1.9). Share price rises in the world's major equity markets, which had begun in March 2009, continued until the middle of January 2010. However, they weakened in the last months of 2009 and at the turn

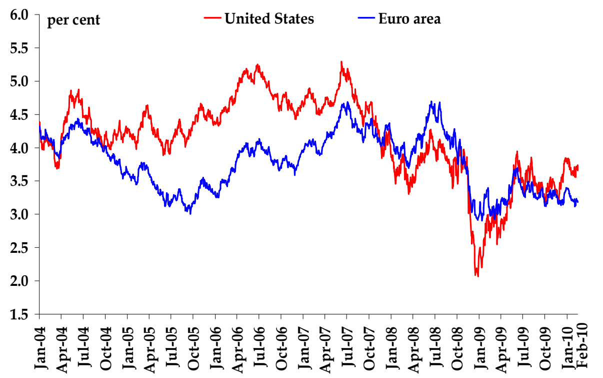
Figure 1.9
Level of risk in international financial markets (volatility in the US stock and bond markets, and volatility of G7 economies' exchange rates; January 2008=100; increase denotes and increase in volatility).



Source: Bloomberg data, NBP calculations.

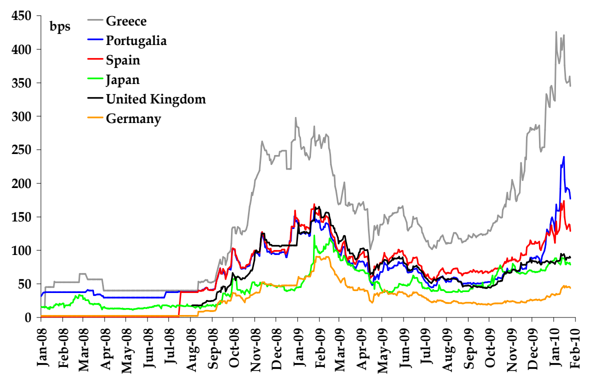
Volatility in the US stock and bond markets is measured by the VIX and MOVE indices respectively, and volatility of G7 economies' exchange rates by the JPMVXYG7 index.

Figure 1.10
Yields of 10-year US and euro area bonds.



Source: Bloomberg data.

Figure 1.11
CDS spreads in selected developed countries.



Source: Bloomberg data, NBP calculations.

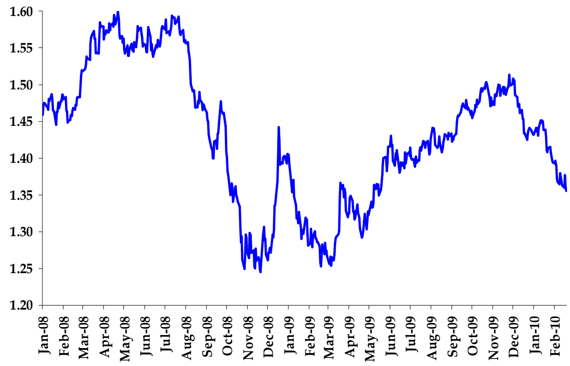
of January and February 2010 the strongest sell-off since March 2009 occurred.

In October 2009 – February 2010 yields on US bonds increased (Figure 1.10), driven by better than expected macroeconomic data and rising inflation expectations in the conditions of persistently high liquidity in global financial markets. Over the same period yields on Treasury bonds in the euro area changed to a lesser degree. At the same time, in the last few months increasing fears about the fiscal standing of some euro-area countries, primarily Greece, after its credit rating was lowered, as well as Spain and Portugal, led to the widening of the spread between the yields on these countries' bonds and German bonds. Greece, Spain and Portugal together with some developed countries outside the euro area (Japan, the United Kingdom), saw a rise in credit default swap[6] spreads, which reflected a decline in the creditworthiness of those countries (Figure 1.11). Increased fears about the fiscal stability of some euro-area countries also contributed to the reversal of the euro's appreciation tendency against the US dollar observed since March 2009, followed by a clear depreciation of the euro since December 2009 (Figure 1.12).

Since the publication of the last *Report* major central banks have continued to pursue easy monetary policy (Figure 1.13). The Fed has kept the federal funds fate unchanged at 0.00-0.25%, the European Central Bank (ECB) has upheld its key interest rate at 1.00% and the Swiss National Bank (SNB) has not changed the 3-month LIBOR band currently set at 0.00-0.75%, while still aiming to keep the rate in the lower end of this range, i.e. around 0.25%. Analysts expect (according to the Bloomberg survey) that the Fed and the ECB will raise interest rates in 2010 Q4 (to 0.75% and 1.50%, respectively), while the SNB will raise its rate already in 2010 Q3 (to 0.50%). In line with forward market quotations it is currently expected that the federal funds rate and the key rates of the ECB and SNB will be kept unchanged over the horizon of the next six months.

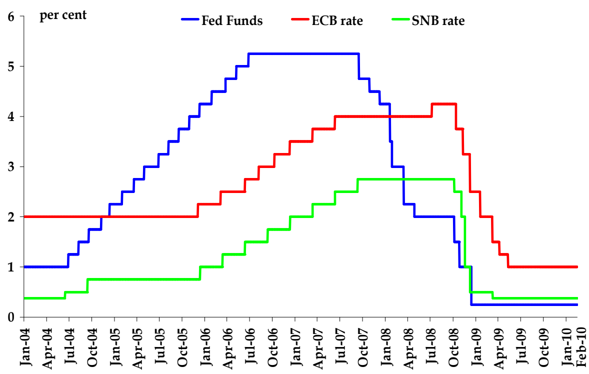
Major central banks continued to purchase financial assets in order to support credit mar-

Figure 1.12
The EUR/USD exchange rate (increase denotes appreciation of the euro).



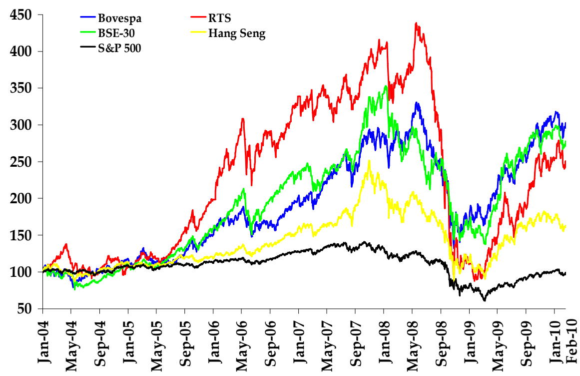
Source: Bloomberg data.

Figure 1.13
Fed Funds rate, ECB refinancing rate, and SNB rate.



Source: Reuters Ecowin data, NBP calculations.

Figure 1.14
Stockmarket indices in Brazil (Bovespa), Russia (RTS), India (BSE-30), and China (Hang Seng), against the background of the US index S&P 500 (January 2004 = 100).

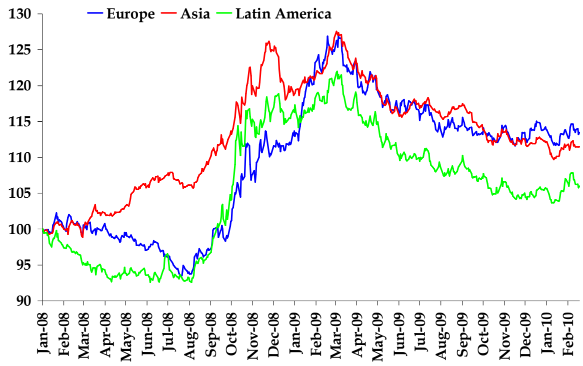


Source: Central banks' data.

[6] Credit default swap spreads measure the cost of bond purchase insurance.

kets, while gradually reducing the scale of purchases. The Fed phased out some operations and expects the remaining ones to expire gradually by the end of June 2010, emphasizing that these plans may be modified should financial stability or economic growth be endangered. The Fed has also raised the discount rate by 25 basis points to 0.75%. The ECB and the SNB also announced plans to phase out programmes supporting credit markets. Moreover, the Fed in cooperation with the ECB, the SNB, the Bank of England and the Bank of Japan decided to terminate operations providing these banks with US dollar liquidity.

Figure 1.15
Exchange rate indices of emerging market economies (1 January 2008=100; increase denotes depreciation).



Source: Bloomberg data, NBP calculations.

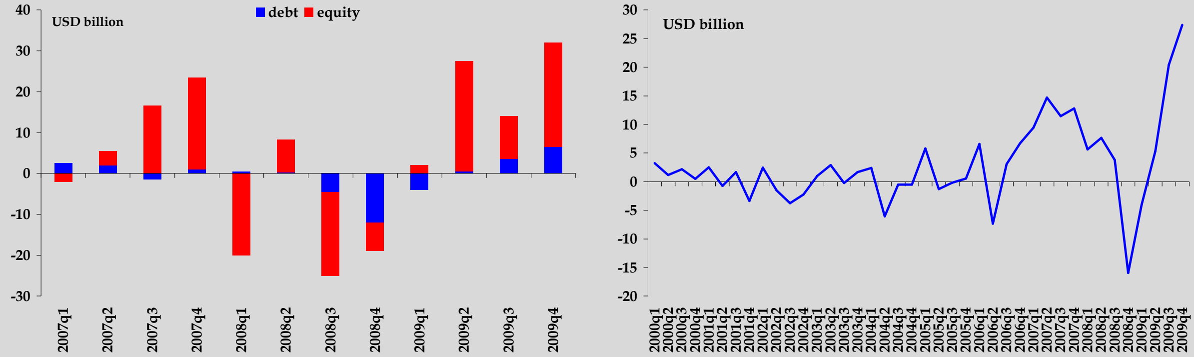
The decline in risk aversion in the world financial markets amid low interest rates in developed countries, and further improvement in the outlook for growth in emerging economies translated into significant capital inflows to the latter economies (see Box 1). As a result, starting from March 2009 these economies have seen markedly higher rises in stock exchange indices than those observed in developed markets (Figure 1.14) and their currencies appreciated (Figure 1.15). At the turn of January and February 2010, however, shares prices in emerging economies slumped, together with a slump in developed markets, and currencies depreciated.

Box 1. Capital flows to emerging economies

Before the onset of the global financial crisis emerging economies had attracted significant capital flows, yet the crisis and the ensuing increased aversion to risk resulted in a reversal of capital flows and a considerable capital outflow from these economies in 2008 Q4 and 2009 Q1. This outflow concerned mainly portfolio capital, whereas the value of foreign direct investment inflows decreased to a relatively small extent. However, since 2009 Q2 an intensive resurge in the inflow of capital to those countries has been observed (Figure B1), particularly to the economies in Asia (mainly China and India) and Latin America (mainly Brazil), which fuelled many fears about its consequences.

The resurge in capital inflows to emerging economies has been driven by a drop in risk aversion among global investors, observed since 2009 Q2. The gradual stabilisation of the situation in international financial markets might have persuaded investors, particularly institutional ones from developed countries, to diversify their portfolios again and engage more of their capital in emerging economies. The increased inflow of capital into emerging economies was also encouraged by the high spread between short-term interest rates in emerging and developed countries. Very low short-term rates in the latter might have prompted investors, especially those with a short investment horizon, to seek higher rates of return in other parts of the world. The appreciation of some emerging economies' currencies that rendered the rates of return in those countries even higher might have been another cause, but also a result, of increased capital inflows. Fundamental factors might also have been instrumental in attracting foreign capital: whereas developed countries suffered from a severe recession, in emerging economies economic growth, albeit slower, was sustained (cf. Table B1).

Figure B1.
Inflow of portfolio investment to emerging economies: emerging market fund net inflows (left-hand side) and net portfolio investment in Brazil (right-hand side).



Source: Global Financial Stability Report, Market Update January 2010, International Monetary Fund and Reuters EcoWin (net portfolio investment in Brazil).

Table B1.
Economic growth (in %) in developed and developing countries in 2008-2011.

	2008		2009		2010*		2011*	
	IMF	WB	IMF	WB	IMF	WB	IMF	WB
Developed economies	0.5	0.4	-3.2	-3.3	2.1	1.8	2.4	2.3
Developing and emerging economies	6.1	5.6	2.1	1.2	6.0	5.2	6.3	5.8

Source: International Monetary Fund (World Economic Outlook Update, January 2010), World Bank (Global Economic Prospects 2010).

*Forecast

A change in the way investors perceive the risk of investing in emerging economies could be a factor conducive to sustained capital inflows to these countries in the future. Traditionally, investments in emerging economies – primarily due to higher average economic growth rates – yielded higher rates of return than in developed countries (Figure 1.14); at the same time, however, they were perceived as more risky. According to forecasts of major international institutions, currently the outlook for economic growth in emerging and developing countries is also markedly better than in developed countries (Table B1). This would be a stimulus for the inflow of foreign capital, because a faster rate of economic growth will translate into higher market rates of return on investment. In turn, the higher perceived risk of investing in the assets of emerging economies resulted, in many cases, from a lack of fiscal discipline in those countries, which very often led to a debt, foreign exchange or a banking crisis and/or increased inflation. This factor, however, has relatively lost in significance over the recent period – at present the fiscal situation in many developed countries is less favourable than in many emerging economies. Additionally, the perceived risk of investment in emerging countries may be mitigated by the relative resilience of the financial systems in some of those economies to the global crisis, which, in part, results from their lower level of development. The perception of investments in emerging countries as still yielding high returns but relatively less risky could be conducive to an increased capital inflow into those countries.

There are also factors that decrease the probability of sustained capital inflows into emerging economies. Despite a reduction of macroeconomic risk in some of these economies in comparison to developed countries, it still remains higher. The governments of emerging countries may also seek to curb the inflow of foreign capital, especially speculative, by introducing administrative measures (e.g. in October 2009 Brazil imposed a 2-percent tax on foreign purchases of fixed-income securities and shares). Moreover, a possible toughening of capital requirements imposed on banks in developed countries may encourage those banks to make safer investments, e.g. purchases developed countries' bonds instead of investing in developing economies.

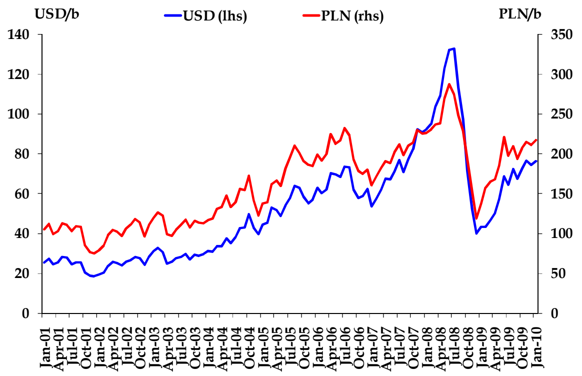
1.4. Global commodity markets

Incoming macroeconomic data and an improvement in the outlook for economic growth in major fuel-consuming countries, i.e. the United States and China, contributed to the rising tendency in oil prices, observed in the global markets since March 2009, being maintained also in 2009 Q4 and at the beginning of 2010. The rise in oil prices was also driven by high liquidity in the global financial markets, dollar depreciation observed till November 2009 and unfavourable atmospheric conditions affecting the northern hemisphere. The improving outlook for growth in the global economy and announcements of continuation of anti-crisis measures in the largest economies contributed to an upward revision in the outlook for oil demand. Factors limiting oil price growth included increasing oil output and a high level of oil inventories. In 2009 Q4 the average Brent oil price was 75.5 USD/b and was 6.7 USD (i.e. by 9.7%) higher than in 2009 Q3 (Figure 1.16).

In response to the improvement in the global economy the prices of coal rose to approx. 104 USD/t in January 2010 (as compared with 61 USD/t in September 2009). In turn, natural gas prices, the changes of which display a 6-9 month lag in relation to oil price shifts, rose to approx. 270 USD/1000m³ (Figure 1.17).

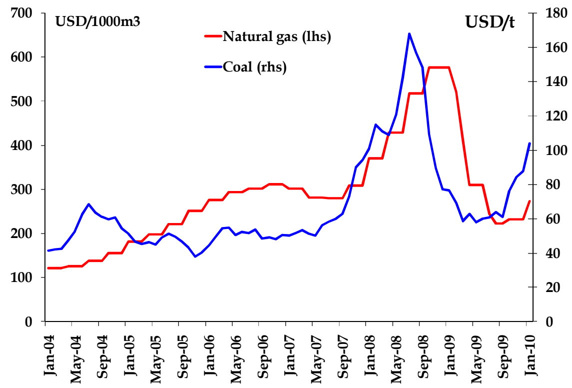
Since the publication of the last *Report* a rise in agricultural commodity prices has been observed in global markets (Figure 1.18). Yet, these prices continue to remain considerably below the level recorded in 2008 Q4. In certain segments of the market (e.g. sugar and rice) recent months have brought considerable price increases driven by unfavourable weather conditions in the region of the South-East Asia. The pressure connected with higher open interest in commodity markets might have been another factor responsible for increases of those prices.

Figure 1.16
Brent crude oil prices in USD and PLN.



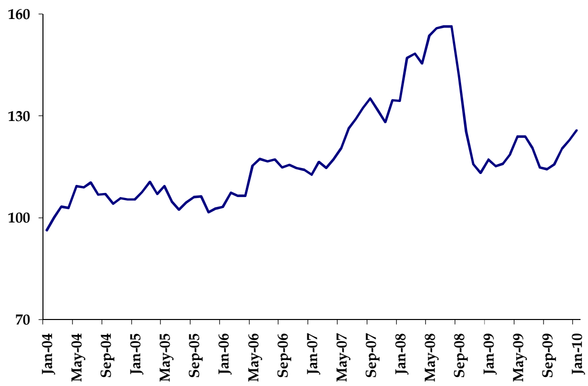
Source: The US Department of Energy data, NBP calculations.

Figure 1.17
Gas and coal prices in the global markets.



Source: IMF data.

Figure 1.18
Index of agricultural commodity prices in the global markets (2004Q1=100).



Source: IMF data, NBP calculations.

Chapter 2.

Domestic economy

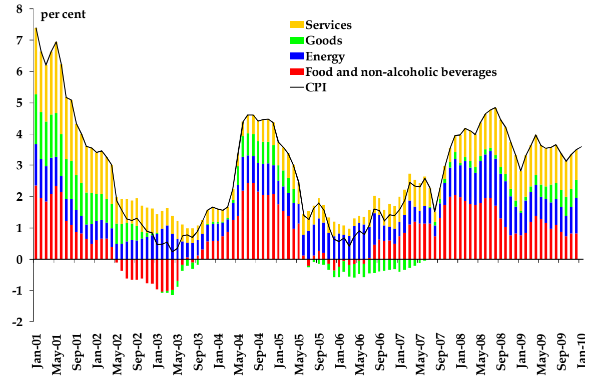
2.1. Inflationary processes

2.1.1. Consumer prices

The annual growth of prices of consumer goods and services in Poland, following a decline in October 2009 to 3.1% y/y, rose gradually, reaching 3.5% y/y in December 2009, i.e. the upper limit for deviations from the NBP inflation target. According to GUS preliminary data[7], annual inflation in January 2010 rose further to 3.6% (Figure 2.1).

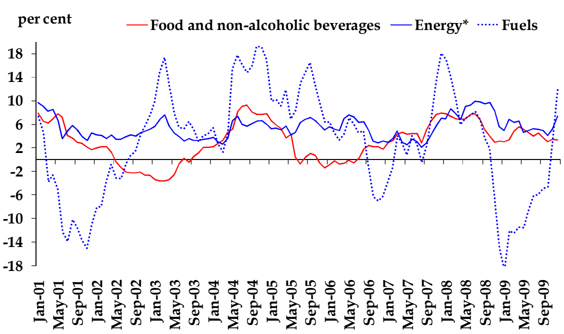
The growth of annual inflation in the analysed period was driven by the positive base effect connected with a strong decline in fuel prices a year before (as a result of the decline in oil prices in the global markets). Heightened annual inflation was also driven, to a large extent, by past increases in administered prices, including the prices of energy carriers (electricity and heating for households) and dwelling-maintenance services (mainly water supply and sewerage services). Other factors that contributed to heightened inflation included persistently high annual growth of tobacco products and alcoholic beverages, driven by the earlier excise tax hikes. Inflation remained at an elevated level also because of the rapid, albeit weakening, growth in the prices of food and non-alcoholic beverages and the earlier depreciation of the zloty.

Figure 2.1
Changes in CPI and main price categories (y/y).



Source: GUS data, NBP calculations.

Figure 2.2
Changes in food and energy prices (y/y).



Source: GUS data, NBP calculations.

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

[7] Data on inflation in January 2010, published by GUS in February 2010, are preliminary and will be revised in March 2010 due to a change in the CPI basket weights, made at the beginning of each year. As information on developments in particular groups of consumer prices in January is incomplete, the analysis presented in the *Report* covers the period until the end of 2009.

On the other hand, in the analysed period inflation was curbed by a decline in the prices of natural gas for households in June 2009 and as a result of a reduction of Internet prices in December 2009 (which resulted in a greater decline – on a year-on-year basis– in the prices of telecommunications services and in lower growth in the prices of recreation and cultural activities). The growth of inflation was also limited by the appreciation of the zloty observed since March 2009, low demand pressure and weaker growth of unit labour costs in the economy.

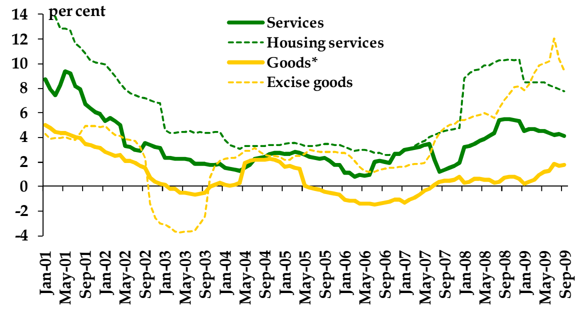
2.1.2. Core inflation

In October – December 2009 the majority of core inflation measures edged down slightly or stabilised (Figure 2.4). The index of core inflation net of food and energy prices decreased from 2.9% y/y in October to 2.6% y/y in December 2009. Its persistently high level was primarily the result of invariably high growth in the prices of services, including mainly dwelling-maintenance services, and in the prices of excise goods. The fact that core inflation has remained relatively high indicates that the past weakening of demand has not offset the increase in administered prices and excise tax rates as well as the effects of the earlier exchange rate depreciation.

2.1.3. The Maastricht price stability criterion

In October–December 2009 the 12-month moving average of HICP inflation in Poland, considered while assessing compliance with the Maastricht price stability criterion, increased from 3.9% to 4.0%. At the same time, due to deflation persisting in certain EU Member States, the reference value for the inflation criterion declined from 1.7% to 1.5%[8], i.e. to its his-

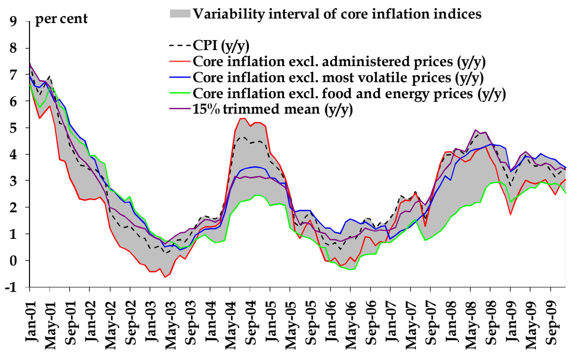
Figure 2.3
Changes in the prices of services and goods (y/y).



Source: GUS data, NBP calculations.

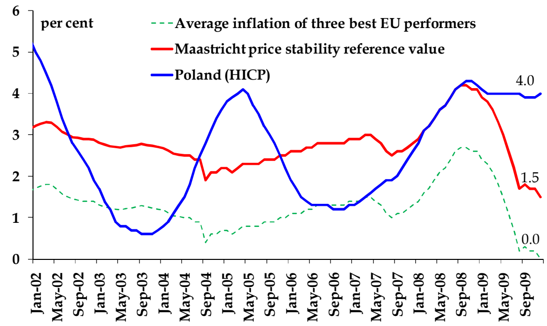
* The category of *goods* does not include food, non-alcoholic beverages or energy.

Figure 2.4
Core inflation measures (y/y).



Source: GUS data, NBP calculations.

Figure 2.5
HICP inflation in Poland (12-month moving average) and the Maastricht criterion.



Source: Eurostat data, NBP calculations.

[8] NBP estimates based on the assumption that in December 2009 the lowest non-negative (rounded up to one decimal place) 12-month moving average of HICP inflation was recorded in Belgium (0.0%), Luxembourg (0.0%) and France (0.1%). Formal assessment of a particular country's compliance with the price stability criterion is performed by the European Commission and the European Central Bank and published in *Convergence Reports*. So far the Commission has not included in the reference group countries with a negative 12-month moving average of HICP inflation. Since the 12-month moving average of HICP inflation in Belgium in December 2009, rounded up to two decimal places, amounted to -0.01%, there is a possibility that Belgium would not be included in the reference group by the European Commission. In such a situation, the reference group would in-

toric low (Figure 2.5). As a result, the gap between the 12-month moving average of HICP inflation in Poland and the reference value widened to 2.5 percentage points in October - December 2009.

2.1.4. Producer prices

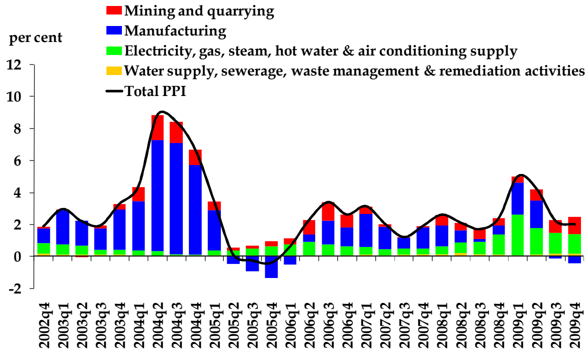
The growth of producer prices (PPI) edged down from 2.2% y/y in 2009 Q3 to 2.0% y/y in 2009 Q4 and in January 2010 fell to 0.2%[9]. This was driven by a deeper decline (on a year-on-year basis) of prices in *manufacturing* and lower price growth in the section *electricity, gas, steam, hot water and air conditioning supply* (Figure 2.6).

In 2009 Q4 producer prices in the domestic market rose by 2.1% y/y as compared with 0.7% y/y in 2009 Q3. In contrast, the growth of producer prices of exported goods slowed down, which was connected with zloty appreciation.

2.1.5. Import prices

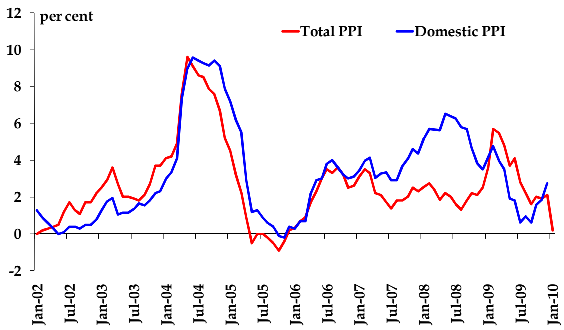
In 2009 Q3 a decline in the zloty-denominated import prices deepened significantly (to -6.5% q/q from –0.3% q/q in the previous quarter), mainly due to zloty appreciation. The decrease in import prices was limited by further growth in commodity prices in the global markets, including oil prices. In year-on-year terms, import prices rose by 8.2% in 2009 Q3, as compared with the growth of 13.1% in 2009 Q2 (Figure 2.8).

Figure 2.6
Composition of the annual PPI growth by sections of industry.



Source: GUS data.

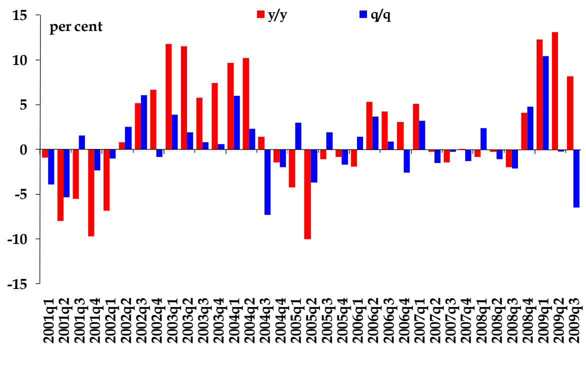
Figure 2.7
Total PPI* and domestic PPI (y/y).



Source: GUS data.

* Total PPI includes producer prices in the domestic market and export producer prices.

Figure 2.8
Changes in import prices in PLN terms.



Source: GUS data.

clude Luxembourg (0.0%), France (0.1%) and Cyprus (0.2%), and the reference value for the price stability criterion in December 2009 would amount to 1.6%.

[9] The fall of PPI in January 2010 resulted mainly from the negative base effect connected with a strong rise of prices in the section *electricity, gas, steam, hot water and air conditioning supply* in January 2009.

2.1.6. Inflation expectations

Since the beginning of 2009, analysts' forecasts of inflation over an 11-month horizon have remained relatively stable at levels slightly lower or equal to the NBP inflation target (Figure 2.9). According to bank analysts' forecasts from February 2009 the average annual inflation in 2010 will amount to 2.5%, and the annual inflation will be equal to 2.4% in December.

On the other hand, the objectified measure of inflation expectations of individuals remains close to current inflation which results from the adaptive character of those expectations. At the same time, there has been no significant change in the structure of responses in the survey study of inflation expectations of individuals (Figure 2.10).

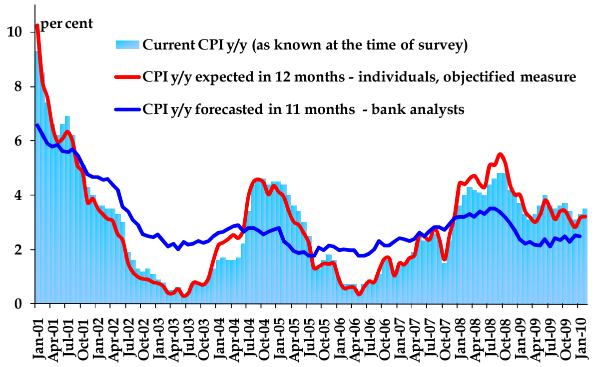
2.2. Demand and output

Available data indicate an improvement in economic activity in Poland. In 2009 Q3 GDP in real terms increased by 1.7% y/y (as compared to 1.1% y/y in the previous quarter). Based on GUS preliminary data on GDP in 2009 it may be estimated that GDP in real terms rose by 2.9% y/y in 2009 Q4 (Figure 2.11).

Private consumption growth in 2009 Q3 and Q4 accelerated slightly[10], yet remained markedly weaker than the multi-year average. Slow consumption growth was mainly the result of low growth in household disposable income and clearly slower growth in consumption loans as compared with the previous years. Public consumption growth in 2008 Q3 and Q4 was also lower than in the corresponding period of the previous year.

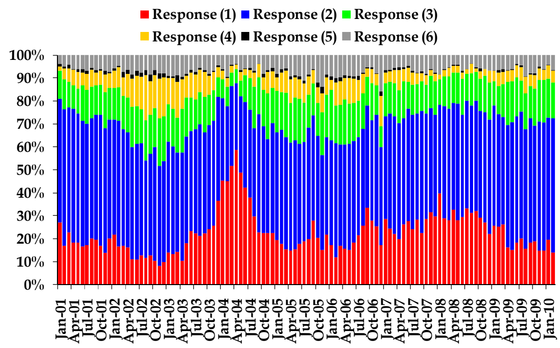
In 2009 Q3 the annual growth of investment remained negative, whereas 2009 Q4 probably brought a rise in investment in year-on-year terms. Enterprises continued to reduce their inventories, while in 2009 Q4 this trend was most probably curbed, as a result of which the change in inventories had only a minor negative

Figure 2.9
Inflation expectations of individuals and inflation forecasts of bank analysts.



Source: Ipsos, Reuters and GUS data, NBP calculations.

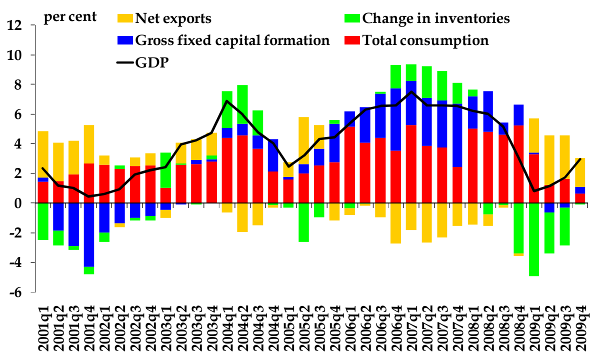
Figure 2.10
Inflation expectations of individuals - responses to the question asked by Ipsos.



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?"

Figure 2.11
Contribution of aggregate demand components to GDP growth.



Source: GUS data.

[10] Data on GDP and its components in 2009 Q4 are NBP estimates based on GUS preliminary data on GDP in 2009.

contribution to GDP growth.

Domestic demand decreased by 1.2% y/y in 2009 Q3 and - as may be estimated on the basis of GUS preliminary data for 2009 - increased by approx. 0.9% y/y in 2009 Q4.

Similarly to 2009 Q2, in 2009 Q3 and Q4 net exports had the largest contribution to GDP growth (of 3.0 and 2.0 percentage points respectively in 2009 Q3 and Q4). This was driven by a slump in imports and a relatively smaller fall in exports (in year-on-year terms), as a result of recession abroad and the slowdown in the domestic economy, as well as the previously observed significant depreciation of the zloty and related changes in the terms of trade.

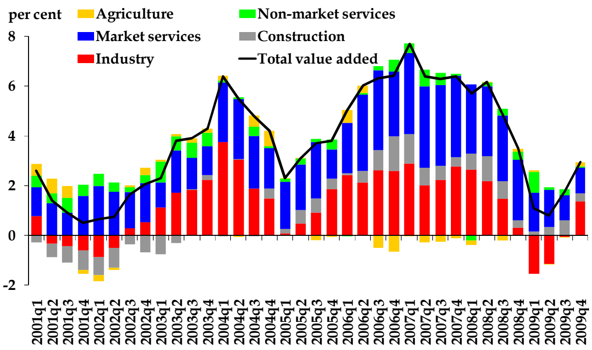
The growth in gross value added in 2009 Q3 resulted mainly from the growth in the sector of market services and - to a lesser extent - in the construction sector. A minor negative contribution to the value added growth was recorded in industry which saw a slight output decline in year-on-year terms. It is estimated that in 2009 Q4 the largest contribution to the value added growth was recorded in industry and in market services, accompanied by a still positive contribution of value added in construction (Figure 2.12).

2.2.1. Consumption demand

In 2009 Q3 private consumption growth increased to 2.2% y/y, as compared to 1.7% y/y in 2009 Q2. Public consumption growth also recorded an increase (to 1.5% y/y as compared to 0.9% in the previous quarter). Private consumption growth in 2009 Q4, implied on the basis of GUS annual estimates, amounted to 2.2% y/y.

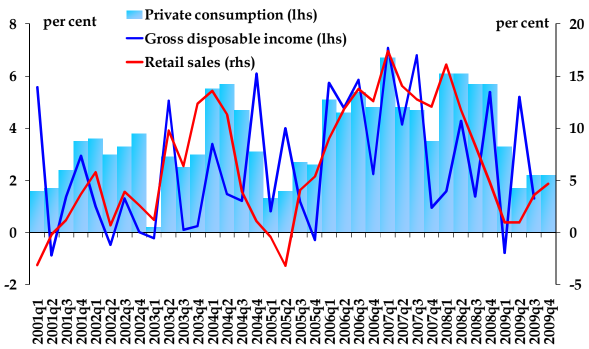
The low - as compared to a multi-year average - private consumption growth in 2009 Q3 and Q4 was mainly the result of markedly lower growth in household disposable income (Figure 2.13). This was driven by a strong decline in the growth of income from paid employment, connected with a deterioration in the labour market situation, including in particular a slowdown in wage growth and a decline in em-

Figure 2.12
Sector contribution to annual growth of gross value added.



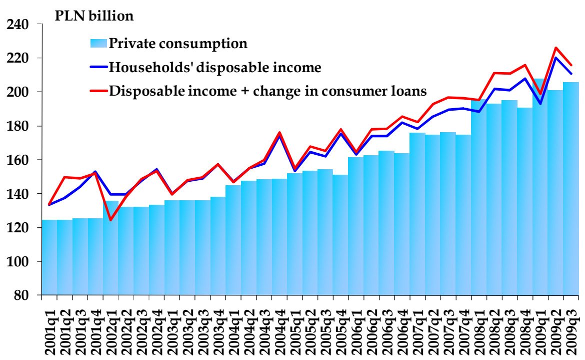
Source: GUS data, NBP calculations.

Figure 2.13
Growth of private consumption, gross disposable income and retail sales (y/y, constant prices).



Source: GUS data.

Figure 2.14
Private consumption expenditure and disposable income of households, including the change in consumption loans (current prices).



Source: GUS, NBP data.

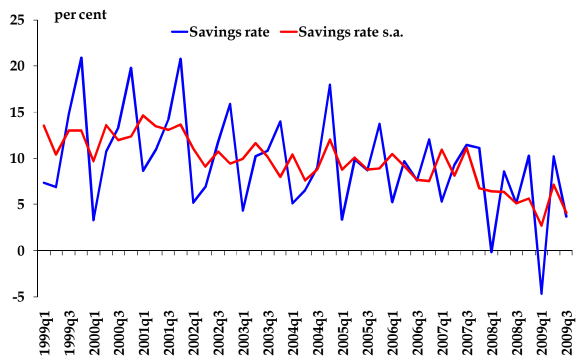
ployment in the corporate sector (cf. Section 2.3). Relatively fast growth in social benefits, driven by their relatively high indexation in 2009, as well as the reduction of personal income tax rates since the beginning of 2009 had an opposite effect.

Apart from the low growth of disposable income, weakening consumption demand was largely the effect of considerably slower growth in consumption loans as compared with the previous years (Figure 2.14; cf. Section 2.5). The fall in the annual growth rate of this type of loans was particularly strong in 2009 Q4.

Despite a strong slowdown in economic growth (to 1.7% in 2009 as compared to 5.0% in the previous year) private consumption contributed to GDP growth in all quarters of 2009. Relative stability in consumption demand amidst limited disposable income growth is also corroborated by data on retail sales which, in all quarters of 2009, rose in real terms and in 2009 Q4 increased by 4.7% y/y (as compared to 3.6% y/y in 2009 Q3; Figure 2.13). Sustained growth in private consumption in 2009 might have been the result of households aiming to smooth consumption over time, which was accompanied by a faster decline in household savings rate (Figure 2.15).

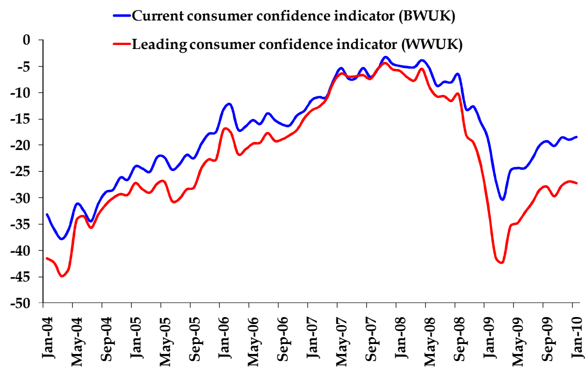
Consumer sentiment surveys point to a systematic improvement in household sentiment. In 2009 Q4 the leading consumer confidence indicator (WWUK), reflecting expectations with regard to the coming year, rose again, mainly driven by an improvement in the assessment of future situation of the domestic economy and future financial condition of households. Results of the consumer sentiment surveys (including the assessments of intended major purchases in the coming year - Figure 2.17) may indicate a recovery in consumption demand in 2010 Q1.

Figure 2.15
Savings rate of households (savings relative to disposable income, current prices).



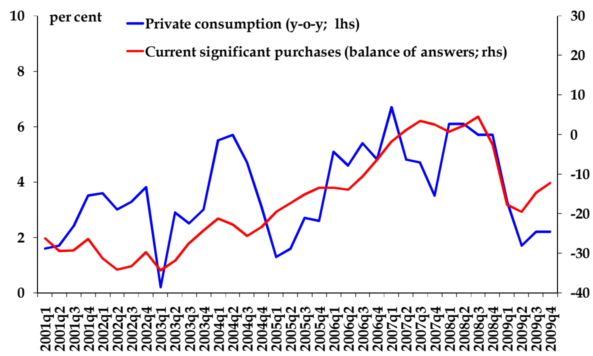
Source: GUS, NBP data.

Figure 2.16
Consumer confidence indicators.



Source: GUS, NBP data.

Figure 2.17
Private consumption expenditure and consumer sentiment (assessments of intended major purchases).



Source: GUS, NBP data.

2.2.2. Investment demand

In 2009 Q3 gross fixed capital formation declined by 1.5% y/y (as compared with the fall of 3.0% y/y in 2009 Q2; Figure 2.18), and the investment rate, i.e. the ratio of gross fixed capital formation to GDP, declined to 21.4%[11] (Figure 2.19). On the other hand, in 2009 Q4 the annual growth of gross fixed capital formation - implied on the basis of GDP estimates for 2009 published by the GUS - was positive and amounted to 1.4% y/y.

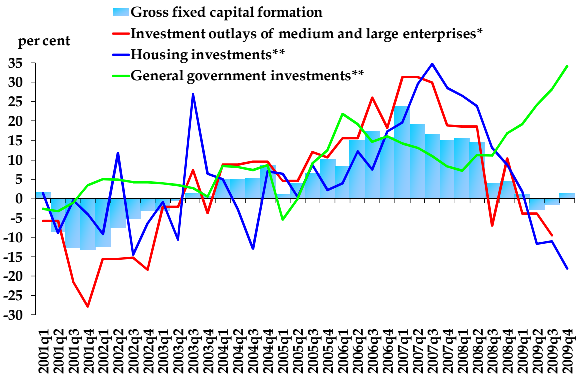
In 2009 Q3 the decline in investment in the corporate sector deepened further. In 2009 Q3 and Q4 investment in housing construction continued to fall. Investment decline in the economy was limited throughout the whole year by a very strong increase in investment expenditure in the public finance sector.

In nominal terms 2009 Q3 saw enterprises limit their investment expenditure in all categories, for the first time since 2002 (Figure 2.20).

According to the business condition survey of the NBP[12], the outlook for corporate investment in 2010 is only slightly better than in 2009. The index of new investments, despite a certain improvement, remains at its lowest level since 2001-2002[13] (Figure 2.18).

The persistently low level of investment is driven by a relatively low degree of production capacity utilisation, though the latter is significantly higher than during the economic slowdown of 2001-2002 (Figure 2.22). According to NBP surveys, the percentage of enterprises planning investment in the build-up of production capacity (relative to the number of enterprises planning any new investment) decreased as compared with 2009, reaching a level almost two times lower than in 2008. Investment outlays are mainly intended for reconstruction and maintenance of existing assets and for modernisation of technology.

Figure 2.18
Investment in the economy (y/y).

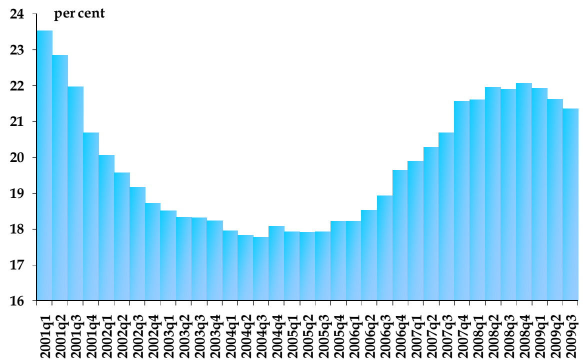


Source: GUS data, Ministry of Finance data, NBP estimates.

* Due to the 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.

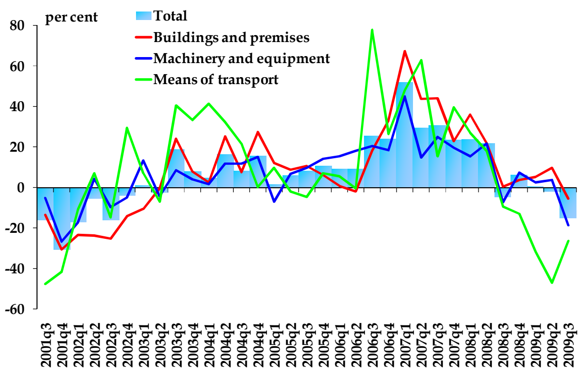
** NBP estimates for the NECMOD model; seasonally adjusted data.

Figure 2.19
Investment rate (ratio of gross fixed capital formation to GDP in nominal terms; data cumulated over the past four quarters).



Source: GUS data, NBP calculations.

Figure 2.20
Gross fixed capital formation in the enterprise sector (in nominal terms, y/y).



Source: GUS data, NBP calculations.

[11] Investment rate is calculated on the basis of data for the past four quarters.

[12] *Information on the Condition of the Enterprise Sector, Including the Economic Climate in 2009 Q4 and Forecasts for 2010 Q1*, NBP.

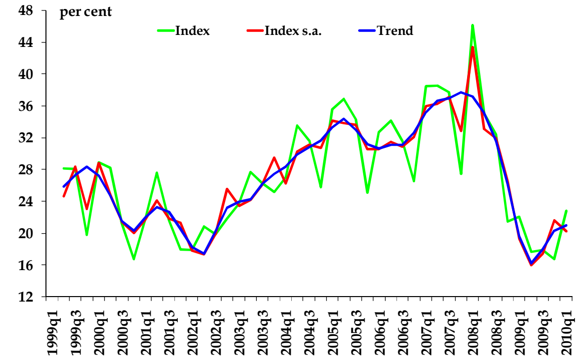
[13] In 2010 Q1 20.2% of respondents plan to start new investments, as compared with 21.6% in 2009 Q4 (seasonally adjusted data).

2.2.3. General government demand

The general government deficit in relation to GDP according to ESA95 doubled in 2009 and reached 7.2% (Figure 2.23)[14]. The growing fiscal imbalance is, on the one hand, the consequence of the slowdown of economic growth which has led to a significant deterioration in the sector's revenues, and, on the other hand, of the rise in the structural deficit in 2008-2009. The rise in the structural deficit resulted i.a. from a reduction of the disability contribution rate[15] and personal income taxes[16] as well as from increased spending on investments[17] and social benefits[18].

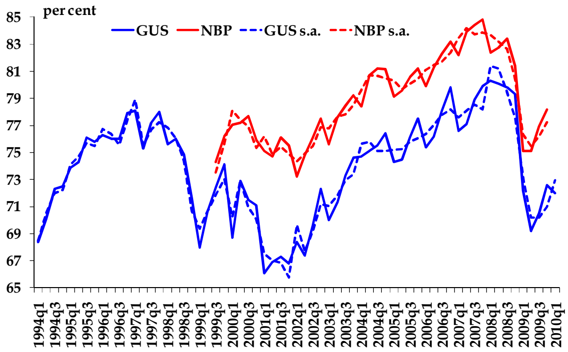
A considerable slowdown in the growth rate of tax revenues in the first months of 2009 made it necessary to amend the *Budget Act for 2009*. Despite the fall in tax revenues by 2.1% y/y[19], total central budget revenues in 2009 increased by 8.2% y/y and amounted to PLN 274.4 billion. The rise in the total central budget revenues was mainly influenced by higher revenues from the European Union and non-tax revenues. In turn, central budget expenditures in 2009 reached the level of PLN 298.2 billion, i.e. rose by 7.3% y/y, which was mainly driven by rising costs of servicing public debt and transfers to local government entities. At the same time, transfers to FUS (Social Security Fund) in 2009 decreased by 8.2% y/y. As a result, the central budget deficit in 2009 reached PLN 23.8 billion

Figure 2.21
Index of new investments (percentage of enterprises planning to start new investments within the coming quarter).



Source: NBP business tendency survey.

Figure 2.22
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 NBP sample in December 2009 included 859 enterprises from the whole non-financial corporate sector. The GUS sample, in turn, includes approx. 3500 enterprises from section C according to PKD 2007 classification (manufacturing; data till 2001 refer to a GUS sample of approx. 3500 enterprises from section manufacturing excluding waste processing). The difference may also reflect the over-representation of big enterprises in the NBP sample, while the GUS sample is representative with respect to enterprise size.

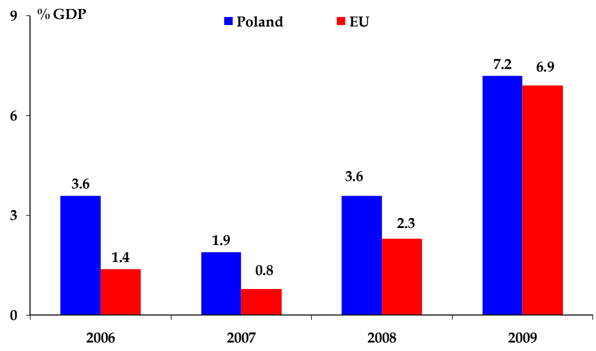
[14] Estimates of the Ministry of Finance presented in the *Convergence Programme – Update* 2009.
[15] Disability contribution rate was reduced in two stages: starting from 1 July 2007 the contribution payable by employees was lowered from 6.5% to 3.5% of the contribution assessment basis; from 1 January 2008 the contribution paid by both employees and employers was cut by 2 percentage points – i.e. from 3.5% to 1.5% and from 6.5% to 4.5% of the basis for employees and employers, respectively. After the changes, the disability contribution rate now stands at 6% of the contribution assessment basis, compared to 13% before the reduction.
[16] Pursuant to the Act of 16 November 2006 Amending the Act on Personal Income Tax and Some Other Acts, tax thresholds and tax-free amounts were unfrozen starting from 2007 and a two-step scale of PIT was introduced from 2009 (18% and 32%, compared to 19%, 30% and 40% previously) together with a pro-family tax relief in the amount of PLN 120 per child starting from the 2007 annual settlement (deduction from the income tax after deductions for health insurance contributions).
[17] In the years 2008-2009 a dynamic increase in gross fixed capital formation was recorded (of 19.3% and 12.8%, respectively), which, to a large extent, resulted from higher expenditures on financing of EU projects. Increased expenditures of the general government sector on co-financing of those investments was responsible for the growth of the structural deficit.
[18] Increased expenditures on social benefits resulted, to a large extent, from the growing number of old-age and disability pensioners.
[19] Revenues from VAT decreased by 2.5% y/y, from CIT by 11.0% y/y and from PIT by 7.7% y/y (this category, apart from the slowdown in business activity, was also affected by the tax rate changes introduced on 1 January 2009). By contrast, revenues from excise tax rose (by 7.3% y/y), mainly due to the increase of excise tax rate on tobacco products.

(as compared to PLN 24.4 billion in 2008), which constitutes 84.9% of the annual plan following the amendment of the *Budget Act for 2009*.

It should be emphasised, however, that the decrease in the central budget deficit was affected by a number of factors which did not occur in recent years. First of all, the transfer of the responsibility for financing the construction of roads and highways to the National Road Fund (KFD)[20] reduced central government outlays for that purpose. Secondly, in 2009 the transfers to FUS were planned at a low level[21], and the shortfall of funding had to be subsequently supplemented by credit from the banking sector and a loan from the central budget[22]. Thirdly, the budget balance was positively affected by the surplus of EU funds receipts over expenditures on co-financing of EU projects, while in 2008 the revenue from EU funds was significantly lower than the expenditure on EU projects.

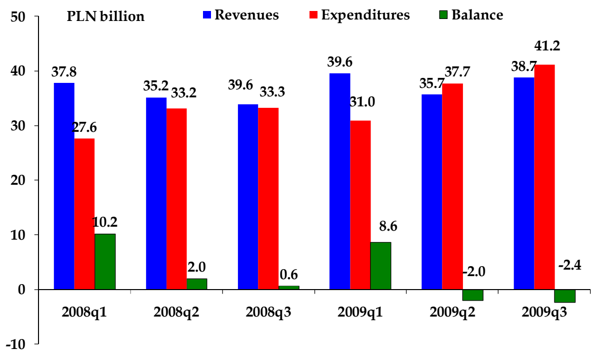
The analysed period brought a deterioration in the financial situation of local government entities which was driven by a considerable slowdown in the growth of own revenues amidst the persistently high growth in expenditures[23]. In 2009 local government entities recorded quarterly deficits, persisting since Q2, as compared with the surpluses recorded in the corresponding periods of the previous years[24] (Figure 2.24). At the same time, an upward trend was recorded in the local government debt - after 2009 Q3

Figure 2.23
General government deficit according to ESA95.



Source: Data concerning the sector deficit for 2009 come from the Convergence Programme – 2009 Update. Data for the EU come from the autumn forecast of the European Commission, 2009.

Figure 2.24
Revenues and expenditures of local government entities.



Source: Ministry of Finance data.

[20] The National Road Fund is a fund established at Bank Gospodarstwa Krajowego (BGK) in accordance with the Act of 27 October 1994 on Toll Motorways and the National Road Fund. It is not a special purpose state fund so, consequently, it is not a general government sector entity in line with the provisions of the Public Finance Act of 27 August 2009. However, it is included in the sector in line with ESA95 methodology. The Act of 22 May 2009 Amending the Act on Toll Motorways and the National Road Fund and Some Other Acts introduced a new mechanism which shifts the burden of financing the investments included in the National Road Construction Programme for the years 2008-2012 from the central budget to the National Road Fund.

[21] The assumed level of subsidies did not cover the planned expenditures of the Fund.

[22] A loan of PLN 5.5 billion was granted pursuant to the Act of 3 December 2009 Amending the Act on the Social Insurance System. This operation is not classified as a central budget expenditure but rather as its outlay and as such does not increase the central budget deficit.

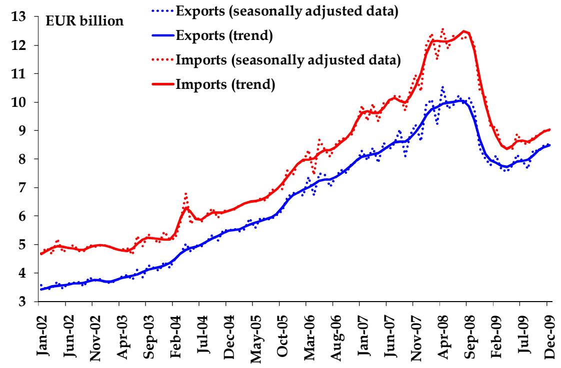
[23] Expenditures of local governments in 2009 Q3 reached the highest level since the end of 2004, mainly as a result of a considerable growth in proprietary expenditure on financing projects with the participation of EU funds.

[24] Cumulative after three quarters of 2009, local governments reached a surplus of approx. PLN 4.2 billion, compared to PLN 12.8 billion in the corresponding period of 2008.

it reached approx. PLN 32.1 billion, and was approx. PLN 4.0 billion higher than at the end of 2008[25]. Thus, it may be concluded that the level of local government sector deficit in 2008 will prove significantly higher than in 2008 and will largely contribute to the widening of fiscal imbalance of the whole general government sector.

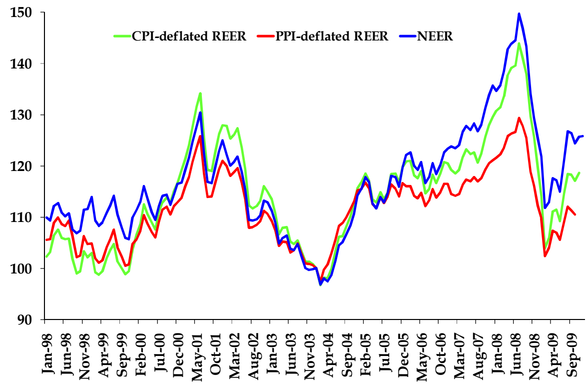
In 2009 the situation of the special purpose funds deteriorated as well. Poor labour market conditions led to a considerable fall in the growth rate of social security contributions and an increase of expenditures of special purpose funds. The increase in expenditures of the Labour Fund was additionally affected by systemic changes[26]. Moreover, in 2009 transfers to FUS were planned at a low level. As a consequence, the three major funds (Social Security Fund, Labour Fund, National Health Fund) recorded deficits in 2009, as compared to surpluses in the previous year. The shortfall of funding of the FUS was supplemented by loans from the banking sector (the value of which stood at PLN 4.0 billion as of end 2009) and from the central budget (a loan of PLN 5.5 billion). The Labour Fund[27] and the National Health Fund financed their current deficits with surpluses accumulated in previous years.

Figure 2.25
Value of Polish exports and imports (EUR billion).



Source: NBP calculations based on GUS data.

Figure 2.26
Zloty real and nominal effective exchange rate (increase denotes appreciation; January 2004=100)



Source: NBP and European Commission data.

2.2.4. Exports and imports

Following a strong decline at the turn of 2008 and 2009, connected with a slump in external demand, Polish exports have been gradually growing since 2009 Q2 as the global economic climate has been improving. In 2009 Q3 the volume of Polish exports rose by 4.2% q/q (compared to a rise of 4.4%, respectively, in 2009 Q2)[28]. Polish exports benefited from a continued

[25] In the corresponding period of previous years the indebtedness of local governments decreased: in the first three quarters of 2008 their indebtedness diminished by PLN 1.0 billion, and in the corresponding period of 2007 – by PLN 0.9 billion.

[26] Among others, the burdening of the Labour Fund with the duty of financing the payment of pre-retirement allowances and benefits, reimbursement of costs of postgraduate internships and specialisation courses for medical doctors and nurses (previously financed from the central budget), as well as increasing the amount of allowance payable to the unemployed undertaking own business activity.

[27] Rising unemployment and systemic changes (among others, the payment of pre-retirement allowances and benefits, the reimbursement of costs of postgraduate internships and specialisation courses of medical doctors and nurses, as well as increased amount of allowance granted to the unemployed undertaking business activity, all financed by the Labour Fund.) translated into a considerable increase in the Labour Fund's expenditure.

[28] The data on the growth rate of export and import volumes are taken from GUS foreign trade statistics (not seasonally adjusted).

recovery in the export sector of the euro area. The growth rate of Polish exports was also positively affected by a slower pace of inventory reduction in the euro area.

The rise in Polish exports in 2009 Q3 was accompanied by import growth, the volume of which increased by 6.2% q/q (compared to a rise of 0.4% in 2009 Q2, respectively). The rise in the volume of imports was driven by increased imports of intermediate goods connected with a recovery in Polish exports that are characterised by relatively high import intensity. Import growth was also related to a rise in the imports of consumer goods, which has been supported by the appreciation of the zloty since March 2009.

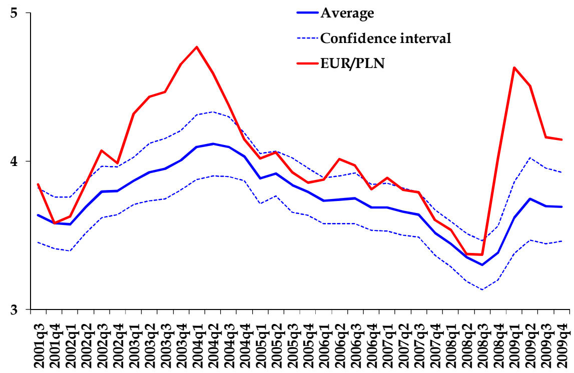
Despite the strengthening of the nominal exchange rate of the zloty, which was conducive to weakening the competitive position of Polish enterprises in comparison to preceding quarters (Figure 2.26), the price competitiveness of exports in 2009 H2 remained high. This is confirmed by NBP economic climate surveys, which suggest that the average threshold exchange rate of export profitability was running markedly below the actual exchange rate and that the share of enterprises with unprofitable exports in this period was low (Figure 2.27).

Transaction prices of exports rose in 2009 Q3 by 12.5% y/y (compared to a rise of 16.2% y/y in the previous quarter), which amid a relatively weaker rise of import prices (cf. Section 2.1.3) translated into a further improvement in the *terms-of-trade*.

2.2.5. Output

Monthly data on industry, including in particular the year-on-year growth in sold industrial output observed since November 2009 and the steadily expanding portfolio of orders, point to an improvement in the situation in this sector in 2009 Q4 (Figure 2.28). In the last months of 2009 higher output was also observed in construction, alongside lower annual drops in construction orders (Figure 2.29); data for January, however, point to a deterioration of this sector's situation. The growth of construction and assem-

Figure 2.27
Average threshold exchange rate (EUR/PLN) of exports profitability declared by enterprises.

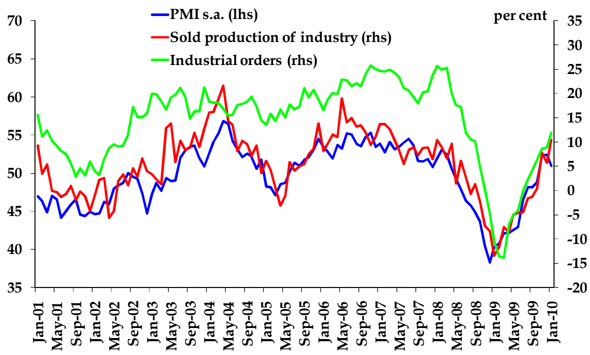


Source: NBP data and estimates.

The threshold exchange rate at which exports become profitable is determined as the average of responses to a question (see below) included in the survey of NBP quick monitoring addressed at enterprises *Information on the Condition of the Enterprise Sector, Including the Economic Climate*. The survey study covers non-financial entities 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.

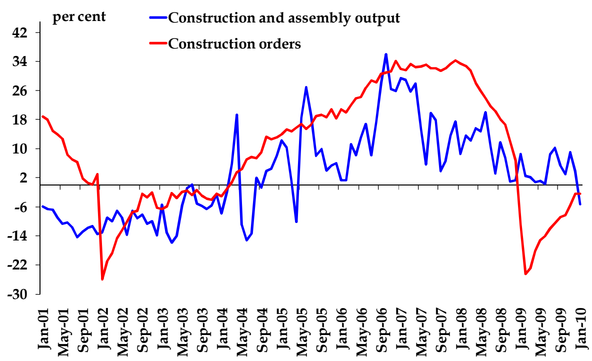
Survey question: "What is the threshold level of the foreign exchange rate at which exports will become (is) unprofitable (in zloty)?"

Figure 2.28
PMI and annual growth of sold production of industry and of industrial orders.



Source: GUS, Reuters data (seasonally adjusted), NBP calculations.

Figure 2.29
Annual growth of construction and assembly output and construction orders.



Source: GUS data (seasonally adjusted), NBP calculations.

bly output is significantly positively affected by the increase in civil engineering, connected with high public spending on infrastructural projects.

The gradual improvement in the situation of the domestic economy found reflection in GUS business tendency surveys: since the last *Report* business sentiment has improved in most sections (Figure 2.30). At the same time, however, sentiment indicators – most notably in sections construction and transportation and storage – are still lower than the average values achieved in recent years.

2.3. Labour market

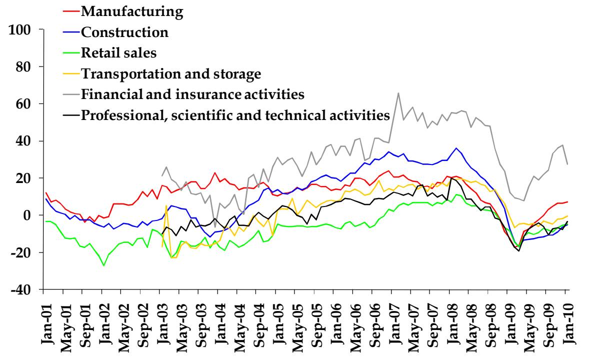
Despite improved economic climate in the second half of 2009 unfavourable situation persisted in the labour market which responds to changes in economic activity with some delay. The past few months, however, have brought some signs of gradual deceleration of negative tendencies in this market.

In the second half of 2009 the rate of unemployment continued to rise. In seasonally adjusted terms, the unemployment rate according to the BAEL (LFS) increased in 2009 Q3 to 8.3% (from 7.6% in 2009 Q2) and the rate of registered unemployment in January 2010 rose to 12.2%[29] (from 11.3% in September; Figure 2.33).

Unemployment growth in 2009 Q3 was primarily driven by an increased labour supply amid persistently low demand for labour (Figure 2.31). The rise in the supply of labour mostly resulted from a higher economic activity ratio and, to a lesser extent, from an increase in working-age population.

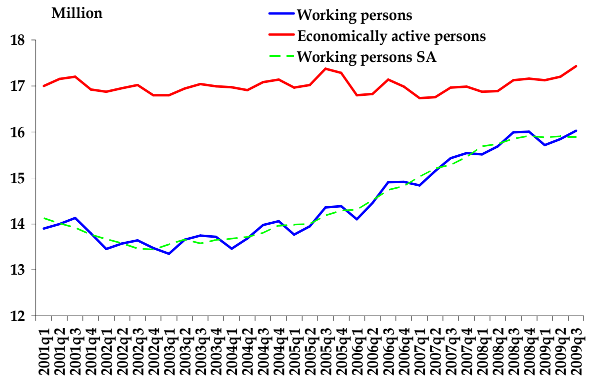
After a decline in 2009 Q1, the number of working persons according to the BAEL edged up and in 2009 Q3 ranged at a level close to that observed in 2008 Q3 (Figure 2.31). Moreover, 2009 Q4 brought a stabilisation in employment in the enterprise sector[30] (Figure 2.32).

Figure 2.30
Indicators of future economic activity in selected sections.



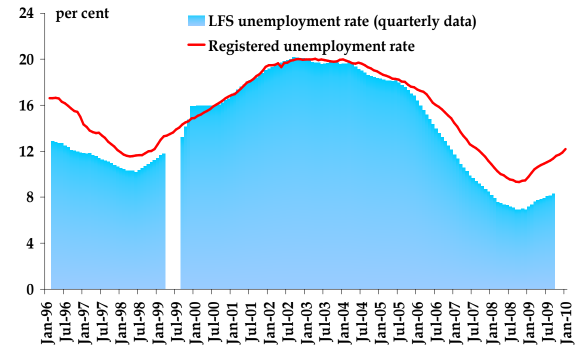
Source: GUS business tendency survey.

Figure 2.31
Working persons working in the economy and economically active in the economy according to BAEL.



Source: GUS data.

Figure 2.32
Unemployment rate registered by labour offices and unemployment rate according to LFS.



Source: GUS data (seasonally adjusted).

Date till 2002 adjusted for the results of the 2002 National Census. No BAEL survey was conducted in 1999 Q2 or Q3.

There are two reasons for the differences between the unemployment rate according to the 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.

[29] January 2010 unemployment data are based on Ministry of Labour and Social Policy estimates.
[30] In January 2010 the average employment in the enterprise sector increased by 46 thousands as compared to December 2009 (i.e 0.9%). The employment figure in January apart from being influenced by labour market conditions was affected by sample change caused by enterprise size verification. This makes the employment figure in January 2010 difficult to interpret.

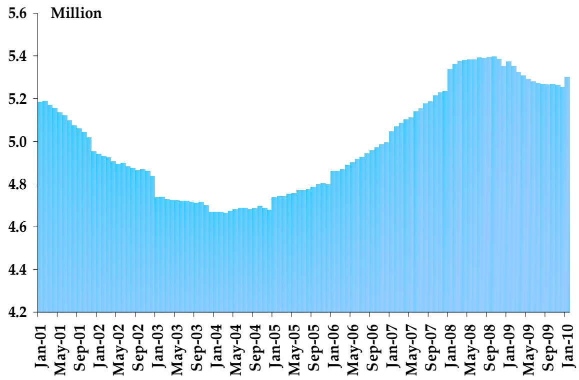
After the decline started in 2008 Q1, the number of vacancies reported to labour offices stabilised in the last months of 2009 and fell sharply in January 2010. The stabilisation in the number of job vacancies translated into the levelling-off of the labour market tensions index in late 2009 and its further decline in January 2010 (Figure 2.34).

In 2009 Q3, the reduction in the number of people employed on fixed-term contracts and in the number of working hours[31], which had so far been an important element of the adjustment of labour outlays to the economic slowdown, decelerated.

Possible weakening in the unfavourable labour market tendencies is also suggested by the results of the NBP business tendency surveys[32]. In 2009 Q4 forecasts of employment in the corporate sector improved for the third consecutive quarter. However, enterprises still more often declare plans to reduce the number of employees than to increase it.

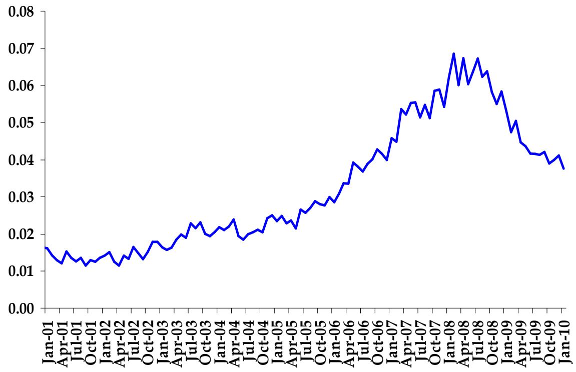
After a decline started in 2008 Q4, the growth rate of nominal and real wages in the economy stabilised in 2009 Q3 and Q4. In 2009 Q4, nominal wages in the economy rose by 4.7% y/y (compared to 4.9% y/y recorded in 2009 Q3), which with inflation running lower than in the preceding quarter translated into an acceleration in the growth of real wages to 1.4% y/y (compared to 1.3% y/y in 2009 Q3) (Figure 2.35). In 2009 Q4 the growth rate of wages in the enterprise sector equalled 3.8% y/y, which was consistent with the level observed in two preceding quarters[33].

Figure 2.33
Employment in corporate sector.



Source: GUS data.

Figure 2.34
Labour market tensions index (number of vacancies per one unemployed)



Source: GUS data, NBP calculations.

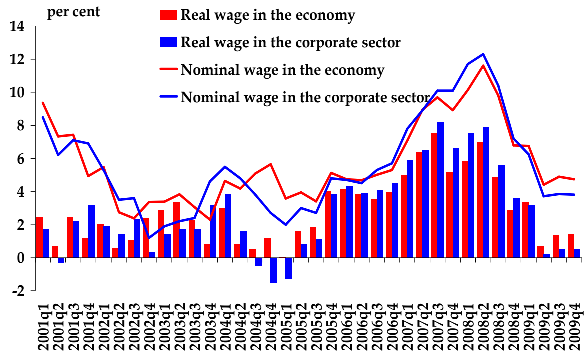
The Vacancy-Unemployment Ratio is directly proportional to the probability of an unemployed person finding a job (the more vacancies per unemployed the more likely he/she is to find a job) and inversely proportional to the probability of filling a vacant post by an employer (the more job offers in relation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

[31] In seasonally adjusted terms, the average weekly number of hours worked in the main job increased to 39.7 in 2009 Q3 as compared to 39.5 in 2009 Q2.
[32] See: *Information on the Condition of the Enterprise Sector, Including the Economic Climate in 2009 Q4 and Forecasts for 2010 Q1, NBP, January 2010.*
[33] According to monthly data in January 2010 average gross wage growth in enterprise sector was 0.5% y/y as compared to 6.5% y/y in December 2009. Wage dynamics in enterprise sector in December 2009 and January 2010 was influenced by base effect associated with tax rate changes introduced in 2009. It could also have been affected by sample change (See: Footnote 30). This makes employment figure in January 2010 difficult to interpret.

Further economic growth improvement amid a lower year-on-year rise in the number of working persons according to the BAEL translated into a significant acceleration in labour productivity growth in 2009 Q3 (1.4% y/y compared to 0.1% y/y in 2009 Q2). With a weaker growth rate of wages, this resulted in a further slowdown in the rate of unit labour costs in the economy (in 2009 Q3 it was 3.4% y/y compared to 4.3% y/y recorded in the previous quarter, Figure 2.36). At the same time, unit labour costs in industry have been decreasing since August 2009 (Figure 2.37).

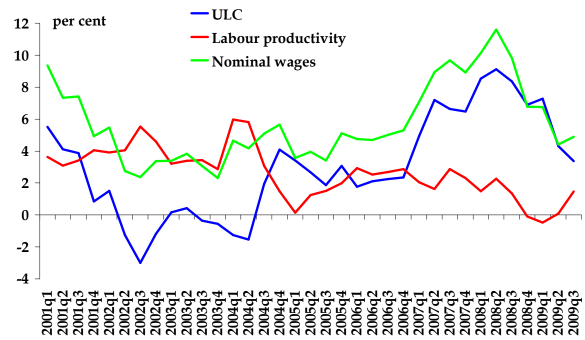
The NBP business tendency surveys[34] point to a possibility of a decline in the growth rate of wages in the corporate sector in 2010 Q1.[35] Moreover, the GUS consumer sentiment survey indicates that the percentage of those afraid of becoming unemployed, despite decreasing slightly in comparison to the previous quarter, remains high, which may be conducive to holding the wage pressure on the part of employees at a relatively low level.

Figure 2.35
Annual growth of wages in the economy and corporate sector (in nominal and real terms).



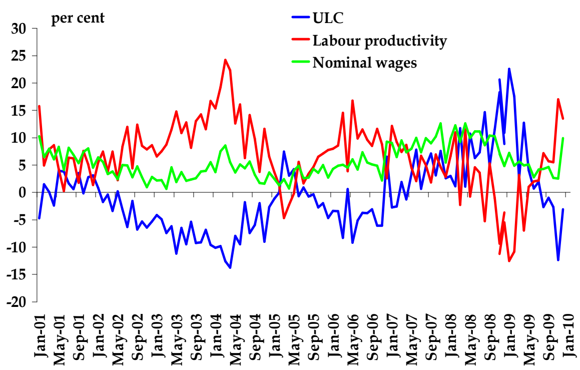
Source: GUS data, NBP calculation

Figure 2.36
Annual growth of labour productivity, wages and unit labour costs (ULC) in the economy.



Source: GUS data, NBP calculations.

Figure 2.37
Annual growth of labour productivity, wages and unit labour costs (ULC) in industry.



Source: GUS data, NBP calculations.

[34] See: *Information on the Condition of the Enterprise Sector, Including the Economic Climate in 2009 Q4 and Forecasts for 2010 Q1, NBP, January 2010.*

[35] In 2010 Q1 pay rises are planned by 9.6% of the surveyed enterprises (compared to 4.3% in 2009 Q4 and 2.7% in 2009 Q1). At the same time, 2.6% of respondents declared intentions to cut wages (compared to 4.2% in 2009 Q4). It is expected, however, that an average pay increase will be lower than the average pay reduction.

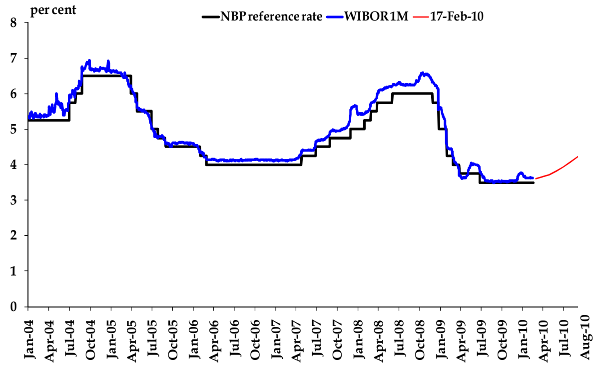
2.4. Financial markets

Following a cut in June 2009, the NBP interest rates have remained unchanged. Likewise, interest rates in the interbank market have also been stable (Figure 2.38). The National Bank of Poland ceased to conduct foreign exchange swaps with the Swiss National Bank (SNB) and with commercial banks[36], which was connected with a fall in demand for liquidity provided by these operations as well as improved conditions in the Swiss franc money market.

According to the results of the Reuters survey of 8 February 2010, most analysts expect the reference rate to be raised in 2010[37]. Currently it is difficult to determine the future level of NBP interest rates based on FRA rates due to the heightened liquidity and credit risk premium included in the prices of these contracts as well as in the WIBOR rate. One-month WIBOR rates implied from FRAs (including the risk premium; Figure 2.38) could point to expectations of the NBP rates at 3.50-3.75% over the next three months, and 4.50-4.75% over a one-year horizon.

Yields on Polish bonds range close to the level observed around the time of publication of the previous *Report* (Figure 2.39). Since then yields have been pushed up by deteriorating investor sentiment towards emerging markets, resulting from reports of Dubai's debt difficulties, and by news of a significant fiscal imbalance in Greece. On the other hand, the release of favourable macroeconomic data on the Polish economy and announcements of a fiscal consolidation plan to be implemented in the coming years were the factors conducive to yield decreases. Since 2009 Q2 heightened differences have persisted between yields on long- and short-term bonds.

Figure 2.38
NBP reference rate, 1-month WIBOR and 1-month interest rate implied by FRAs.

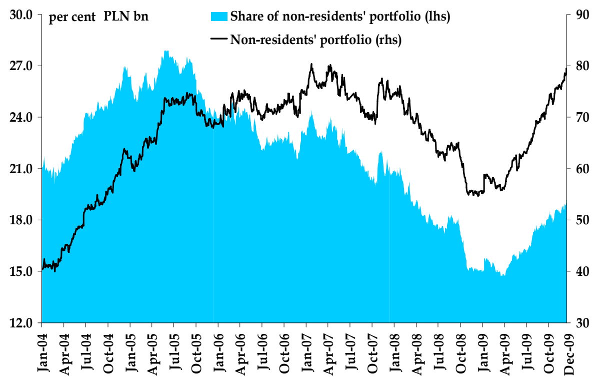


Source: Reuters data, NBP calculations.

Figure 2.39
Yields of Polish benchmark bonds (y/y).

Source: Reuters data.

Figure 2.40
Non-residents' engagement in the Polish Treasury bond market.



Source: National Depository for Securities (KDPW) data.

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36 Under these transactions the SNB provided the NBP with Swiss francs in exchange for euros, and the NBP provided domestic commercial banks with Swiss francs in exchange for Polish zlotys.

37 43% of analysts assess that in 2010 Q4 the reference rate will stand at 4.00%, 18% see it at 3.75%, 15% expect it more than 4.00%, while the remaining analysts (25%) believe that the main NBP rate will remain unchanged in 2010.

In the recent period, non-residents have further increased their involvement in the Polish debt market. (Figure 2.40). Polish bond issues abroad have become more attractive, as revealed by the relatively more favourable valuation of Polish bond issues in foreign markets in January 2010 as compared to the issues of early 2009, and a drop in credit default swap spreads to a level below that observed for Greece, Ireland and Portugal[38].

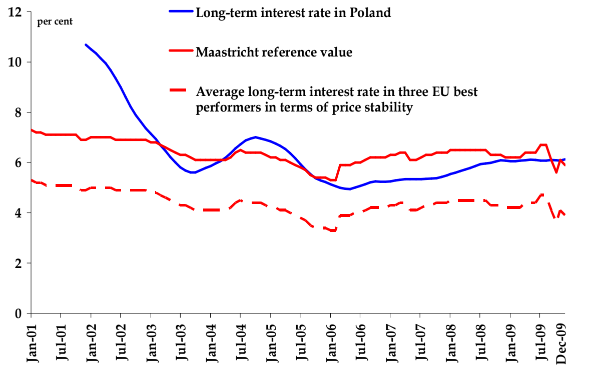
In December 2009 yields on Polish long-term bonds in average annual terms, used for assessing the compliance with the Maastricht interest rate criterion, amounted to 6.1%, while the reference value stood at 5.9%[39] (Figure 2.41).

The rises in Polish equity prices, initiated in March 2009, have continued over the past few months but lost momentum towards the end of 2009 and at the turn of January and February 2010 a strong selloff occurred (Figure 2.42). In the last few months the involvement of foreign investors in the Polish capital market has also increased (Figure 2.43).

2.4.1. Home prices

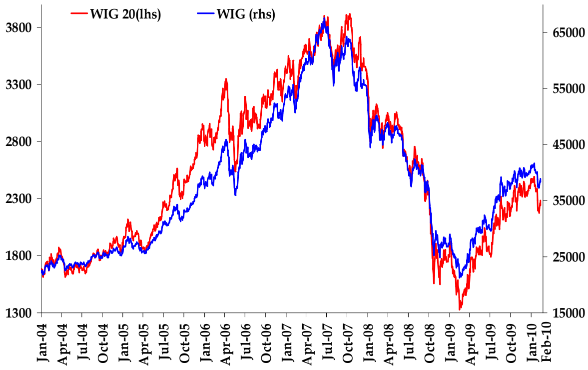
In the second half of 2009 asking prices of flats in the primary and secondary markets, and sale prices in the secondary market in Poland's largest cities were stable or displayed a slight falling tendency (Figure 2.44). A similar tendency was observed in the markets of other, smaller, cities. Prices of flats remain high in relation to the income of households, which results in low availability of flats and a small number of concluded transactions. The demand for flats is being curbed by lower than in the previous years credit availability due to tighter lending criteria.

Figure 2.41
Average annual yield (12-month moving average) of long-term Treasury bonds in Poland versus the reference value for the Maastricht criterion.



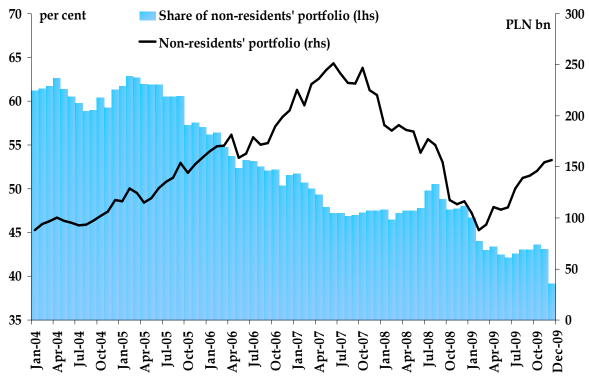
Source: NBP estimates based on Eurostat data.

Figure 2.42
WIG and WIG20 stock exchange indices.



Source: Reuters data.

Figure 2.43
Non-residents' engagement in the Polish equity market (measured by the market value of shares)



Source: NBP data.

[38] On 17 February they amounted to 143 points for Polish bonds, 345 basis points for Greek, 177 basis points for Portuguese and 153 for Irish Treasury bonds.

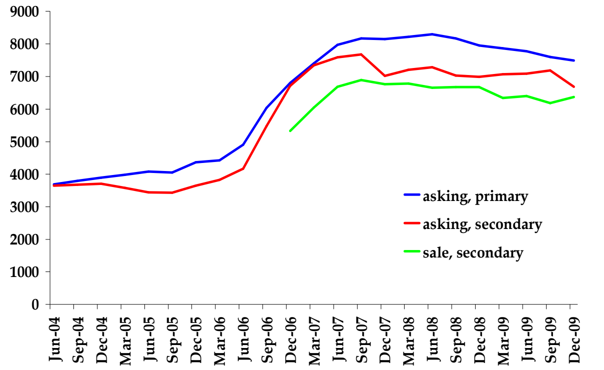
[39] NBP estimates based on the assumption that the reference group in December 2009 included Belgium, Luxembourg and France (cf. footnote 5). If the reference group consisted of Luxembourg, France and Cyprus, then the reference value for the long-term interest rate criterion in December 2009 would be 6.2%.

Construction costs still display a slight falling tendency, which – in combination with still high prices of flats – provides an incentive for property developers to start new construction projects. As a result, in spite of very high surpluses of unsold flats in the largest markets, the number of building permits and newly started flats, despite some decline, remained at a relatively high level in 2009 (Figure 2.45).

2.4.2. Exchange rate

Between the publication of the previous *Report* and 17 February 2010, the nominal exchange rate of the zloty (Figure 2.46) appreciated by approx. 6% against the euro, approx. 3% against the Swiss franc and depreciated approx. 1% to the US dollar. The zloty exchange rate against the euro strengthened in November and at the beginning of December 2009, mainly due to better foreign investor sentiment towards Poland and the region of Central and Eastern Europe, as well as releases of positive macroeconomic data on Poland. In the first half of December 2009 the zloty depreciated against the euro in reaction to external factors, primarily the news of lowered credit rating of Greece and worsening of investor sentiment towards CEE economies connected with fears that their credit ratings would be downgraded. Starting from the second half of December 2009, the zloty has appreciated again. The appreciation was supported by good data on the Polish economy and investors' positive perception of the economic outlook for Poland, which was also reflected in an increased demand for Polish Treasury bonds abroad.

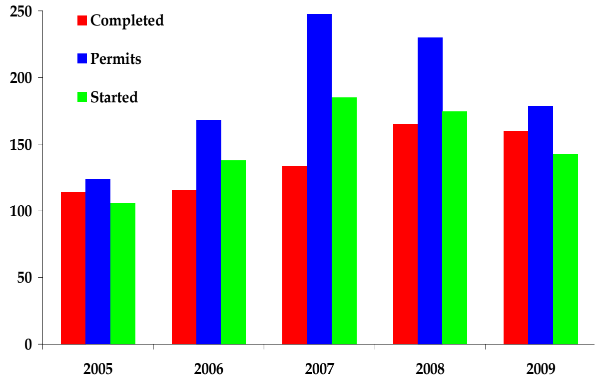
Figure 2.44
Average* asking prices (PLN/m^2) in the primary and secondary markets, and sale prices in the secondary markets of 7 big cities in Poland (Gdansk, Gdynia, Krakow, Lodz, Poznan, Warszawa, Wroclaw).



Source: Sale price data from an NBP survey, PONT Info Nieruchomości asking price data, NBP calculations.

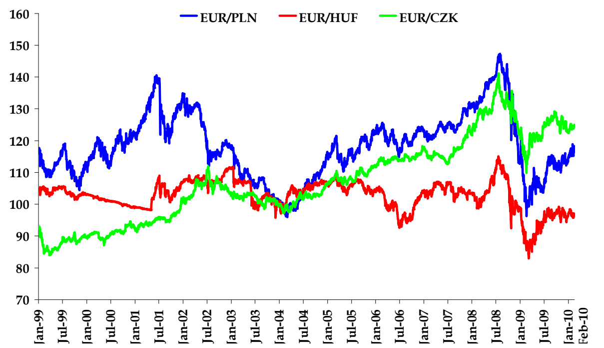
* Asking prices - average weighted by the number of offers, sale prices - average weighted by the share of the housing stock in a given city in the overall housing stock for all 7 cities.

Figure 2.45
The number of completed flats, construction permits issued and construction projects started.



Source: GUS data.

Figure 2.46
Nominal exchange rates of the Polish zloty, the Czech koruna and the Hungarian forint against the euro (January 2004=100; increase denotes appreciation).



Source: Ecowin data, NBP calcualtions.

2.5. Credit and money[40]

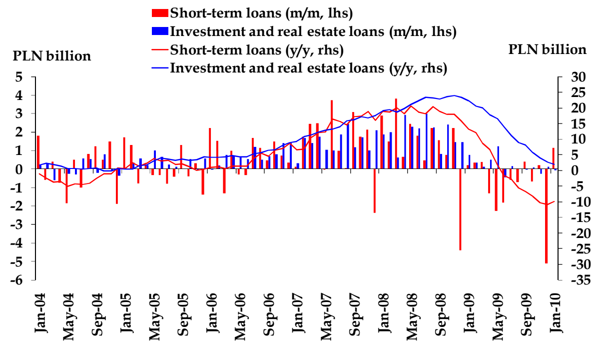
2.5.1. Loans

After falling in October-December 2009 the volume of loans to enterprises increased in January 2010, which was primarily connected with an increase in short-term loans (i.e. loans on current account and working capital loans) extended to enterprises for the purpose of financing operating expenses related to their core activity. That said, in the whole period analysed the volume of short-term loans decreased by PLN 4.4 billion. Since 2009 Q2 investment and real estate loans of enterprises have remained stable (Figure 2.47). In 2009 Q3 the foreign debt of enterprises increased by EUR 3.1 billion, primarily in connection to their growing non-trade credit. The negative annual growth rate of trade loans in this period (-15.1%), i.e. postponed payments for imported goods and services, was primarily connected with a decline in import.

The data on the demand for credit to enterprises has been ambiguous in the recent period. Survey studies of enterprises[41] indicate that in 2009 Q4 the percentage of companies applying for a loan decreased (by 4.6 percentage points q/q and 2.3 percentage points y/y), while surveys carried out among senior loan officers[42] show than in the same period banks recorded a net increase in the demand for corporate credit. At the same time, both surveys point to a gradual loosening of banks' credit policy[43] (Figure 2.48).

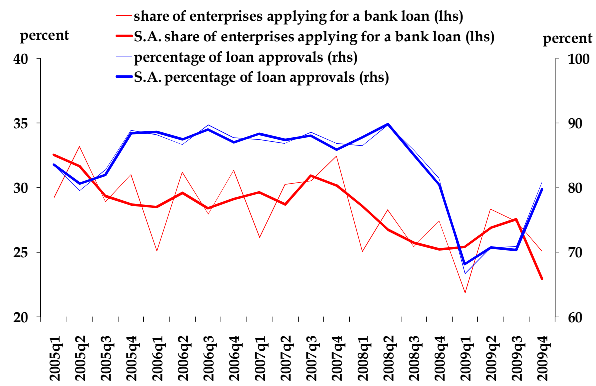
In October 2009 – January 2010 annual and monthly growth in housing loans to households stabilised at levels which were only approx. 50% lower than in the period of a very strong surge in lending in 2007-2008 (Figure 2.49).

Figure 2.47
Loans to enterprises.



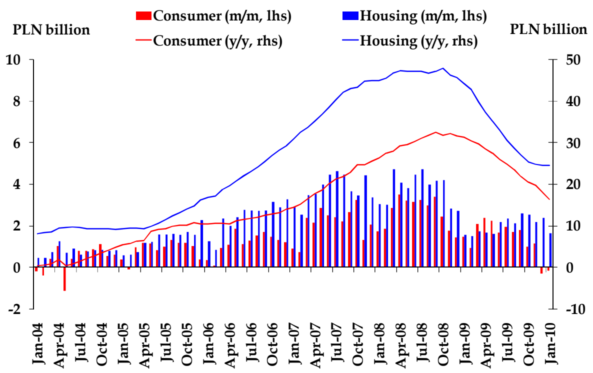
Source: NBP data.

Figure 2.48
Share of enterprises applying for loans and percentage of approved loan applications.



Source: NBP data.

Figure 2.49
Loans to households.



Source: NBP data.

[40] The monetary data presented in this chapter refer to values adjusted for the impact of fluctuations in zloty exchange rate against main foreign currencies.
[41] *Information on the Condition of the Enterprise Sector, Including the Economic Climate in 2009 Q4 and Forecasts for 2010 Q1, NBP*
[42] Senior Loan Officer Opinion Survey on Bank Lending Practices and Credit Conditions (1st Quarter 2010), NBP.
[43] Net percentage of banks which eased their loan granting criteria in 2009 Q4 was 12% and 7%, respectively, for short- and long-term loans to small enterprises, and 8% for short-term loans to large enterprises. At the same time, the share of approved loan applications filed by enterprises increased.

Growth in housing loans was fuelled by increased demand for housing loans registered by the majority of banks in 2009 Q4 and the declared easing of credit standards by the majority of banks (Figure 2.50). The major part of newly granted housing loans (87.6%) was denominated in zlotys, but – after a strong decline in August 2009 – the share of loans denominated in foreign currencies was gradually rising in September - December 2009, which was connected with the easing of terms and the reintroduction of this kind of loans by some banks.

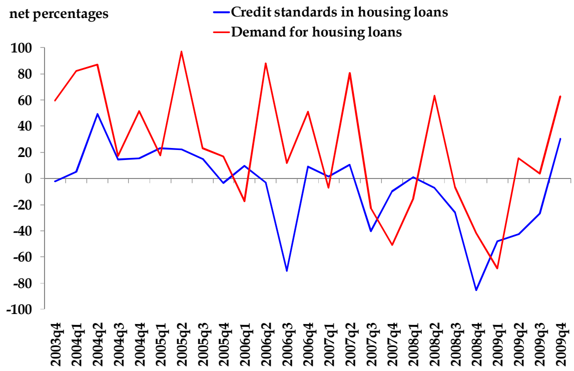
In contrast to housing loans, consumer loans have slid down in month-on-month terms over the recent period (Figure 2.49), which in the light of NBP survey studies may be primarily attributed to the fact that credit standards for granting such loans were tightened by most banks.

Following a decline in September - November 2009, average interest charged on newly granted zloty-denominated loans to enterprises increased in December 2009, despite a stable level of 3M WIBOR rates (Figure 2.52). In contrast, the interest rates charged on new zloty-denominated housing loans to households have been falling in the recent period. Interest and margins also decreased in the case of new consumer loans, reflecting the fact that the credit policy tightening declared by banks in 2009 Q4 referred mainly to credit standards rather than terms of granting consumer loans.

2.5.2. Financing and capital standing of banks[44]

2009 Q4 brought a slight improvement in the financing conditions and capital position of banks, that is factors which affect the supply of credit. A slower growth rate of lending and extension of a stable deposit base resulted in the narrowing of the funding gap[45] in the banking sector, i.e. the share of receivables that has to be financed from sources other

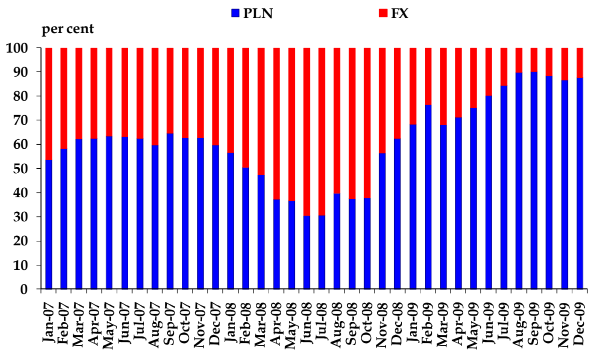
Figure 2.50
Demand for housing loans and credit policy of banks as regards housing loans to households.



Source: NBP data.

Weighted responses of banks. Positive value should be interpreted as rise in demand for credit or credit policy easing in relation to previous quarter.

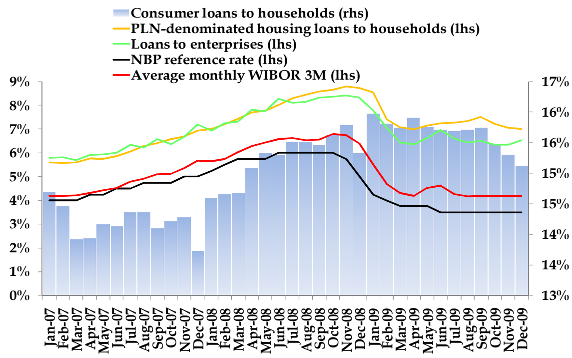
Figure 2.51
Currency structure of newly granted housing loans to households.



Source: NBP data.

Structure prepared based on information acquired for interest-rate reporting purposes from sample of 20 banks whose share in market of loans to non-financial sector accounts for approx. 75%.

Figure 2.52
Average interest charged on newly granted zloty loans to households and enterprises.



Source: NBP data.

[44] A more comprehensive discussion of the banking sector's stability may be found in the *Financial Stability Report – December 2009*, NBP.

[45] The funding gap is the difference between the amount of loans to non-financial customers and the general government sector and the amount of deposits accepted from those sectors, expressed as percentage of the value of loans.

than the deposits of clients (Figure 2.53). The rollover of the financing granted at a large scale by foreign parent entities in 2008 Q4 facilitated the closing of the funding gap in the domestic banking sector.

After most banks retained profits for 2008 and raised their capital, the average solvency ratio in the banking sector increased, while the positive assessment of the current and future capital situation was conducive to the easing of banks' lending policy (Figure 2.54). In turn, the deterioration of the quality of loan portfolios becomes the main factor prompting banks to tighten their terms and criteria for granting loans. The share of irregular loans increased the most for consumer loans and loans to enterprises (Figure 2.55).

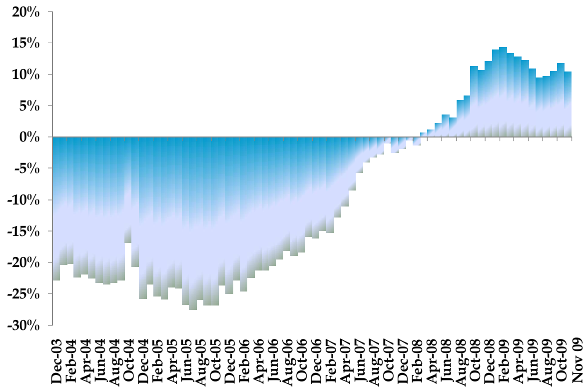
2.5.3. Deposits and monetary aggregates

According to the NBP's survey studies, 2009 Q4 saw an improvement in the liquidity assessments of enterprises and their capacity for timely settlement of liabilities[46], which found reflection in the annual and monthly growth in bank deposits of this sector (Figure 2.56). In January 2010 the volume of enterprises' bank deposits dropped in accordance with a seasonal pattern, still in the whole period October 2009 – January 2010 deposits of enterprises did increase by PLN 7.4 billion. Improved liquidity of enterprises in 2009 Q4 was conducive to reducing their dependence on short-term loans.

Following a period of slowdown in September and October 2009, the period November 2009 – January 2010 brought a visible rise in the deposits of households. In the recent period households have consolidated their tendency, observed since May 2009, to place a higher share of their savings in the capital market. In September-November 2009 the positive balance of payments and amortisations of investment fund units amounted to PLN 1.5 billion (compared to the outflow of PLN 38 billion in the whole of 2008).

After a sharp fall in the growth rate of broad

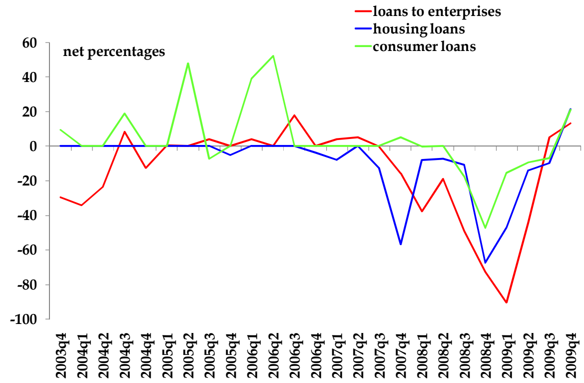
Figure 2.53
Average financing gap in banking sector.



Source: NBP data.

The financing gap is the difference between the total amount of loans granted to non-financial, central and local government sectors and the sum of deposits received from these sectors, expressed as the percentage of the value of loans.

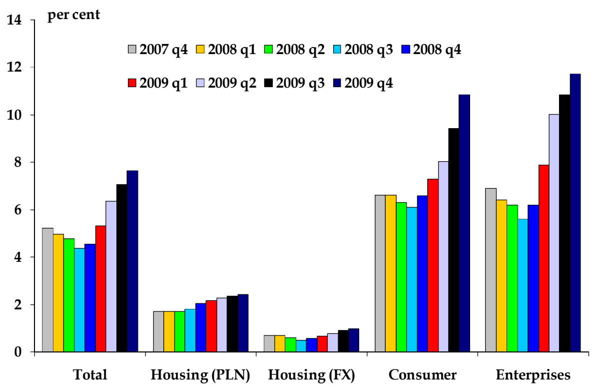
Figure 2.54
Impact of banks' current and anticipated capital situation of bank on credit policy (q/q, net percentages)



Source: NBP data.

Weighted responses of banks. Positive value denotes that the capital situation to a greater extent contributed to easing than tightening the credit policy of banks.

Figure 2.55
Share of irregular loans in particular loan categories.

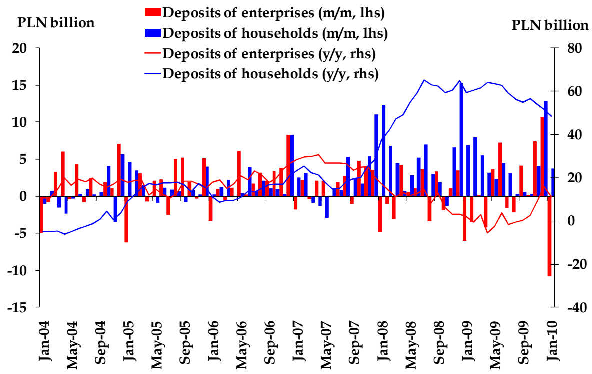


Source: NBP data.

[46] Information on the Condition of the Enterprise Sector, Including the Economic Climate in 2009 Q4 and Forecasts for 2010 Q1, NBP.

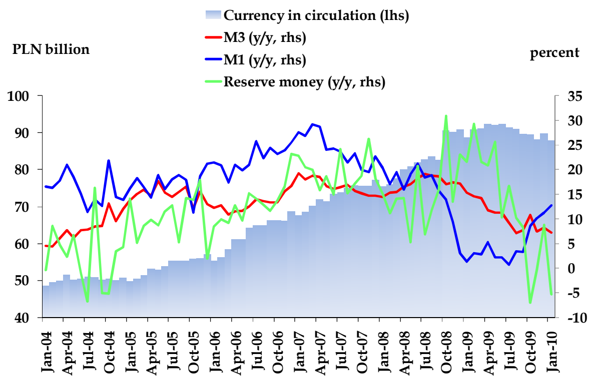
money M3 in the first half of 2009, in the period September 2009 - January 2010 the annual growth of broad money M3 remained at a stable level of 7-8% (Figure 2.57).[47] At the same time, the second half of 2009 saw a rapid increase in the annual growth rate of M1, which reached 12.7% in January 2010. Overall, in 2009 M3 increased by PLN 55.2 billion, compared to an average yearly increase of PLN 64.2 billion in 2004-2009, while M1 increased by PLN 40.0 billion, compared to an average yearly increase of PLN 38.3 billion in 2004-2009. The volume of reserve money (cash in circulation plus banks' current as well as required reserves accounts)[48] increased in 2009 by PLN 11.2 billion, compared to an average increase of 11.9 in 2004-2009. At the same time, the annual growth rate of this aggregate was mainly influenced by changes in banks' current account holdings. In 2009 (Figure 2.57) the level of currency in circulation decreased by PLN 2.9 billion, with the annual growth rate of currency in circulation staying negative due to a strong positive base effect, connected with a significant rise in this aggregate in October 2008.

Figure 2.56
Bank deposits of households and enterprises.



Source: NBP data.

Figure 2.57
Currency in circulation and annual growth rates of M1, M3 and reserve money.



Source: NBP data.

[47] A temporary deviation of M3 growth rate from the trend observed in October 2009 resulted from a strong increase in non-monetary deposits of financial institutions, connected with the fact that investors deposited funds in broker accounts with the intention of purchasing the shares in PGE Polska Grupa Energetyczna S.A. The funds for the purchase of shares were, to a large extent, acquired from loans incurred for the purchase of securities and, after an over-90-percent reduction in orders, they returned to ordering parties.

[48] Starting from end-November 2008 data the National Bank of Poland introduced methodological change in the compilation of the central bank monetary base. The redefinition consists in including in the monetary base deposit facility held by banks in the NBP.

Box. 2. Analysis of impact of commercial banks' credit policy tightening on GDP in Poland

Although in comparison to other countries, the Polish economy showed relatively high resilience to the global economic crisis, the slowdown of GDP growth in Poland triggered by the crisis proved to be significant. The global economic crisis affected the Polish economy through the following main channels:

- decline in the foreign demand for goods and services manufactured in Poland, connected with the recession faced by the main markets for Polish exports;
- higher restrictiveness of commercial banks' credit policy, connected with rising perceived credit risk for borrowers and lower liquidity in the interbank market, resulting in higher costs of credit and the tightening of terms and credit standards;
- growing risk aversion in the global financial markets, resulting in a higher risk premium for Polish debt securities, which increased the costs of corporate financing and public debt servicing in Poland and contributed to the outflow of foreign capital and a strong depreciation of the Polish zloty.

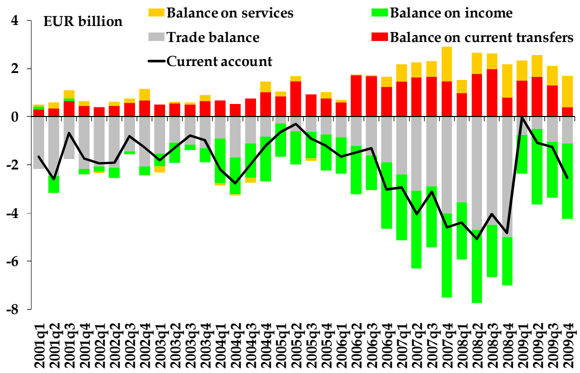
In order to assess the relative impact of shocks generated by the domestic banking sector on GDP growth slowdown against the background of other macroeconomic disturbances, a dynamic stochastic general equilibrium model (DSGE) with a banking sector was designed at the NBP[1]. The model's parameters were estimated using a Bayesian method on data from 1997 Q1 to 2009 Q2. The study suggests that, as a result of disturbances which affected the Polish banking sector in the period of the global financial crisis, GDP level was approx. 1.3% lower than it would have been in the absence of such disturbances. Although the GDP shortfall caused by the tightening of credit policy exceeds 1%, it should be pointed out that the impact of other macroeconomic factors was considerably larger.

[1] Brzoza-Brzezina, M and K. Makarski (2010) Credit Crunch in a Small Open Economy, to be published as NBP Working Paper.

2.6. Current account and capital account of the balance of payments

Following a considerable improvement in the current account balance in 2009 Q1, mainly connected with a strong reduction in the imports of goods, subsequent quarters saw deepening of the current account deficit (Figure 2.58). In 2009 Q4 this deficit rose to EUR 2.5 billion[49] (as compared with EUR 1.3 billion in 2009 Q3), driven by a lower surplus in current transfers and deepening of the income deficit. However, shifts in the balance of current transfers and the balance of income in this period were largely shaped by a one-off, large-scale transaction of November 2009.

Figure 2.58
Current account balance (EUR billion).



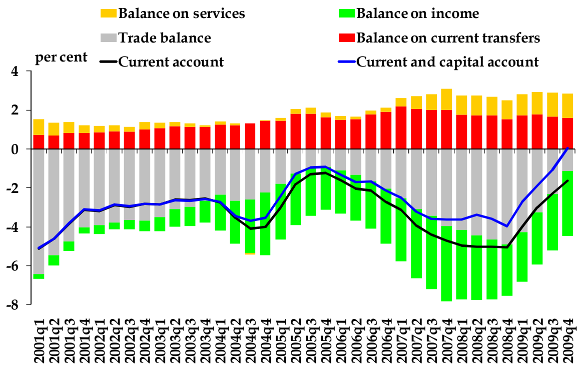
Source: NBP data.

[49] Shifts in the balance of payments in 2009 Q4 were described based on the NBP.

This period brought a further rise in the net inflow of foreign capital to Poland, yet of a lower magnitude than in the preceding quarter. The financial account surplus amounted to EUR 4.7 billion (as compared to EUR 10.7 billion in 2009 Q3), mainly as a result of the inflow of portfolio investment. Investment of non-residents in Polish debt and equity increased in 2009 Q4 by 3.3 EUR billion. Foreign investors invested mainly in Treasury bonds issued at the domestic and foreign markets. 2009 Q4 saw also a continued inflow of foreign net capital in the form of foreign direct investment. Its level was to a large extent driven by positive reinvested gains of enterprises. Amid low global economic activity foreign direct investment in Poland increased in 2009 by a total of EUR 8.3 billion, i.e. by the lowest amount since 2005.

According to preliminary estimates the current account deficit (in terms of four quarters) decreased to 1.6% of GDP at the end of 2009 (as compared to 5.1% at the end of 2008), while a small surplus of 0.1% of GDP was observed in the total current and capital account (as compared to a deficit of 4.0% of GDP at the end of 2008; Figure 2.59). The current account deficit in 2009 was fully financed with the inflow of capital in the form of direct investment.

Figure 2.59
Current and capital account to GDP (4-quarter rolling window).



Source: NBP data.

Chapter 3.

Monetary policy in October 2009 - February 2010

At the meetings in October, November, December 2009 and in January and February 2010 the Monetary Policy Council decided to keep the NBP interest rates unchanged: the reference rate at 3.50% on an annual basis; the lombard rate at 5.00% on an annual basis; the deposit rate at 2.00% on an annual basis; the rediscount rate at 3.75% on an annual basis. Moreover, at its meeting in December 2009 the Council decided to introduce, starting on 1 January 2010, the discount rate on bills of exchange accepted from commercial banks for discount at the NBP. The Council set the discount rate at 4.00% 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 October, November, December 2009 and January 2010, as well as the *Information from the meeting of the Monetary Policy Council* in February 2010.

Minutes of the Monetary Policy Council decision-making meeting held on 28 October 2009

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

The discussion at the meeting focused on the outlook for economic growth in the world and in the Polish economy, on current inflationary processes in Poland and the situation in the credit market. The Council discussed the influence of these factors on future inflation in Poland against the background of the October projection of inflation and GDP.

While assessing the global economic situation, some members of the Council emphasised that the improvement in economic climate in the euro-area economy was relatively small and the forecast economic growth in the region remained considerably below potential. Those members also pointed out that the improved economic climate in the United States and in China was to a large extent rooted in the stimulus packages, and that the prospective gradual removal of such measures kept up the uncertainty about the sustainability of global economic recovery. In particular, those members stressed the uncertainty surrounding private consumption recovery in the United States amid the still deteriorating situation in the US labour market. Moreover, some Council members assessed that the drop in private consumption in the United States connected, among others, with households' limited possibilities of taking out loans, including mortgage loans incurred to finance consumption, will not be offset by a rise in household consumption in emerging countries, even if the revived growth in these economies was sustained. In this context, those members pointed to the risk of slow economic growth persisting worldwide.

Other Council members assessed that the recovery in emerging economies, including, in particular, Asian countries, may be an important factor conducive to an economic revival all over the world. Those members indicated that the accelerated growth in emerging economies will be feeding through into the world economy mainly through the rise in those countries' demand for investment goods, exported, to a large extent, by the developed countries of Western Europe. In the opinion of those Council members, the current recovery in Asia may be marking the beginning of these economies' return to the potential growth path which may run at a relatively high level due to the ongoing process of real convergence in these economies.

While discussing the outlook for economic growth in Poland, some Council members assessed that the Polish economy had already entered the phase of recovery, although some of them emphasised that this recovery may prove relatively slow. At the same time it was pointed out that the October projection forecast only a slight acceleration of growth in 2010. It was emphasised that the relatively low GDP growth may be the result of a drop in real disposable income of households connected with a rise in unemployment and a decline in real wages as well as more difficult access to credit. Some Council members assessed that the latest macroeconomic data, including those on exports, output and retail sales, did not indicate unambiguously the beginning of a sustainable recovery in the Polish economy.

While discussing current inflation developments, it was pointed out that, despite the fact that in September 2009 inflation had fallen to 3.4%, i.e. below the upper limit for deviations from the inflation target (3.5%), it might nevertheless continue at a heightened level in the near future. This high level of inflation would be driven primarily by the positive base effect connected with a strong drop in fuel prices at the end of 2008. Some members of the Council pointed to the continuation of the relatively high level of core inflation, including the persistently high growth of prices of services. It was pointed out that Poland was one of the three EU countries with highest inflation. Other Council members argued that the difference in the levels of inflation in Poland and in other EU countries was connected with a smaller scale of economic activity weakening in Poland and with the process of price convergence of the Polish economy to price levels recorded in developed Western European economies.

While discussing the outlook for inflation in Poland, the Council addressed the projection and the short-term inflation forecasts of the NBP which foresee inflation declining below the inflation target of 2.5% in the middle of 2010. In the opinion of some members of the Council this course of future inflation will follow from weaker consumption demand, persistently low wage pressure and the appreciation of nominal zloty exchange rate so far. Those members also pointed out that the October projection indicated a higher risk of inflation declining in 2010 below the lower limit for deviations from the inflation target of the NBP (1.5%) than the June projection.

Other Council members indicated that the discrepancy between the short-term forecasts of core inflation, food and energy prices and their forecasts in the October projection pointed to a significant uncertainty as to the path of inflation in the coming quarters. In particular, some Council members assessed that the growth of food prices in the nearest future may prove higher than in the October projection. Those members additionally pointed to recently observed oil-price rises in the world markets and to the uncertainty about natural gas prices in Poland. Moreover, some Council members argued that the recovery in emerging economies, where economic growth raises the demand for raw materials, may be conducive to a resurge in the prices of agricultural and energy commodities in the world markets, especially in a situation where no limits exist on open investment positions in some forward commodity markets. In the opinion of those Council members, this may lead to higher inflation around the world and in Poland. At the meeting the Council also discussed the risk of increases of administered prices in 2010, including the prices decided by local authorities, resulting from the unfavourable situation of the public finance sector.

While addressing the outlook for inflation in 2011, some members of the Council pointed out that, in line with the October projection the probabilities of inflation running below and above the inflation target were similar towards the end of the projection horizon. Moreover, some Council members argued that, following a drop to a low level foreseen in the middle of 2010, inflation would be steadily increasing till the end of the projection horizon. Other Council members, on the other hand, emphasised that for the most part of the projection horizon the probability of inflation running below the target was higher than the probability of its running above the target. Those members indicated that 2011 inflation being higher in the October projection than in the June projection was partially a result of a positive base effect connected with a deeper decline in food prices forecast for 2010. They also emphasised the issue of the optimal forecast horizon in central banks pursuing inflation targeting and stressed that the limited projection horizon increased the uncertainty about the durability of inflation changes in the final period of the forecast horizon.

While discussing the future exchange rate and its impact on inflation in Poland, it was pointed out that the projection assumed a gradual depreciation of the zloty exchange rate, which was connected with a decreasing real interest rate disparity, the persistently high budget deficit and growing public debt. Some Council members, however, pointed to the possibility of zloty exchange rate appreciation, which could be supported by Poland's relatively favourable economic situation as compared to other EU countries and the continuously high surplus liquidity in the global financial markets. Moreover, in the opinion of those Council members, should the recovery in emerging markets come faster than in developed economies, emerging economies' currencies, including the zloty, could be expected to appreciate. Those members further emphasised that the potential zloty appreciation would be conducive to lower economic growth and lower inflation in the Polish economy than those accounted for in the October projection.

Other Council members, however, assessed that an appreciation of the zloty exchange rate significantly exceeding the appreciation of the equilibrium exchange rate was unlikely in case the growth of the Polish economy remained close to the October projection of GDP. Those members pointed out that the zloty could depreciate due to a possible increase in the risk premium, which in turn might be driven by an unfavourable situation of the public finance sector, a lack of structural reforms in the Polish economy and Poland's postponed adoption of the euro.

While analysing the situation in the credit market, some members of the Council assessed that it was still deteriorating, which was, among others, indicated by a further decline in the growth of credit to households and very low growth of credit to enterprises. Other members of the Council, however, pointed to the fact that in September 2009 the value of granted loans in month-on-month terms had risen for the first time in five months, both in the case of loans to households and to enterprises.

Moreover, some Council members emphasised that the slow growth of loans to enterprises was connected with their relatively good financial results and with their curbing their investment activity, and any recovery in lending to the enterprise sector might come only once the outlook for growth in the Polish economy significantly improved. Other Council members argued that reduced lending was, on the one hand, connected with households being more cautious while incurring liabilities amid slowing economic growth and rising unemployment, and, on the other hand, with an increased credit risk perceived by banks as indicated, among others, by the tightening of loan terms in the segment of consumer loans introduced in 2009 Q3 as well as planned for the future.

While discussing real interest rates in the context of the credit market situation, some Council members indicated that real interest rates remaining at a relatively low level for too long in a country undergoing real convergence may be increasing the risk of a credit boom in the medium term. Those members pointed out that real interest rates were currently lower than the equilibrium interest rate for the Polish economy. At the same time, those members suggested that the expected inflation decrease should translate into an increase in real interest rates, which in turn should be conducive to a rise in household saving following a strong decline in 2009 Q1, as well as to curbing the risk of excessive lending growth.

While considering the decision on interest rates, the Council concluded that the information on the economic situation released since the last meeting warranted keeping the interest rates unchanged at the current meeting. Some members of the Council were of the opinion that in the conditions of continuing uncertainty about the recovery in the world economy and about the outlook for economic growth in Poland, as well as in the light of the October inflation projection predicting inflation to be below the NBP inflation target for the most part of the projection horizon, it was justified to assess that in the medium term the probability of inflation running below the inflation target was higher than the probability of inflation overshooting the target. Other members of the Council argued that the recovery in the world and Polish economies combined with the risk of commodity price increases in the world markets and administered price rises in Poland, as well as the balanced probabilities of inflation running above or below the inflation target in the final period of the October projection, warranted the assessment that the probabilities of inflation in the medium term running below or above the inflation target were balanced. The majority of Council members judged the probability of inflation running below or above the inflation target to be balanced in the medium term. In the assessment of some Council members balanced risks to future inflation should indicate that the interest rates in the coming months would remain unchanged, which does not rule out the possibility of their adjustment in case of developments that would significantly affect the outlook for inflation and economic growth.

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

Minutes of the Monetary Policy Council decision-making meeting held on 25 November 2009

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

The discussion at the meeting focused on the outlook for economic growth abroad and in Poland, inflationary processes in Poland and the situation in the labour and credit markets.

While assessing the situation in developed economies, it was pointed out that following several quarters of decline 2009 Q3 brought a rise in GDP in the United States and in the euro area, including Germany, Italy and France, i.e. major markets for Polish exports. Yet, it was emphasised that the recovery in those economies was, to a large extent, the effect of government stimulus packages. It was assessed that the prospective discontinuation of these measures was accompanied by a risk of decline in economic activity in those countries, mainly due to a possible fall in private consumption growth. It was pointed out that economic growth in the United States and in the euro area was also negatively affected by a decline in corporate loans and, in the longer term also by the deteriorating situation of the public finance sector.

While analysing the situation in emerging economies, some members of the Council pointed out that the recovery in those economies might not be sufficient to boost global GDP growth considerably. Those members also noted that although private consumption in China might be expected to accelerate in the coming period this would be unlikely to compensate for the impact of a possible consumption decline in the United States on global economic growth due to a low level of private consumption in China relative to global demand. An important factor curbing growth in consumption expenditure in this country is the absence of a universal social security system, as a result of which an important part of household income is saved.

While discussing the outlook for domestic economic growth, it was assessed that the Polish economy had already entered the phase of recovery, which was confirmed, among other things, by increasing industrial output growth and very good financial results of enterprises in 2009 Q3. It was also indicated that the recovery abroad (particularly in the euro area) contributed to growth in Polish exports in 2009 Q3, as indicated by the data for the past three months. Some members of the Council believed that the recovery would be relatively slow, and argued that in the coming period economic growth in Poland might likely be curbed by a renewed deterioration in global economic climate. In the opinion of those Council members, GDP growth in Poland would be negatively affected also by such factors as: the deteriorating situation in the labour market, including rising unemployment and the fall in real wages in the enterprise sector, the decline in corporate loans and lending to households growing more slowly than in the last years, as well as the difficult situation of the public finance sector.

In the opinion of other members of the Council, GDP growth in Poland dropping notably again was very unlikely even in the event of a considerable deterioration in the global economy. They argued that the scale of GDP growth decline in Poland due to the global financial crisis was considerably smaller than in other European Union countries, and emphasised that despite the absence of government stimulus packages of a scale comparable to those implemented abroad GDP growth in Poland remained positive. It was assessed that the relatively high resilience of the Polish economy to unfavourable external shocks – the turmoil in the global financial markets and the recession abroad – was, among other things, the result of a low credit-to-GDP ratio and the economy's lower degree of openness as compared to other EU countries, as well as of the dynamic development of the service sector (less dependent on global economic developments) observed in the past few years. It was also emphasised that the relatively small scale of economic slowdown was largely due to a marked decrease in the NBP interest rates as well as the depreciation of the zloty exchange rate.

While addressing the labour market situation, members of the Council pointed to persisting unfavourable trends, including in particular the growth in registered unemployment and the continuing negative annual employment growth, as well as the decline in real wages in the enterprise sector in October 2009. Some members of the Council pointed out that in the light of the October projection of the NBP, nominal wage growth in subsequent quarters would decline further. Moreover, some members of the Council argued that due to lags in the adjustment of employment to the pace of economic growth and a likely increase in labour supply, unemployment could increase further in the coming period despite economic recovery. They assessed that rising unemployment would be conducive to lowering the inflationary pressure through weaker consumer demand and limited wage pressure. At the same time, some members of the Council pointed out that rising unemployment might, due to the hysteresis effect, negatively affect the potential GDP growth in the coming period.

While analysing the relationship between inflation and labour market developments, some members of the Council emphasised that elevated inflation contributed to lowering real wages, facilitating their adjustment to falling labour productivity growth. In the opinion of those Council members, relatively high flexibility of real wages helped to reduce the scale of decline in Poland's GDP growth amid the global recession. They also pointed to the so-called labour hoarding, consisting in incomplete adjustment of employment (i.e. reduced lay-offs) during an economic slowdown. On the other hand, they emphasised that via indexation increased inflation contributed to wage growth in the public finance sector as well as to growth in disability and old-age pension benefits, which, in the short term, is conducive to deepening the deficit of the public finance sector. In the opinion of those members of the Council, rising social benefits driven by indexation amid a concurrent decline in wage growth in the economy reduced work attractiveness and might negatively affect the economic activity of Poles. They also made reference to the data on wages in the national economy which in the first three quarters of 2009 – unlike in the previous period – showed higher annual growth than wages in the enterprise sector. According to those Council members, this might indicate that the share of this sector in the national economy was declining and, consequently, that the changes in wages in the enterprise sector – where wages are largely dependent on cyclical conditions – might in the future affect wage developments in the economy to a lesser extent than previously had been the case.

While discussing inflation developments, it was pointed out that in October 2009 annual CPI decreased to 3.1%, which was primarily the result of slower growth of food and energy prices; at the same time, core inflation (net of food and energy prices) remained at 2.9%. Some Council members emphasised that core inflation continuing at a heightened level was the effect, among other things, of steady growth in the prices of services. Those members assessed that the gradual increase in the demand for services observed over the recent years, which resulted in a growing share of this spending category in the basket of consumer goods and services, would also continue in the coming years, and so the prices of services would be exerting a growing impact on CPI developments. They emphasised that core inflation had not been falling despite a clearly negative output gap and pointed out that the current level of annual core inflation rate could still be to some extent influenced by the high demand pressure observed in the previous period. Other members of the Council stressed, however, that elevated CPI inflation was to a considerable degree driven by unfavourable price shocks, including in particular the administered price increases implemented in 2009. Some Council members also pointed to the reduced scale of decline in the prices of goods strongly affected by globalisation recorded in the recent months, which was partially connected with the earlier zloty exchange rate depreciation.

While discussing the outlook for inflation, it was pointed out that in the near term the annual CPI would develop largely under the influence of statistical base effects: first, a positive one – connected with a strong decline in fuel prices at the end of 2008, and then, a negative one – connected with considerable increases in administered prices and food price rises at the beginning of 2009 (provided the lack of equally strong administered price increases in 2010). Due to the former effect inflation would rise temporarily in the nearest future, while the latter effect would be conducive to its decrease next year. Some Council members indicated that in 2010 a drop in CPI inflation below the NBP inflation target could be expected as the negative output gap would likely persist. Another factor conducive to decreasing inflation could be the appreciation of the zloty so far. Other Council members pointed out that the inflation decline might be curbed by indirect tax and administered price increases. They also argued that inflation might prove higher than currently expected in the event of unfavourable price shocks in the commodity or food markets, or zloty exchange rate depreciation. In the opinion of those Council members in the longer term the inflationary pressure would be largely determined by labour and credit market situation.

While addressing the current situation in the domestic credit market, its further deterioration was highlighted, including especially the negative annual growth of lending to enterprises (adjusted for the impact of zloty exchange rate fluctuations) observed in October for the first time since 2004, and the fact that the growth of lending to households was persistently slower than in the preceding years. Some Council members argued that the reduction in the supply of credit to enterprises contributed to curbing corporate investment, which in turn adversely affected GDP growth. Other Council members, however, assessed that reduced lending was to a large extent attributable to the limited demand for credit resulting from the economic slowdown. They emphasised that in view of the data on financial results of enterprises in 2009 Q3, the liquidity of this sector remained relatively high, allowing firms to finance their current operations to a large extent with their own funds, and thus constrained their borrowing needs. They also pointed out that lending to households was still growing.

The Council also analysed the development of the credit market in the longer-term perspective. Some members of the Council emphasised that the credit-to-GDP ratio in Poland in the period preceding the global financial crisis had been among the lowest in the EU. Other Council members underlined that in the past few years this ratio had increased significantly. They argued that, even though the rapid credit expansion in the years preceding the global crisis had largely resulted from the convergence process, in the longer term sustaining such fast lending growth could lead to growing credit market imbalances. They assessed that the current slowdown in lending was to a large extent a cyclical phenomenon and that it would be conducive to a more balanced lending growth. Those members argued that the recovery in economic growth would give a new momentum to lending growth in connection with the convergence process and due to demographic changes leading to a rising demand for mortgage loans. In the assessment of those Council members, the current situation in the credit market did not necessitate the introduction of any additional instruments to support lending growth.

While discussing the policy mix abroad and in Poland, some Council members pointed out that expansionary fiscal policies in many countries led to rising public debt levels which – amid efforts to sustain price stability – could only be halted by strong fiscal tightening. At the same time, however, low real interest rates around the world, driven by loose monetary policy, limited the current costs of financing public debt, thus weakening the incentives to implement reforms aimed at the improvement of the primary balance of the public finance sector. In this context, those members emphasised the need for introducing measures that would curb the expansion of public debt in Poland.

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

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

Minutes of the Monetary Policy Council decision-making meeting held on 23 December 2009

During the meeting the Monetary Policy Council discussed the outlook for future economic growth and inflation in Poland, the monetary policy conducted by the Monetary Policy Council in its second term of office, and determinants of monetary policy in subsequent years.

While discussing the outlook for global economic growth, some members of the Council assessed the scale and sustainability of global economic revival as largely uncertain. Those members emphasised that improved activity to-date in the largest developed economies had been, to a large extent, the effect of fiscal stimulus packages. Those members also pointed out that, in line with economic growth outlook for 2010, strong GDP growth could be expected in Asian and Latin American economies as well as further improvement in economic activity in the United States with relatively lower GDP growth in European economies.

As regards the situation in the Polish economy, it was emphasised that the in-coming data, including data on export, industrial output and construction and assembly production, as well as economic situation indices illustrating enterprises' and households' sentiment confirmed the gradual recovery. However, some of the members pointed to risk factors underlying a prompt and sustained revival of the Polish economy. In particular, those members pointed to reduced lending to enterprises and a decline in loan growth to households, as well as to the persistence of an unfavourable situation in the interbank market, reflected in elevated spreads between the NBP reference rate and WIBOR rates. Those members also drew attention to the quick buildup of public debt and argued that its high level could adversely affect economic growth in the medium term.

While discussing current and future inflation the Council members pointed to the decrease in core inflation net of food and energy prices from 2.9% in October to 2.8% in November 2009. Some of the members were of the opinion, however, that core inflation stood at a relatively high level, which, given a likely improvement in global economic situation that potentially could trigger a rise in world prices for agricultural and energy commodities, posed a risk to maintaining inflation at the target in the medium term. However, other members maintained that given the persistence of the negative output gap in the Polish economy, a fall of inflation could be expected in subsequent quarters. Moreover, some members of the Council stressed that the risk of increased inflationary pressure in the Polish economy in the near future would be additionally contained by the still unfavourable situation in the labour market, despite some signals of improvement in recent months.

While discussing the effects of the monetary policy conducted by the Council in its second term of office, some members argued that the elevated CPI inflation in the years 2008-2009 indicated that in the earlier period the level of interest rates may not have fully accounted for future inflation risk. According to those members their view was supported by the persistence of relatively high core inflation in recent quarters, including the fast growth of market services prices. In their opinion, the key factors conducive to lower inflationary pressure in 2008-2009 and thus contributing to limiting inflation's deviation from the inflation target were the appreciation of the zloty in the period preceding the outbreak of the global financial crisis and the crisis-related decline of prices of agricultural and energy commodities in global markets.

Other members pointed to the fact that elevated inflation in recent years was mainly connected with factors beyond the direct control of domestic monetary policy. Those members argued that the strong rise in prices of agricultural and energy commodities in global markets at the end of 2007 and in the first half of 2008, which led to a rise in inflation in a number of countries, including Poland, was, among other things, connected with a quick increase in demand from emerging economies and legislative changes in the United States which excluded trade in commodity futures from the supervision of public institutions. They also stressed that the crisis-driven zloty depreciation which significantly exceeded the depreciation of the equilibrium exchange rate was conducive to the rise in inflation in Poland in 2009. Among the factors that had significantly influenced prices in the Polish economy, including their faster growth in recent years, the members indicated price liberalisation in certain domestic markets and increases of indirect taxes and administered prices. Those members also stressed that in that period there had been a very quick increase in loans in the Polish economy, which was connected with a strong inflow of capital to emerging markets.

It was stressed that the rise in the prices of services, which contributed to increasing inflation in Poland in 2008-2009, had probably been connected with changes in the structure of private consumption and was characteristic of countries undergoing the process of convergence.

When discussing the monetary policy conducted in the years 2004-2009, the members pointed out that one of the factors confirming the effectiveness of the policy was the fact that it had anchored inflation expectations at a low level. Some of the members also argued that given the lags between changes in NBP interest rates and their strongest impact on economic processes a comprehensive assessment of the monetary policy conducted by the MPC in its second term of office should account for inflation developments in 2010-2011. In this context the members of the Council pointed out that most forecasts available show a strong fall of inflation in 2010. They also argued that attempting to fully neutralise the impact of price shocks in global commodity markets on inflation in Poland would have led to excessive GDP fluctuations in Poland, including a likely GDP decrease after the outbreak of the global economic crisis.

While discussing the effects of the monetary policy conducted by the Council in its second term of office against the background of other countries, some MPC members pointed to the fact that in the years 2004-2009, in addition to shocks that impacted the world economy as a whole, such as commodity shocks and the global economic crisis, the Polish economy also underwent large changes connected with the accession to the European Union. Those members pointed to the fact that despite these shocks, inflation's average deviation from the target (0.3 p.p.), the volatility of the output gap and of central bank interest rates in Poland in 2004-2009 were among the smallest in countries which pursued inflation targeting with a continuous inflation target.

While discussing the monetary policy in the coming years, some members of the Council argued that an excessive rise in lending, in particular a rise in the market for mortgage loans, could pose a threat to price stability in the Polish economy over a longer time horizon. In addition, those members stressed that if the credit boom risk increased significantly, monetary policy would have to be tightened in Poland regardless of the relatively low CPI inflation. Since interest rate rises themselves would not eliminate the credit boom risk they should be complemented with appropriate supervisory measures.

While referring to the decisions on interest rates in the coming months the Council pointed out that in view of the low inflation pressure and the persisting threats to the sustainability of economic recovery in Poland, NBP interest rates should be left at an unchanged level in the near future. At the same time it was emphasised that in case of a significant economic revival in Poland, accompanied by a significant increase in inflationary pressure, a change to the monetary policy parameters could be required. Too strong and premature a monetary policy tightening in a situation of over-liquidity in global financial markets could, however, result in an excessive appreciation of the zloty. The situation of public finances will be an important conditioning factor to monetary policy.

The Council concluded that leaving the interest rates unchanged was justified by the information about the Polish and global economic situation that had been released since the previous meeting.

The Council left the interest rates at an unchanged level: reference rate at 3.50%, lombard rate at 5.00%, deposit rate at 2.00% and rediscount rate at 3.75%.

At the same time, the Council decided to introduce, starting on 1 January 2010, the discount rate on bills of exchange accepted from commercial banks for discount at the NBP. The Council set the discount rate at 4.00% on an annual basis.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Information from the meeting of the MPC held on 23-24 February 2010

Released data point to a further increase in economic activity in the United States and a slow improvement in economic conditions in the euro area. However, the labour market situation in the developed economies remains unfavourable, which is in line with expectations. Moreover, lending continues to shrink, though the difference between the share of banks tightening and those loosening their credit policies in the euro area has narrowed. At the same time, the largest emerging economies, including China, see their GDP growth accelerate. The recovery in economic activity around the world is still being supported by strongly expansionary macroeconomic policies based on both conventional and non-standard instruments.

In the recent period, the risk aversion in international financial markets has risen, which was largely related to fears about the effects of the fiscal problems in some of the euro-area economies. The rise in risk aversion contributed to declines in prices of some financial assets. At the same time, oil prices remained highly volatile. Inflation increase in emerging market economies was accompanied with a slight rise in inflation in some of the developed economies.

Preliminary GUS data on GDP in 2009 imply that 2009 Q4 saw further recovery of economic growth. The newest monthly data on the Polish economy also point to improved economic activity. Some stabilisation of employment in the enterprise sector may signal a gradual deceleration of the unfavourable labour market tendencies, though unemployment rate is still rising, which is largely driven by increasing labour force participation. The growth in loans to the non-financial sector remains low, though banks envisage higher lending to this sector in the coming period.

According to GUS preliminary data, in January 2010 annual CPI inflation rose to 3.6%, i.e. slightly above the upper limit for deviations from the inflation target of 2.5%. The rise in the annual inflation rate was primarily driven by higher annual rate of fuel prices, largely due to a positive base effect.

The Council got acquainted with the projection of inflation and GDP prepared by the Economic Institute of the NBP, which is one of the inputs into the Council's decision-making on the NBP interest rates. In line with the February projection – under the assumption of constant NBP interest rates – there is a 50-percent probability that inflation will remain within the range of 1.3–2.2% in 2010 (compared to 0.8–2.2% in the October projection), 1.7–3.1% in 2011 (compared to 1.1–3.2%) and 2.6–4.6% in 2012. According to the February projection, there is a 50-percent probability that the annual GDP growth will remain within the range of 2.1–4.1% in 2010 (compared to 0.8–2.8% in the October projection), 1.8–4.0% in 2011 (compared to 2.2–4.2%) and 1.9–4.3% in 2012.

In line with available forecasts, in the months to come the annual CPI will be lowered by negative base effects connected with the surge in administered prices and food prices at the beginning of 2009. Other factors conducive to lower inflation include: low demand pressure, previously observed moderate growth of labour costs and the hitherto observed zloty appreciation. In turn, inflation decline in 2010 may be curbed by rises in: commodity prices in the world markets, fees subject to local governments' decisions and administered prices.

In the Council's assessment the probabilities of inflation running below or above the inflation target in the medium term to be balanced. In the Council's view, the improvement in global economic activity and the previously implemented monetary policy easing support the return of the economy to the potential growth path. The impact of the hitherto pursued expansionary macroeconomic policies abroad and their prospective reversal are an important source of uncertainty for future economic growth and inflation in the world economy and, consequently, also for the domestic monetary policy.

An important factor affecting monetary policy is the situation of the public finance sector. Introducing measures aimed at permanently reducing the deficit of the general government sector and at curbing the increase of the public debt will support macroeconomic stability and allow to meet the criteria for euro adoption.

The Council expresses the opinion that Poland should join the Exchange Rate Mechanism II and the euro area at the earliest possible date, after meeting the necessary legal, economic and organisational conditions.

The Council adopted the *Inflation Report – February 2010*.

Chapter 4.

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 Director General of the Economic Institute of the NBP, Mr. Mateusz Pipień. The works on the projection were coordinated by the Bureau of Macroeconomic Forecasts of the Economic Institute. The projection was prepared with the use of the macroeconomic model NECMOD[50]. 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.

International environment

In 2009 Q3 the euro-area and the United States recorded GDP growth in quarter-on-quarter terms, which confirms the scenario for these economies' recovery from the recession. Over the same period, GDP in the United Kingdom declined, yet quarterly data on GDP for 2009 Q4 point to positive GDP growth in quarter-on-quarter terms. Recovery in those economies was largely driven by expansionary fiscal and monetary policies. The economic situation of developed countries will improve in the years to come, which will be accompanied by rising inflation and a gradual tightening of monetary policy.

Positive signs from the world economy in the second half of 2009 contributed to an improvement in the sentiment in global financial markets. As a result of investors' move away from the American currency to more risky assets, the US dollar depreciated to USD 1.48 per euro in 2009 Q4, but stabilisation of the EUR/USD exchange rate is expected in the coming quarters. Global prices of energy commodities, following strong surges at the turn of 2009 and 2010, will continue in the years to come in a moderate upward trend, which will be the result of a rebound in the global economy and a growing demand for these commodities. In turn, price stabilisation resulting from favourable supply conditions is expected in the world agricultural markets.

Aggregate demand

The years 2010-2012 will bring a significant change in the structure of economic growth in Poland. Domestic demand will increase while the contribution of net exports to domestic growth will be

[50] The current version of the model's documentation is available in Budnik et al. (2009) *An update of the macroeconometric model of the Polish economy NECMOD*, National Bank of Poland Working Paper, No. 64.

close to zero or slightly negative. Domestic demand will be stimulated, among others, by a further inflow of financing from EU structural funds and the ensuing high growth rate of public investment. Corporate investment and housing investments of households will slowly start to grow beginning from 2011, while the growth rate of consumption demand will remain relatively stable over the projection horizon. In 2010-2011 a significant contribution to the acceleration in domestic demand growth will also be made by build-ups in inventories, which have been strongly reduced by enterprises over the past few quarters.

In 2009 Poland recorded a positive, 2.7 percentage point, contribution of net exports to economic growth. This was driven by a strong decline in imports, which resulted from limited domestic demand and relatively weaker response of exports to diminished external demand, which in turn was brought about by improved price competitiveness of Polish goods due to significant depreciation of the zloty. In 2010, following the exchange rate appreciation, net exports will cease to be a factor responsible for growth of the Polish economy, despite a gradual rebuilding of foreign demand connected with the anticipated recovery in the world economy.

Throughout 2010, due to persistently unfavourable outlook for sales and a relatively low level of production capacity utilisation, growth of investment demand of private enterprises will remain negative. As a result of the persistently high credit risk premium (despite a certain improvement recorded in the previous quarter), availability of corporate loans, especially long-term ones, will continue to be a factor limiting investment over the short-term projection horizon. In 2011-2012 gross fixed capital formation in the enterprise sector will rise steadily, driven by further improvement in the domestic and global economic climate and increased availability of loans (as a result of more lenient credit policy of banks and a drop in real interest rates that is a consequence of the projection assuming a constant NBP reference rate despite rising inflation). Additionally, private investment will be positively affected by growing investor confidence in Central and Eastern Europe, reflected in the increased inflow of direct investment.

The growth rate of consumption demand will remain at a relatively constant level throughout the projection horizon. A factor mitigating the increase in individual consumption in the short-term projection horizon will be the continuation of negative tendencies in the labour market and the ensuing low growth of the real aggregate wages. In the longer horizon, the situation in the labour market will improve, though due to higher price growth the increase in real disposable income of households will remain low. Growth in the purchasing power of consumers will be additionally offset by the fact that the rate of growth of retirement and disability pension payments will be close to inflation, due to the adopted indexation mechanism and a falling number of old-age and disability pensioners (a significant share of boomers entering the retirement age have already acquired rights to pension benefits, among others, because of a favourable legal situation).

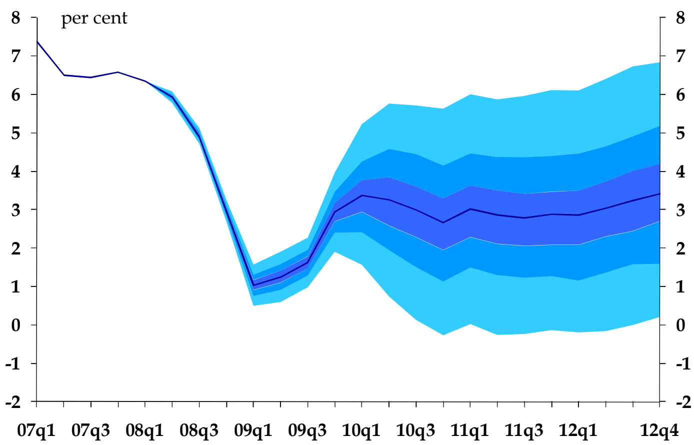
Household investment will gradually begin to pick up starting from the second half of 2010, driven by a lower level of the prices of flats and a looser policy of banks as regards housing loans. In the short projection horizon, the investment demand of households will be curbed by the still low attractiveness of foreign currency loans in connection with their higher level of margins and uncertainty as to the foreign exchange rate path.

Macroeconomic equilibrium

The rate of economic growth will stay at a level close to 3% y/y throughout the projection horizon, that is slightly lower than the rate of potential output growth. Consequently, the negative output gap will widen even further. Potential output growth will be supported by a rapid increase in production capital connected with intensified infrastructural investment. On the other hand, growth will be negatively affected by a rise in the NAWRU rate, limited investment activity of private enterprises in 2009—2010 and slower growth in the productivity of factors of production.

Until mid-2011, the labour market will still be affected by delayed effects of economic slowdown. Enterprises, striving to cut costs, will curtail the growth of wages and reduce employment, yet the scale of employment decline will be smaller than in the previous periods of growth deceleration in Poland. A stronger build-up of domestic and external demand will translate into a gradual improvement of the labour market situation in the long projection horizon. Throughout the projection horizon, favourable changes in the demographic structure of the population will be observed, such as a growing share of persons of working-age, particularly those aged 25-44, which group is characterised by a high economic activity ratio. As a result, the number of the economically active will grow over the next years by approx. 2%, which will be easing wage pressure. The growth rate of real wages will remain lower than labour productivity growth throughout the projection horizon, which will be conducive to closing the positive gap between real wages and productivity stemming from the recovery in the labour market observed until 2008.

Figure 4.1
Central GDP projection and fan chart.



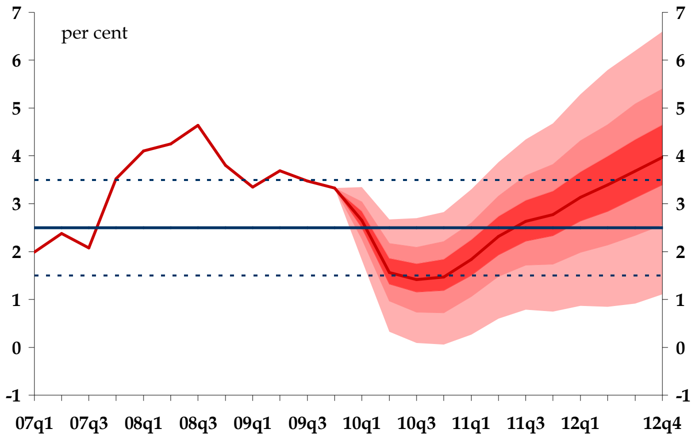
Source: NBP.

Till the end of 2010 the actual unemployment rate growth will be faster than the rise of NAWRU, which may lead to closing the gap in unemployment. In 2011-2012 improved economic situation will halt the unemployment rate growth and so the BAEL unemployment rate will stabilise in the range of 11-12%. In turn, the rise in production costs, connected, among others, with increasing prices of imported input goods, will translate into further growth of NAWRU, which will be conducive to higher wage pressure in the long projection horizon.

Gradual normalisation of the situation in international financial markets, fast improvement in the trade balance and a favourable interest rate disparity, all contributed to an appreciation of the zloty exchange rate, which has been observed since 2009 Q2. In the projection horizon, despite a steady strengthening of the equilibrium rate (among others, due to the positive balance of transfers connected with the inflow of EU funds and potential output growth in Poland still outpacing that in the euro area), the exchange rate of the zloty will nevertheless depreciate, which, to a large extent, will result form the assumptions adopted while constructing the NBP's projection. Such an exchange rate path will be supported by a negative disparity of interest rates (connected with the assumption of a constant NBP reference rate) and by the persistently high public finance deficit (connected with the assumption of an unchanged fiscal policy).

Following a period of swift improvement in the trade balance in 2009, in 2010-2011 this tendency will be reversed, while the current and capital account deficit will grow to slightly over 3% of GDP. In the long projection horizon, however, an increasing inflow of EU funds will be conducive to decreasing the scale of the external imbalance.

Figure 4.2
Central inflation projection, fan chart of inflation and NBP inflation target.



Source: NBP.

Inflation

In 2009 Q4 core inflation ranged at 2.7% y/y. As a result of an easing cost pressure, connected with a deterioration in the labour market, core inflation will fall down slightly, reaching 2.6% in the middle of 2010. However, a weaker exchange rate and a stepped-up growth rate of import prices in the second half of 2010 will halt its further decline and, together with a new rise in unit labour costs (in the non-agricultural sector), will lead to raising its level in the years to come.

The significant correction in energy and agricultural commodity prices in the world markets and the appreciation of the zloty which occurred in 2009 will result in lagged adjustments in the domestic market prices. In consequence, in the short projection horizon the inflation of energy and food prices in the domestic market will decline. In subsequent years, with the weakening of the zloty exchange and energy commodity price growth in the world markets, this tendency will be reversed and food and energy prices will start to rise again.

Thus, the CPI inflation rate will slide in the short projection horizon, ranging below the NBP inflation target starting from 2010 Q2 to 2011 Q2. In the long projection horizon, following the recovery in the labour market and the weakening of the zloty, inflation will increase, exceeding the upper limit for deviations form the target in 2012 Q2. Under the assumption that the reference rate of the central bank remains unchanged, the probability of average annual inflation running in the range of 1.5%-3.5% diminishes from approx. 66% in 2010 and 2011 to 37% in the final year of the projection.[51]

[51] In the case of CPI inflation, the extension of the fan chart in the long horizon primarily results form the lack of monetary policy reaction to disturbances in the economy and in the external environment (consistently with the assumption of constant interest rates).

Table 4.1
Balance of probabilities for future inflation path.

	Probability of inflation running:				
	below 1.5%	below 2.5%	below 3.5%	below the central path	within the range (1.5%-3.5%)
2010q1	0.01	0.35	0.98	0.49	0.97
2010q2	0.44	0.91	1.00	0.48	0.56
2010q3	0.52	0.93	1.00	0.47	0.48
2010q4	0.50	0.90	1.00	0.49	0.49
2011q1	0.35	0.75	0.97	0.48	0.62
2011q2	0.20	0.55	0.89	0.48	0.69
2011q3	0.15	0.44	0.78	0.49	0.63
2011q4	0.15	0.40	0.71	0.48	0.56
2012q1	0.11	0.32	0.60	0.49	0.49
2012q2	0.11	0.26	0.51	0.49	0.40
2012q3	0.10	0.23	0.43	0.49	0.33
2012q4	0.08	0.19	0.37	0.49	0.29

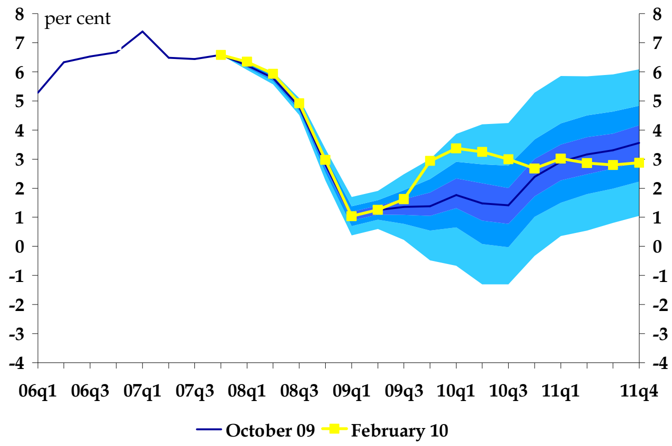
Source: NBP.

February projection compared to October projection

At the starting point of the current projection (2009 Q4), the rate of GDP growth stood at 2.9% y/y, i.e. 1.5 percentage points higher than in the October projection, which primarily resulted from a 1.3-percentage-point higher than estimated contribution of net exports to growth. More favourable trade balance and a weaker zloty at the starting point for the projection results in a higher forecast of net exports, and also GDP as a whole, in the short projection horizon. A higher path of GDP growth in the short horizon is also connected with an upward revision of consumption growth rate, stemming from an improved outlook for wage growth and, consequently, for disposable income of households. In the long projection horizon, due to the lack of any significant correction in the scale of recovery abroad, the effect of a higher starting point is gradually wearing off. Because of a stronger exchange rate and the statistical effect connected with a higher point of reference, in the current forecasting period the rate of growth in 2011 Q2-Q4 is slower than in the October projection.

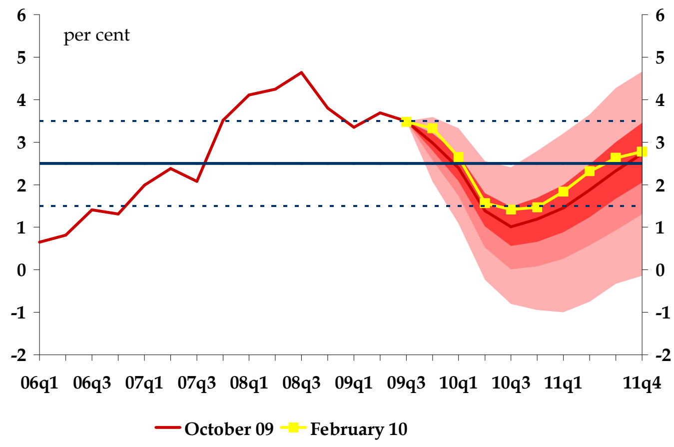
At the starting point for the projection, CPI inflation ran at 3.3% y/y, i.e. 0.3 percentage point above the October projection, which is the consequence of a faster than expected rise of food and energy prices. A higher path of CPI inflation persists throughout the projection horizon – the rate of price growth is 0.2-0.4 percentage points higher than in the previous forecasting period (with the exception of 2011 Q4). The main factor contributing to the upwards revision of the short-term CPI inflation projection is the higher starting point for food and energy prices. Moreover, energy commodity prices in the world markets expressed in US dollars grow faster in the February projection than in the previous forecasting period. On the other hand, lower prices of agricultural products and a weaker exchange rate of the US dollar against the euro are conducive to lower consumer prices. In the long horizon, a factor that pushes the rate of inflation above the path presented in the October projection is a stronger cost pressure from the labour market, which translates into higher core inflation.

Figure 4.3
February projection compared to October projection: GDP.



Source: NBP.

Figure 4.4
February projection compared to October projection: CPI inflation.



Source: NBP.

Main areas of uncertainty

External environment

One of the most important factors of risk for the current projection is the uncertainty connected with the pace and scale of recovery in the world economy, including the response of developed economies to the inevitable exit by governments and central banks from the policy of strong fiscal and monetary stimulation. Significant risk is also connected with the path of the EUR/USD exchange rate, which is, among others, the result of difficulties in the assessment of the response of financial markets to the growing indebtedness of the US and euro area economies.

An additional source of uncertainty is still the assessment of the extent to which the growing demand of the global economy will translate into the path of energy and agricultural commodity prices and also into the pace at which Polish producers will be rebuilding their exports.

Food and energy prices in Poland

There remains the risk, signalled in previous forecasting periods, connected with the zloty exchange rate path. The risk of the actual zloty exchange rate proving different than it was accounted for in the projection is bidirectional. The scenario of a weaker zloty exchange rate path is reinforced by risks connected with public finance sector developments, including the reaction of the financial markets to the possibility of public debt exceeding subsequent prudential thresholds. On the other hand, relatively high economic growth in Poland, as compared to other countries of the region and to euro-area member states, and liquidity surplus in the global financial markets may step up the inflow of foreign direct and portfolio investment and contribute to the strengthening of the zloty.

Uncertainty is also connected with the scale of regulatory activities in the food and energy market, and with their translation into price developments. These risks concern the future policy of the European Union in the area of natural environment protection (including the implementation of carbon dioxide emission standards) and regulatory activities in the food market, including activities connected with the growing propensity to protectionism. The pass-through of the EU regulatory activities to domestic energy prices is also connected with the tariff policy of the Energy Regulatory Office amidst increased investment needs of the energy sector in Poland.

Recovery in domestic demand

The period of economic slowdown saw a considerable adjustment of the inventories and investments of enterprises to the current and expected economic situation, in which, apart from the tightening of banks' credit policy, a significant role was played by the channel of expectations. Uncertainty about the developments in inventories and investment over the projection horizon is largely driven by the response of the banking and enterprise sectors to the expected economic recovery in Poland and abroad.

On the other hand, uncertainty as to the path of consumption demand is related to developments in the labour market. Depletion of reserves allowing to easily improve labour productivity prompted enterprises to reduce layoffs in the current business cycle as compared to previous slowdown periods. Significant risk is connected with determining the extent to which this policy will be continued in the coming quarters. This uncertainty is amplified by previous developments which increased the elasticity of the labour market (reflected in a considerable growth in the number of persons employed on fixed term contracts in 2000-2007), due to the difficulties in assessing their impact on the changes in the functioning of this market.

Fiscal policy

Considerable risk is connected with the fiscal policy response to the rise in the deficit of the public finance sector. The possibility of the government launching a savings plan may affect both the demand side (reduction in internal demand) and the supply side (deceleration in capital formation or effective labour supply) of the economy, leading to a slower rate of economic growth in the projection horizon. The condition of public finance also determines how Poland is perceived by the financial markets, and so it is a factor affecting the level of portfolio and direct investment and the exchange rate of the zloty.

Discussion of data released after 18 January 2010

The turn of January and February brought a decline in both the current prices of energy commodities expressed in dollars and futures contract quotations. This was primarily the effect of an appreciation of the US currency against the euro and a deterioration in financial market sentiment. In consequence, there was no substantial change in forecast energy commodity prices expressed in the euro, and so the impact of the correction of these data on inflation and GDP is moderate in the projection horizon.

Summary of risks to inflation and GDP projection

It is assessed that over the projection horizon the risks not accounted for in the projection are well-balanced both for economic growth and inflation. The main risk of higher inflation is posed by faster food and energy price growth resulting from regulatory activities, including those of the European Union, as well as higher prices of energy commodities in the world markets. In turn, the possibility of inflation running below the central path is connected with the realisation of the scenario of a stronger exchange rate, which would result from investors' better perception of the Polish currency. Stronger exchange rate also constitutes a risk of lower GDP growth over the projection horizon. Changes in fiscal policy limiting the public finance sector deficit may also slow down the rate of economic growth. The higher probability of GDP running above the central path is mainly connected with a stronger response of the private sector to the expected economic climate improvement in Poland and abroad, reflected in a faster than accounted for in the projection rebuilding of inventories and fixed capital formation.

Table 4.2
Central path of inflation and GDP projection.

	2009	2010	2011	2012
Consumer Price Index (per cent y/y)	3.5	1.8	2.4	3.5
Food prices (per cent y/y)	4.1	-1.3	0.7	3.4
Energy prices (per cent y/y)	5.5	3.3	2.5	5.3
Core inflation net of food and energy prices (per cent y/y)	2.7	2.7	3.0	3.2
GDP (per cent y/y)	1.7	3.1	2.9	3.1
Domestic demand (per cent y/y)	-1.0	3.0	3.3	3.0
Private consumption (per cent y/y)	2.4	2.4	2.2	2.0
Public consumption (per cent y/y)	1.2	2.1	0.8	2.5
Investment outlays (per cent y/y)	-1.4	0.9	4.3	5.9
Contribution of net exports (percentage points y/y)	2.7	0.0	-0.5	0.1
Exports (per cent y/y)	-10.1	4.7	12.0	11.4
Imports (per cent y/y)	-15.3	4.5	13.1	10.9
Gross wages (per cent y/y)	5.1	4.1	3.9	5.3
Number of working persons (per cent y/y)	-1.7	-1.6	-0.2	0.2
Unemployment rate (per cent)	8.2	10.4	11.3	11.3
NAWRU (per cent)	11.0	12.0	13.0	13.9
Economic activity rate (per cent)	54.8	55.2	55.5	55.5
Labour productivity (per cent y/y)	3.4	4.7	3.1	3.0
Unit labour costs (per cent y/y)	2.3	-0.7	0.8	2.3
Potential output (per cent y/y)	4.1	3.4	3.7	3.7
Output gap (percentage of potential GDP)	-0.2	-0.9	-1.6	-2.3
Index of agricultural commodity prices (USD; 2007=1.00)	0.95	0.98	0.98	0.99
Index of energy commodity prices (USD; 2007=1.00)	0.92	1.25	1.35	1.41
Foreign price level (per cent y/y)	1.5	1.4	2.0	2.1
Foreign GDP (per cent y/y)	-3.9	1.3	2.0	2.1
Current account and capital account balance (percentage of GDP)	-0.7	-2.3	-3.1	-1.9
3M WIBOR (per cent)	4.32	3.85	3.70	3.70

Source: NBP.

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 for future paths of the prices of wheat, pork, beef, poultry, fish, sugar, rape oil, oranges, bananas and drinks allowing for weights reflecting the consumption structure of Polish households. The index of the prices of energy commodities includes the prices of crude oil, coal and natural gas allowing for the consumption structure of these commodities in Poland.

Chapter 5.

The voting of the Monetary Policy Council members on motions and resolutions adopted in September - December 2009

- **Date:** 29 September 2009

  Subject matter of motion or resolution:

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

- **Date:** 30 September 2009

  Subject matter of motion or resolution:

  Resolution on adopting *Monetary Policy Guidelines for 2010.*

  Voting of the MPC members:

For:		Against:
	S. Skrzypek J. Czekaj D. Filar S. Nieckarz M. Noga S. Owsiak A. Sławiński A. Wojtyna	

M. Pietrewicz and H. Wasilewska - Trenkner did not participate in the voting.

- **Date:** 28 October 2009

Subject matter of motion or resolution:

Motion to maintain the style of communication so far used in the press release from decision-making meetings of the Monetary Policy Council (variants of assessment of probabilities for the path of inflation in relation to the target).

MPC decision:

Motion did not receive a majority vote.

Voting of the MPC members:

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

- **Date:** 25 November 2009

Subject matter of motion or resolution:

Motion to amend Resolution of the Monetary Policy Council No. 20/2008 of 23 December 2008 on the rules of conducting open market operations to the effect that the Resolution specifies the type of securities eligible for purchase/sale by the NBP in the secondary market in the framework of structural operations.

MPC decision:

Motion did not receive a majority vote.

Voting of the MPC members:

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

- **Date:** 15 December 2009

  Subject matter of motion or resolution:

  Resolution on approving the *Financial Plan of the National Bank of Poland for 2010.*

  Voting of the MPC members:

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

- **Date:** 15 December 2009

  Subject matter of motion or resolution:

  Resolution amending the resolution on accounting principles, the layout of balance sheet assets and liabilities and profit and loss of the National Bank of Poland.

  Voting of the MPC members:

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

- **Date:** 23 December 2009

  Subject matter of motion or resolution:

  Resolution on the level of the reference rate, lombard rate, deposit rate, rediscount rate and discount rate of the National Bank of Poland.

  MPC decision:

  The Council decided to introduce, beginning 1 January 2010, the discount rate on bills of exchange accepted from commercial banks for discount at the NBP. The Council set the discount rate at 4.00% on an annual basis.

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: