# Inflation Report
# October 2010

National Bank of Poland
Monetary Policy Council

Warsaw, October 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 a member of the NBP Management Board, Mr. Zbigniew Hockuba. The NBP Management Board approved the submission of the projection to the Monetary Policy Council. The inflation projection is one of the inputs to the Monetary Policy Council's decision-making process.

The time horizon of the analysis presented in the *Report* is conditioned by the availability of macroeconomic data; the cut-off date for the data was 20 October 2010. In turn, the periodisation of the analysis (breakdown into sub-periods) is conditioned by the development of particular variables.

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

The year 2010 has seen a continuation of recovery in the world economy. Among major developed economies, in 2010 Q2 GDP growth accelerated in the euro area and in the United Kingdom, whereas it decreased in the United States and in Japan. Rapid activity growth has continued in the largest emerging economies, although in some of them, including China, the gradual tightening of economic policy aimed at containing the risk of a build-up of significant macroeconomic imbalances led to a slight decline in economic growth in 2010 Q2 relative to 2010 Q1. Available data, including the weakening of growth in the volume of global trade and in industrial output at the turn of 2010 Q2 and Q3 as well as the worsening of global indicators of current economic activity, signal softer growth of the global economy in 2010 Q3 as compared to 2010 H1.

After a gradual increase in the second half of 2009 and stabilisation in 2010 Q1, inflation in the world economy fell down slightly in subsequent months. Low ranging indicators of core inflation point to the lack of inflationary pressure in the main developed economies, which is supported by still low production capacity utilisation and high unemployment. Among the Central and Eastern European countries, CPI inflation continued to rise in the Czech Republic and in the Baltic countries, whereas inflation in Hungary fell down significantly.

In 2010 Q3 fears of a possible slowdown in the United States intensified, bringing about a plunge in the yields on US and German bonds. The US economic climate weakening again together with rising expectations that the Fed would pursue its expansionary monetary policy for a longer period and would pursue further quantitative easing led to a depreciation of the dollar against the euro. At the same time safe-haven currencies appreciated, including the Japanese yen, which prompted the Bank of Japan to carry out the first foreign exchange intervention in six years. Emerging-market currencies appreciated as well, supported by faster than in developed countries economic growth and the associated more restrictive monetary policy. Since the publication of the previous *Report* major central banks have continued to pursue easy monetary policy.

In June - September 2010 the prices of crude oil were stable, whereas the prices of agricultural commodities in the global markets rose significantly.

In June - August 2010 the annual growth of prices of consumer goods and services in Poland fell from 2.3% to 2.0% and rose to 2.5% in September 2010, i.e. reached the NBP inflation target. The increase in inflation was mainly driven by a rise in the prices of food as well as prices of natural gas. In turn, inflation growth was limited by negative base effects resulting from a considerable rise in the prices of fuels and excise goods in the corresponding period of 2009 as well as by the limited demand and wage pressures. The decrease in the majority of core inflation measures in June - September 2010 also indicates a limited demand pressure.

In 2010 Q3 producer prices in industry (PPI) grew strongly, which was mainly driven by the positive base effect resulting from the considerable fall of the index in the corresponding period of 2009. In turn, the annual growth of zloty-denominated import prices in 2010 Q2 was still negative, but higher than in 2010 Q1, which was the result of the weaker appreciation of the zloty in year-on-year terms and higher than a year before commodity prices in the global markets.

Inflation forecasts of financial sector analysts over a one-year horizon, after remaining since the beginning of 2009 at a level close to the NBP inflation target rose to 2.9% in August and September 2010 and to 3.0% in October 2010. In turn, inflation expectations of enterprises in the

12-month horizon (an objectified measure) have been relatively stable since the beginning of 2009 and in 2010 Q3 amounted to 2.4%. The objectified measure of inflation expectations of individuals - apart from a temporary rise in August 2010 - remains close to inflation observed at the moment of the survey, which results from the adaptive character of those expectations.

In 2010 Q2 GDP in real terms increased by 3.5% y/y, according to a preliminary GUS estimate (as compared to 3.0% y/y in the previous quarter). GDP growth in year-on-year terms was driven by the growth in total consumption and the increase in inventories; the fall in investment, in turn, had an opposite effect. The contribution of net exports to GDP growth was also negative, for the first time since 2008 Q4.

According to a preliminary GUS estimate, in 2010 Q2 the growth rate of individual consumption rose again (to 3.0% y/y). The acceleration of the growth of retail sales in real terms in July and August 2010 may point to a further recovery in consumption demand in 2010 Q3. At the same time, however, a deterioration in households' sentiment visible in economic climate surveys may signal that the improvement in consumption demand has been halted.

In 2010 Q2 investment in the economy declined further (by 1.7% y/y), although its drop was much slower than in 2010 Q1. The results of NBP business conditions surveys indicate that, despite further improvement in the economic situation, enterprises' interest in undertaking new investment in 2010 Q3 remained small, though greater than in the previous quarter. New investment is encouraged by the growing level of production capacity utilisation, a very good financial standing of enterprises, including their good liquidity situation, as well as the gradual easing of bank credit policies. At the same time, uncertainty surrounding the outlook for economic growth abroad and in Poland as well as the associated worsening of enterprises' expectations of future demand in 2010 Q3 are factors limiting firms' interest in investing.

In January - September 2010 the central budget deficit reached approx. PLN 39.5 billion, which accounts for 73.3% of the annual plan. In the first half of 2010 local government units recorded a surplus, though it was lower than in the corresponding period of 2009. According to the autumn EDP notification, the deficit of the public finance sector in relation to GDP (in ESA95 terms) in 2010 will be higher than in 2009 and it will amount to approx. 7.9% of GDP.

In 2010 Q2 positive tendencies continued in the Polish foreign trade. The value of Polish exports (in EUR) increased markedly, driven by the recovery in global demand, which led to the intensification of corporate trade. The acceleration of exports, characterised by a relatively high import intensity, supported an increase of imports, though their growth was lowered by the deceleration in the purchases of investment goods abroad.

In 2010 Q2 the biggest share in the increase in gross value added - for the third quarter in a row - was attributable to industry. A positive, though modest, contribution to the increase in gross value added was also made by construction and market services.

The situation in the labour market has been improving gradually. According to the BAEL Labour Force Survey in 2010 Q2 the number of working persons increased by 0.9% y/y, following two quarters of a downward trend, which amidst the continuously rising number of economically active persons translated into the seasonally adjusted unemployment rate stabilising at 9.7%. In May - September 2010 employment in the enterprise sector continued to increase, and the registered unemployment rate in seasonally adjusted terms amounted to 11.9% in September 2010, a level close to that recorded in May. In 2010 Q2 wage growth in the economy declined slightly in nominal terms but rose in real terms. In the enterprise sector 2010 Q2 saw an increase in both real and nominal wage growth, whereas in 2010 Q3 nominal wage growth decreased. Despite a decline in the nominal wage growth, the decrease in labour productivity growth in 2010 Q2 resulted in higher growth in unit labour costs in the economy (to 1.2% y/y). Unit labour costs in industry have been decreasing since August 2009, which reflects rapid growth in labour productivity in that sector, typical for economic recovery.

Since the publication of the previous *Report* the NBP interest rates have remained unchanged. The one- and three-month interest rates in the interbank market have also been stable. In turn, spreads between the yields on Polish long- and short-term government bonds have narrowed, which was due to a significant decrease of yields on longer-term bonds related to the publication of favourable data on the Polish economy. In the recent period, non-residents have further increased their involvement in the Polish debt market. Since the publication of the previous *Report* equity prices on the Warsaw Stock Exchange have increased while the involvement of non-residents remained stable.

2010 Q2 saw no significant changes in the housing market in major Polish cities. Asking prices in the primary and secondary markets decreased slightly, while sale prices in both these markets remained stable.

Since the publication of the previous *Report* the nominal exchange rate of the zloty appreciated by 14% against the US dollar and by 4% against both the euro and the Swiss franc. The zloty appreciated against all the three currencies till mid-August 2010 but then started to weaken against the dollar and the Swiss franc and stabilised against the euro, which was driven by the worsening of sentiment in the international financial markets. In September 2010, along with sentiment improvement, most Eastern and Central European currencies, including the zloty, again appreciated. In October this year the zloty exchange rate displayed no clear upward or downward trend.

Following the decline in the first five months of 2010 the volume of corporate loans in the period June - August increased. In year-on-year terms, corporate loans continued on a downward trend, yet the scale of their decline in the past few months was smaller than in the previous period. The revival in the market for housing loans to households has persisted. In turn, in the period from June to August household consumer loans increased only slightly, which was reflected in further annual decline in this loan category. Since November 2009 the annual growth of M3 money has remained at the level of 7-8%.

In 2010 Q2 the current account deficit widened as compared to the previous quarter, which was primarily driven by a deepening deficit in the income account; an increase in the surplus on services had, however, an opposite effect. At the same time a net inflow of foreign capital to Poland continued, mainly in the form of portfolio investment, yet it was lower than in the previous quarter. This inflow resulted in a sustained surplus on the financial account of the balance of payments.

The *Inflation Report* is structured as follows: in Chapter 1 economic developments in the external environment of the Polish economy are presented in the context of their impact on inflationary processes in Poland. Those processes as well as the domestic factors affecting them are discussed in Chapter 2. *Minutes of the Monetary Policy Council decision-making meetings* held in June, August and September 2010 together with the *Information from the meeting of the Monetary Policy Council* in October 2010 are presented in Chapter 3. Minutes from the MPC meeting held in October will be published on 18 November 2010 and so will be included in the next *Report*. Moreover, this *Report* includes two boxes: "Fiscal tightening in the European Union" and "Inflation expectations in Poland".

Chapter 4 of the *Report* presents the projection of inflation and GDP based on the NECMOD model, which is one of the inputs into the Council's decision-making process on the NBP interest rates. In line with the October projection - under the assumption of constant NBP interest rates - there is a 50-percent probability of inflation running in the range of 2.4-2.6% in 2010 (as compared to 2.3-2.9% in the June projection), 2.5-3.5% in 2011 (as compared to 2.1-3.3%) and 2.4-3.7% in 2012 (as compared to 2.2-3.7%). In turn, the October projection sees the annual GDP growth with a 50-percent probability in the range of 3.3-3.7% in 2010 (as compared to 2.5-3.9% in the June projection), 3.3-5.5% in 2011 (as compared to 3.3-5.9%) and 2.8-5.5% in 2012 (as compared to 2.2-5.0%).

# Chapter 1.

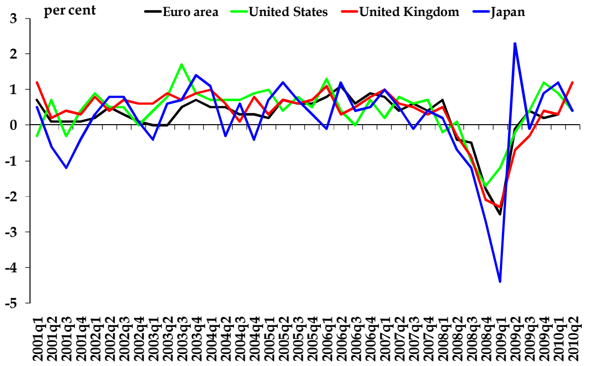
# External environment of Polish economy

## 1.1. Global economic activity

The year 2010 has seen a continuation of recovery in the world economy. However, in 2010 Q2 GDP growth decreased in the United States and in Japan, i.e. countries with economic conditions improving at the fastest rate among major developed economies in previous quarters. On the other hand, GDP growth accelerated in the euro area and in the United Kingdom (Figure 1.1). At the same time rapid activity growth has continued in the largest emerging economies (Figure 1.2), although in some of them, including China, economic growth declined slightly in 2010 Q2 as compared to the previous quarter. This decrease was related to the gradual tightening of economic policy aimed at containing the risk of a build-up of significant macroeconomic imbalances.

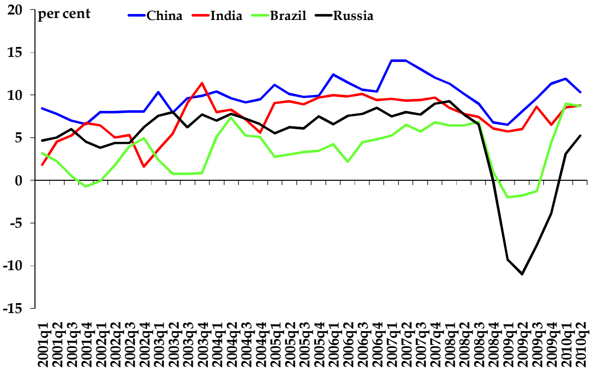
Recent data signal softer growth of the global economy in 2010 Q3. In particular the growth of global trade (Figure 1.3) and industrial output weakened at the turn of 2010 Q2 and Q3. Global indicators of activity in manufacturing and services were also down in recent months.[1] Lower growth in current economic activity across the world has been driven by the weakening support of the inventory cycle and the expiration of some of the fiscal packages. A negative impact on economic growth is also exerted by the effects of large fiscal imbalance in many countries, which i.a. heightens the uncertainty as to the results of economic

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




**Source:** Eurostat and IMF data (seasonally adjusted).

**Figure 1.2**
Economic growth in China, India, Brazil and Russia (y/y).

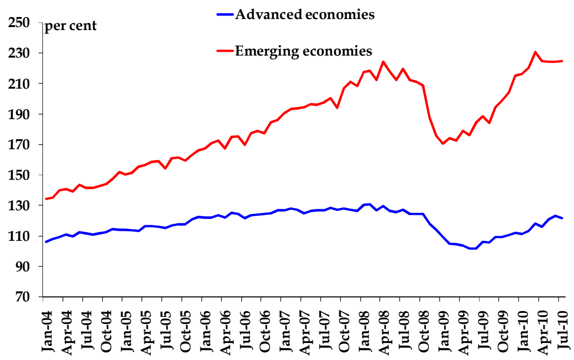



**Source:** Reuters and OECD data.

[1] The index of activity in global services and manufacturing (JP Morgan Global Manufacturing & Services PMI) has been falling steadily since May 2010 and amounted to 52.6 percentage points in September, i.e. the lowest level in ten months.

decisions of households and enterprises. The effects of monetary expansion, including the non-standard measures implemented and planned by the major central banks continue to be an important uncertainty factor for global economic growth.

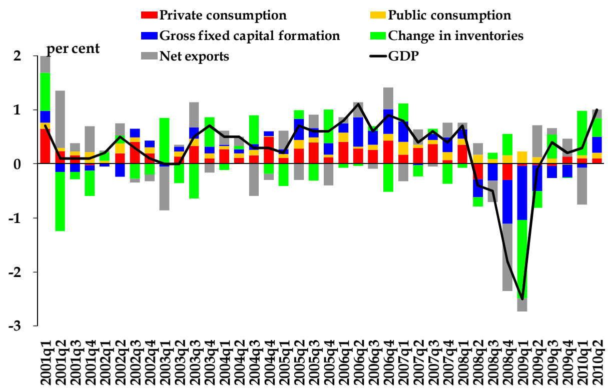
**Figure 1.3**
Volume of imports (2000=100).




**Source:** CPB Netherlands Bureau for Economic Policy Analysis data (seasonally adjusted).

After strong GDP growth in the United States in 2009 Q4, the following quarters saw its steady decline and in 2010 Q2 GDP growth amounted to 0.4% q/q (in seasonally adjusted terms, against 0.9% q/q in 2010 Q1). The weakening GDP growth was the effect of a deeper negative contribution of net exports and a decline in the positive contribution of inventories. On the other hand, GDP growth was supported by a marked acceleration of private sector investment. In particular, a strong rise of investment in machinery and equipment continued and housing investments increased considerably. However, the situation in the housing market deteriorated significantly at the turn of 2010 Q2 and Q3 following the expiration of programs supporting this market. In 2010 Q2 GDP growth in the United States was also supported by the recovery in private consumption. Data on real consumer expenditures suggest that this tendency continued in 2010 Q3.

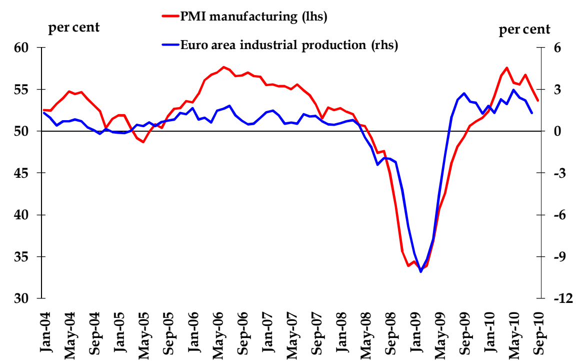
**Figure 1.4**
Euro area GDP growth (q/q).




**Source:** Eurostat data (seasonally adjusted).

In 2010 Q2, euro area GDP growth was markedly higher than in previous quarters (1.0% q/q in seasonally adjusted terms against 0.3% in 2010 Q1). This acceleration in activity growth was, to a great extent, an effect of a strong GDP increase in Germany. At the same time, activity in euro area countries most affected by the sovereign debt crisis (i.e. Greece, Ireland, Portugal and Spain) was low.

**Figure 1.5**
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.

The growth in euro area GDP in 2010 Q2 was driven by an increase in all GDP components (Figure 1.4). After a decline that lasted from the beginning of 2008, in 2010 Q2 there was a significant increase in corporate investment, including construction and assembly, the increase of which was supported by the fading impact of adverse weather conditions from the beginning of this year. GDP growth was also driven, although on a smaller scale than in 2010 Q1, by a recovery in enterprise inventories. On the other hand, euro area exports accelerated markedly on account of improved price competitiveness related to the depreciation of the euro in 2010 H1 and a recovery in the global economy. Imports, in turn, rose slightly slower than in 2010 Q1. As a result in 2010 Q2 the contribution of net exports to euro area GDP growth was slightly positive. In addition, household consumption increased for the third consecutive quarter, yet its growth rate stabilised at a low level. The recovery of consumption is constrained by the persisting adverse situation in the euro area labour market (Figure 1.6).

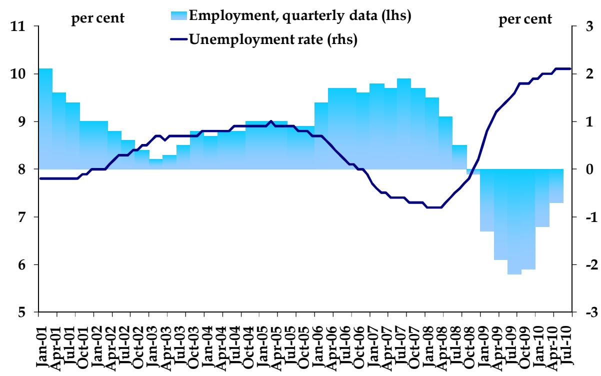
Data for the first months of 2010 Q3 show that recovery in the euro area has continued with some signals of weakening of activity in some sectors of this economy (Figure 1.5).

In 2010 Q2 GDP growth in Japan decreased significantly (to 0.4% q/q in seasonally adjusted terms from 1.2% in 2010 Q1). At the same time GDP growth accelerated in the United Kingdom (to 1.2% q/q in seasonally adjusted terms from 0.3% q/q in 2010 Q1).

Annual GDP growth in China, after a systematic increase from 2009 Q2 to 2010 Q1, decreased to 10.3% y/y in 2010 Q2 (against 11.9% y/y in 2010 Q1; Figure 1.6). Measures aimed at curbing the rapid rise of property prices (including a tightening of credit policy for mortgage loans), and the scaling-down of government investment have translated into a decrease in the growth of investment outlays. This was accompanied by slower imports growth. On the other hand, export rose strongly, although at the beginning of 2010 Q3 its growth weakened slightly. At the same time, Chinese household consumption continued to grow markedly in the analysed period.

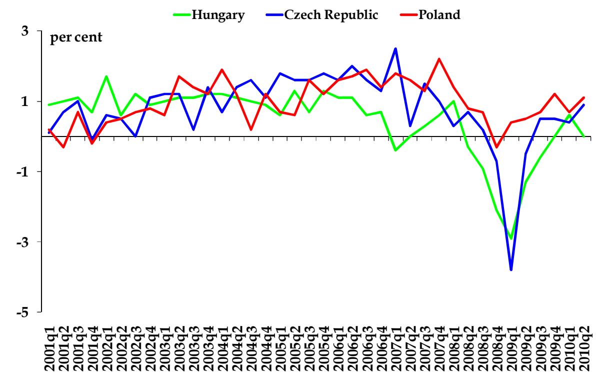
In 2010 Q2, quarter-on-quarter GDP growth was recorded in all non-euro area Central European countries except Hungary, where GDP stabilised at the level of the previous quarter (Figure 1.7, Figure 1.8). GDP growth in Central European economies was driven by rising external demand. At the same time developments in domestic demand varied significantly across those countries. Slow recovery in domestic demand continued in the Czech Republic and Latvia, a much stronger in Lithuania while in Estonia, Hungary and

**Figure 1.6**
Euro area employment (y/y) and unemployment rate.



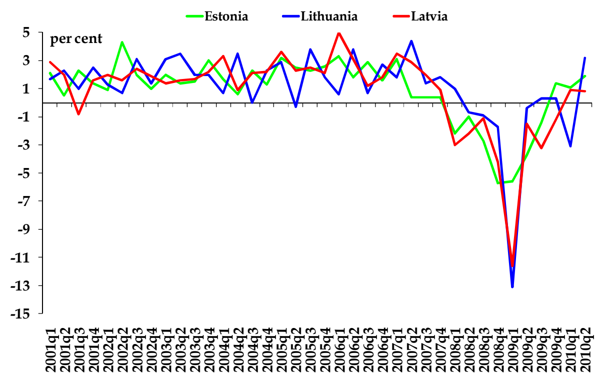

**Source:** Eurostat data

**Figure 1.7**
Economic growth in Czech Republic, Hungary and Poland (q/q).




**Source:** Eurostat data (seasonally adjusted).

**Figure 1.8**
Economic growth in the Baltic countries (q/q).




**Source:** Eurostat data (seasonally adjusted).

Bulgaria domestic demand decreased in 2010 Q2.

## Box 1. Fiscal tightening in the European Union

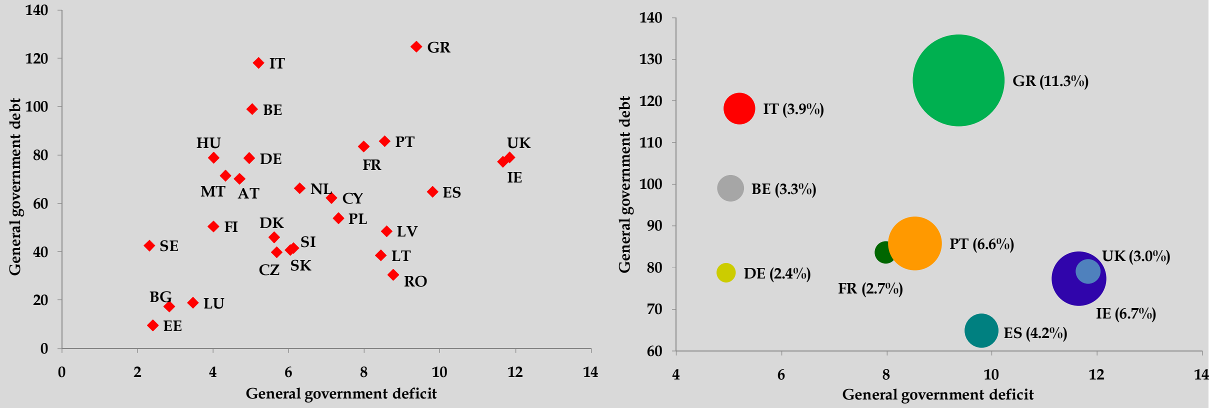
Strong deterioration in the fiscal position of EU countries has been one of the consequences of the economic crisis (Figure B.1). The average level of general government deficit in the EU rose from 0.8% of GDP in 2007 to 7.2% of GDP in 2010, while the public debt in relation to GDP increased, on average, by 21 percentage points (from 58.8% in 2007)[2]. As the fiscal situation deterioration in EU countries is to a large extent structural in nature[3], it is difficult to expect that an improvement in economic conditions will be conducive to reducing the general government deficit below the reference value of the Maastricht Treaty. In the face of threats to economic stability caused by high debt levels and the costs of aging population, it is indispensible to implement adjustment measures reducing the structural gap between the level of revenues and expenditures of the public finance sector.

The scale and rate of fiscal adjustment differ between EU-member countries. In order to halt the rapid accumulation of public debt, regain confidence of investors and reduce the costs of financing, in countries with a very weak fiscal position which are exposed to strong pressure from the financial markets it is necessary to carry out significant fiscal tightening in a relatively short time. The scale of fiscal tightening scheduled by Greece for 2010 exceeds 7% of GDP and in Ireland, Portugal and Spain it ranges at about 2.5-3% of GDP. In 2011 the countries envisage a further tightening in the amount of 2 to 4% of GDP[4]. In turn, in the case of countries assessed by the financial markets as more reliable and for which the costs of debt financing are relatively low (Figure B.1), fiscal adjustment may have a more gradual nature. Germany and France initiate their fiscal tightening in 2011, yet its scale will be markedly smaller than in the so-called peripheral countries. In Germany a fiscal tightening of 0.5% and 0.75% of GDP is scheduled for 2011 and 2012, respectively, and in France - of 1% of GDP in 2011. However, some countries, where Treasury bond yields range at relatively low and stable levels, opted for an earlier beginning or a larger scale of fiscal adjustments, mainly due to the high level of deficit or public debt and in the fear of a sudden shift in financial market confidence. Italy embarked on fiscal adjustment already in 2010 (of 0.5% of GDP) and announced it would total 1.6% of GDP in 2011 and 2012. In turn, in the United Kingdom the total scale of fiscal tightening till the financial year 2014/2015 will reach approx. 6.3% of GDP.

Fiscal adjustment is also implemented in the so-called new member states of the EU, some of which embarked on fiscal policy tightening already in 2009. In the case of Hungary, Latvia and Romania, fiscal tightening was a condition for access to the IMF and EU rescue packages. In Estonia, on the other hand, measures aimed at limiting public finance imbalance were associated with the drive to fulfill the Maastricht fiscal criterion and join the euro area in 2011. Faced with a strong GDP decline threatening public finance stability, Lithuania also opted for a significant fiscal tightening already in 2009. In turn, in view of low tax revenues the Czech Republic put some anti-crisis measures on hold at the end of 2009 and presented a consolidation package for 2010. Further fiscal adjustments are envisaged for 2011. Slovakia postponed the implementation of systemic adjustment measures for 2011. At the beginning of September 2010 leaders of the coalition parties forming the Slovak government adopted a package of fiscal adjustments for 2011 in the amount of 2.4% of GDP[5].

[2] Forecasts of the European Commission of May 2010; the forecasts do not account for fiscal adjustments announced by member countries since May 2010.
[3] The structural deficit in relation to GDP rose threefold in 2007-2010.
[4] According to the statement made by the Irish Minister of Finance on 30 September 2010 (as quoted by the Polish Press Agency) due to higher expected support provided to the banking system, Ireland's general government deficit in 2010 may reach the level of 32% of GDP (compared to the previously expected 11.8% of GDP) and its public debt may come close to 100% of GDP. Considering this announcement, it can be expected that the scale of fiscal tightening in this country in 2011 will prove higher than suggested above.
[5] A detailed description of fiscal adjustment in new EU-member states can be found in the NBP's report entitled "Analysis of economic situation in the countries of Central and Eastern Europe", June 2010.

**Figure B.1**
General government deficit and debt in EU countries (per cent of GDP) in 2010* (left-hand chart) and fiscal position of selected EU countries in 2010 vs. current yields on 10-year Treasury securities** (right-hand chart).




**Source:** European Commission (May 2010), EcoWin Financial.

*General government deficit and debt according to European Commission forecasts of May 2010. The general government deficit in Ireland in 2010 may prove higher due to additional state assistance to the financial sector and reach even 32% of GDP, and the public debt may exceed the level of 100% of GDP.

**Daily yields as of 27 September 2010. The diameters of the circles in the right-hand chart represent the yields for particular countries (numeric values are given in brackets).

There is no consensus among economists on the short-term effects of fiscal tightening. On the one hand, expenditure cuts and/or tax increases may decrease aggregate demand, acting towards a decline in economic activity in the short term. On the other hand, however, a fiscal tightening may translate into improved expectations of households and enterprises about the future economic growth and income of those entities (as a result of a smaller tax burden in the future), and also into a decline in real interest rates in connection with a lowered risk premium, which may support short-term growth in private demand (the so-called non-Keynesian effects of fiscal tightening). Favourable effects of fiscal tightening can arise especially in those countries for which there are significant fears about their solvency, planned fiscal adjustments are large-scale and are associated with measures reinforcing long-term public finance stability and – as a result – are regarded credible.

In addition to decreasing fears of public finance insolvency, positive changes in the costs of business entities (mainly wage costs), leading to an improvement in their international competitiveness and profitability and, as a result, to an increase in their capacity and propensity to invest, may also constitute a source of non-Keynesian effects of fiscal tightening. However, the occurrence of such effects hinges upon the structure of fiscal adjustment. They can appear in the case of fiscal tightening based on expenditure cuts (in particular, expenditures on public sector wages), which would be conducive towards reducing the wage pressure in the economy. An opposite effect could be observed in the case of fiscal tightening based on tax increases.

Fiscal tightening in the aftermath of a financial crisis is usually accompanied by the process of lending reduction by banks, which may increase the negative impact of fiscal policy tightening on GDP. In the past the impact of fiscal tightening on economic activity was often mitigated by the depreciation or devaluation of the nominal exchange rate, which was supporting exports and curbing imports growth, and by accommodative monetary policy[6]. In the current conditions, with probable concurrent fiscal adjustments in many countries and interest rates of major central banks remaining at low levels, there are limited possibilities of using the exchange rate channel and interest rate cuts to offset the effect of a fiscal tightening. However, the lack of fiscal adjustment may lead to an increase in market interest rates and thus have a negative impact on economic activity.

The latest IMF simulations (2010) indicate that with concurrent fiscal adjustments in several countries and no possibility of lowering interest rates a fiscal tightening of 1% of GDP may reduce the level of GDP by 2%

[6] Accommodative monetary policy primarily accompanies fiscal tightening based on adjustments in the public finance sector expenditures.

within two years[7]. At the same time, IMF simulations[8] indicate that in the long-term a public debt reduction of 10 percentage points increases the level of GDP by 1.4%[9].

To sum up, in the conditions of high risk aversion in the financial markets and in the context of growing costs generated by aging societies, a significant fiscal imbalance in the European Union countries constitutes a threat to those countries' economic stability. Despite the fact that in the short term fiscal adjustments may have a negative effect on GDP, they are indispensable for limiting those threats. They also support economic growth in the longer term.

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## 1.2. Inflationary processes abroad

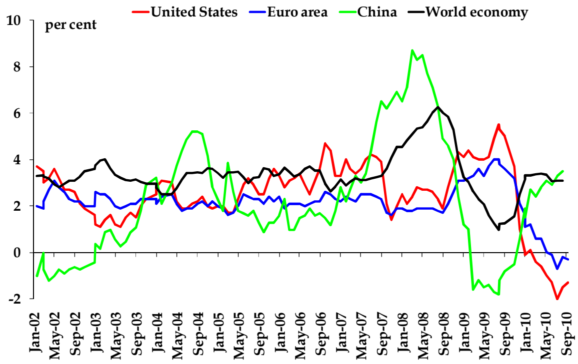
After a gradual increase in the second half of 2009 and stabilisation in 2010 Q1, inflation in the world economy fell down slightly in subsequent months (Figure 1.9).

The negative base effect (connected with a strong surge in energy prices at the end of 2009 Q2) translated into a clear decline of CPI inflation in the United States in 2010 Q3 (Figure 1.9). Inflation in the euro area edged up at the same time. Low ranging indicators of core inflation point to the lack of inflationary pressure in the main developed economies. This is supported by low, though gradually increasing, production capacity utilisation and high unemployment.

At the same time at the beginning of 2010 Q3 inflation decreased slightly in the main emerging economies, except for China (Figure 1.9).

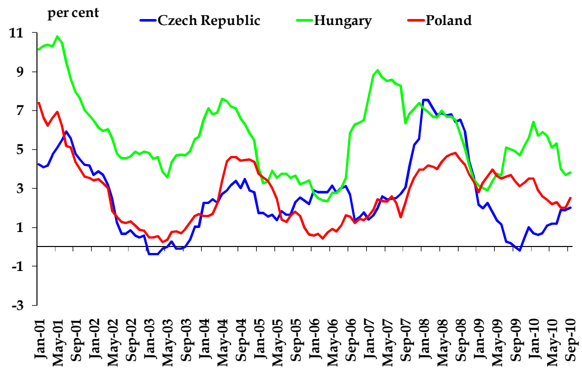
Among the Central and Eastern European countries, an increase in regulated prices and a stronger impact of hikes in indirect taxes[10] than

**Figure 1.9**
CPI inflation in the world economy and the major economies (y/y).




**Source:** IMF, OECD and Eurostat data.

**Figure 1.10**
CPI inflation in the Czech Republic, Hungary and Poland (y/y).




**Source:** National CSO's data.

[7] The simulation is based on a model calibrated for a small open economy (with characteristics similar to the Canadian economy). Simulations do not allow for the application of unconventional monetary policy instruments. Moreover, fiscal tightening in the simulations is only due to expenditure cuts. Empirical evidence suggests that tightening based on spending reduction results in a smaller GDP decline than consolidation consisting of tax increases.

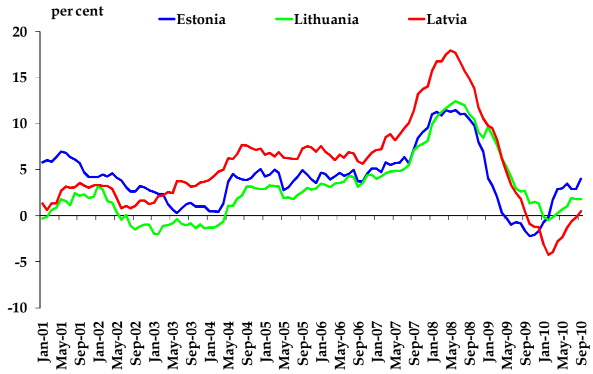
[8] The simulation applies to public debt reduction in the United States, the euro area and Japan, i.e. countries with a high initial level of public debt. Within the simulation public debt reduction is achieved by reducing public consumption and transfers.

[9] The decline in real interest rates supports the increase in investment of enterprises. Moreover, lower debt financing costs create the space for cuts in distortionary taxes.

[10] Since January 2010 VAT rates in the Czech Republic have been increased by 1 percentage point. There was also an increase in excise tax on fuels, alcoholic beverages and tobacco.

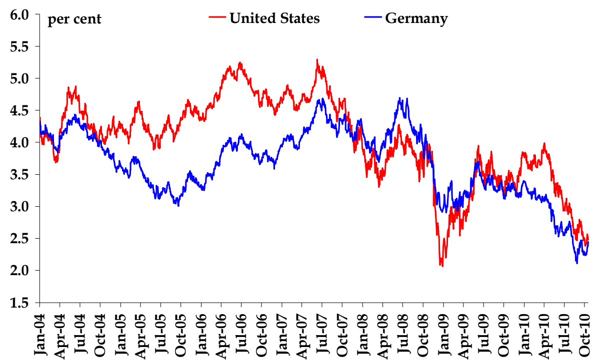
recorded in the previous months translated into a further rise in CPI inflation in the Czech Republic (Figure 1.10). In the analysed period CPI inflation continued to grow also in the Baltic countries (Figure 1.1). In particular, following a transitory decline in July 2010 connected with a negative base effect stemming from an increase in VAT rate in July 2009, CPI inflation in Estonia increased markedly in September 2010. The gradual pick-up in production capacity utilisation in the Czech Republic and the Baltic countries is accompanied by rising core inflation indicators, even though those indicators still run at very low levels in most of the countries. In the analysed period annual CPI inflation and core inflation in Hungary fell down significantly, primarily as a result of the negative base effect connected with a VAT rate increase in July 2009.

**Figure 1.11**
CPI inflation in the Baltic countries (y/y).



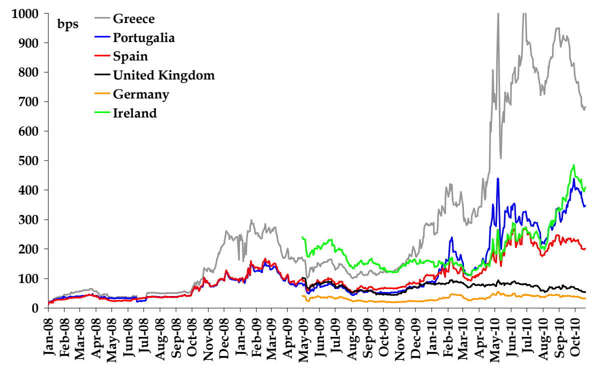

**Source:** National CSO's data.

**Figure 1.12**
Yields of 10-year US and German bonds.




**Source:** Bloomberg data.

**Figure 1.13**
CDS spreads in selected developed countries.




**Source:** Bloomberg data, NBP calculations.

## 1.3. International financial markets and monetary policy abroad

In 2010 Q3 fears of a possible slowdown in the United States and a slower than previously assumed recovery in the world economy intensified. This brought about a plunge in the yields on US and German bonds (Figure 1.12). Expectations that short-term interest rates would remain at a low level for longer than anticipated earlier were confirmed by Fed announcements pointing to a possibility of interest rates being held at a very low level for a longer period and of potential further quantitative easing.

Since the publication of the previous *Report* bond yields and CDS rates of peripheral euro-area countries remained high (Figure 1.13). This was connected with the still high uncertainty about the fiscal situation in these countries, as reflected in downgrades of their bond ratings[11].

The US economic climate weakening again together with rising expectations that the Fed would pursue its expansionary monetary policy for a longer period led to a depreciation of the dollar (Figure 1.14). At the same time safe-

[11] The rating of Irish bonds was downgraded in July 2010 by Moody's, in August – by S&P, and in October – by Fitch. Moreover, Moody's downgraded the rating of Portuguese bonds in July and of Spanish bonds – in September 2010.

haven currencies appreciated. This included the Japanese yen which prompted the Bank of Japan to carry out the first foreign exchange intervention in six years. Emerging-market currencies appreciated as well (Figure 1.15), supported by faster than in developed countries economic growth and the associated more restrictive monetary policy.

Indices of the world's major stock exchanges recorded modest increases (Figure 1.16).

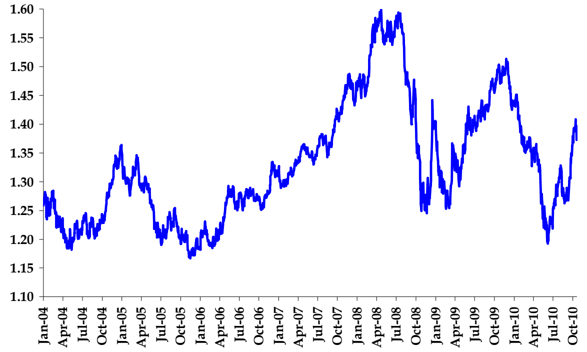
Since the publication of the previous *Report* major central banks have continued to pursue easy monetary policy (Figure 1.17). The Fed has kept its federal funds rate unchanged at 0.00-0.25%, the European Central Bank (ECB) has kept its key interest rate at 1.00% and the Swiss National Bank (SNB) has not changed the 3-month LIBOR band, which is currently set at 0.00-0.75%, while still intending to hold the rate in the lower part of the target range, at around 0.25%. 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. The analysts surveyed by Reuters expect that the SNB will raise its interest rate to 0.50% in 2011 Q1, the ECB to 1.25% in 2011 Q4, and the Fed – to 0.50% also in 2011 Q4.

## 1.4. Global commodity markets

Since the publication of the previous *Report* the price of crude oil has been stable: in June - September 2010 it remained within the band of 74-79 USD/b (Figure 1.18). The halting of the earlier upward trend of oil prices primarily resulted from the deterioration of the growth outlook for the world economy, which was reflected in gloomier sentiment in the financial markets. The price pressure in the oil market was alleviated by the growth in the liquid fuel stock in the USA, which was quite unusual for the holiday season. In October 2010 crude oil prices rose to approx. 83 USD/b.

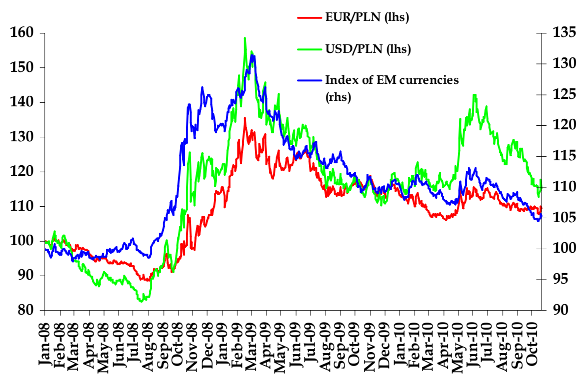
Coal prices have been stable since the beginning of 2010. The prices of natural gas, on the other hand, have showed a rising tendency since the beginning of the year (Figure 1.19).

**Figure 1.14**
The EUR/USD exchange rate (increase denotes appreciation of the euro).



**Source:** Bloomberg data.

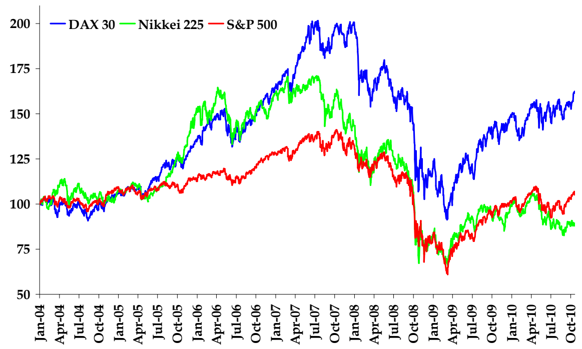
**Figure 1.15**
Index of EM currencies* and the exchange rate of the zloty against the dollar and the euro (January 2008=100, increase denotes depreciation).




**Source:** Bloomberg and BIS data, NBP calculations.

* The EM currencies index reflects an average of exchange rate changes against the dollar and the euro (weights depend on the turnover in the particular spot market) of the following countries' currencies: Argentina, Brazil, Chile, Colombia, Mexico, Peru, Korea, India, Thailand, Indonesia, Philippines, South Africa, Russia, Israel and Turkey.

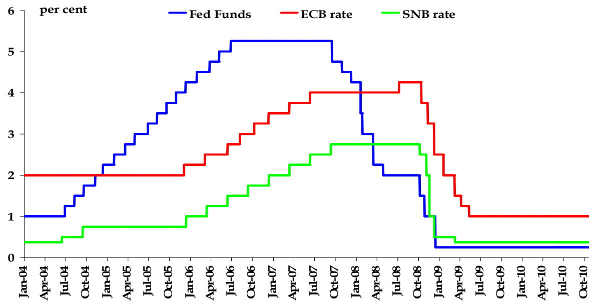
**Figure 1.16**
Stockmarket indices in Germany (DAX 30), Japan (Nikkei 225) and the United States (S&P 500), January 2004 = 100.




**Source:** Reuters data, NBP calculations.

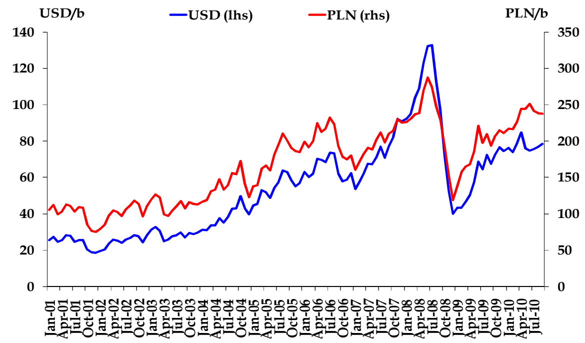
Since the beginning of 2010 a significant increase has been observed in the prices of agricultural commodities. The food price index rose by 9.1% in May - September 2010 (Figure 1.20). The rise in the prices of agricultural commodities was fuelled by unfavourable weather conditions and the Russian embargo on grain exports. Commodity price growth could additionally be driven by speculative activity reflected in the increased number of open interest in the futures markets. At the same time, the growth of these prices was curbed a relatively high level of global agricultural commodities stock.

**Figure 1.17**
Fed Funds rate, ECB refinancing rate, and SNB rate.



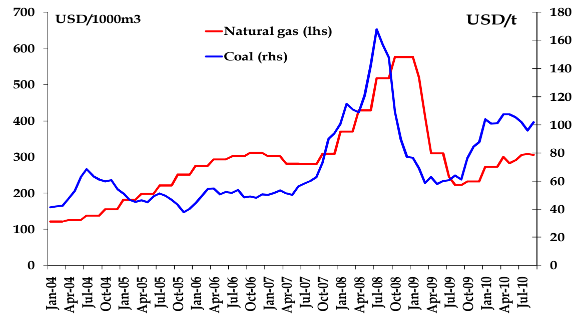

**Source:** Central banks' data.

**Figure 1.18**
Brent crude oil prices in USD and PLN.



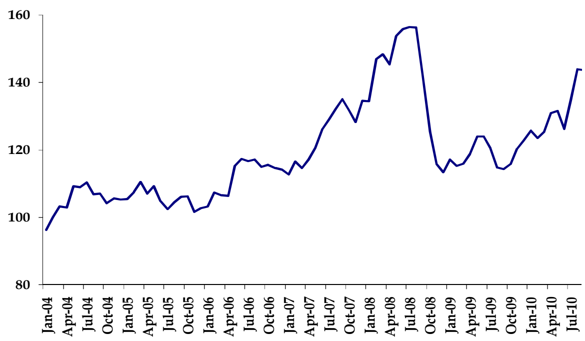

**Source**: The US Department of Energy data, NBP calculations.

**Figure 1.19**
Gas and coal prices in the global markets.




**Source**: IMF data.

**Figure 1.20**
Index of agricultural commodity prices in the global markets (2004Q1=100).



**Source**: IMF data, NBP calculations.

Index includes wheat, beef, pork, poultry, fish, sugar, banannas, oranges, canola oil and beverages

Chapter 2.

# Domestic economy

## 2.1. Inflationary processes

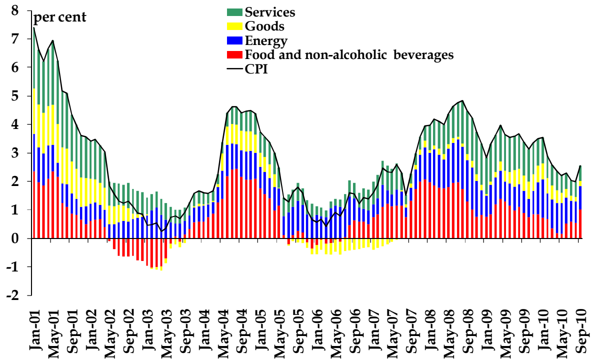
### 2.1.1. Consumer prices

The annual growth of prices of consumer goods and services in Poland in June - August 2010 fell from 2.3% to 2.0% and in September 2010 rose to 2.5%, i.e. reached the NBP inflation target set at 2.5% (Figure 2.1).

The increase in inflation in June - September 2010 was mainly driven by a rise in the prices of food, primarily unprocessed food (mainly fruit and vegetables - as a consequence of unfavourable agricultural and meteorological conditions prevailing in spring and summer 2010, along with a growth in the prices of agricultural produce in the world commodity markets) as well as prices of natural gas (the effect of higher gas fuel tariffs effective since June 2010).

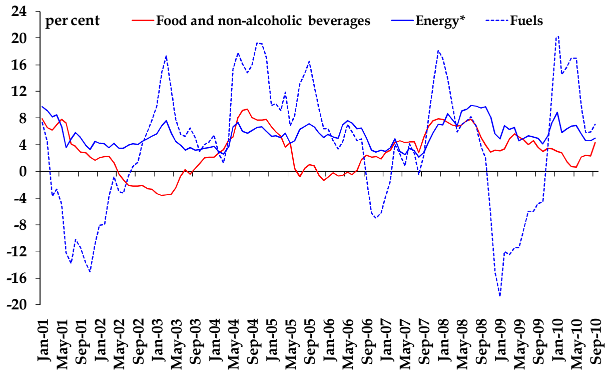
In turn, in the analysed period a dampening effect on inflation growth was exerted mainly by negative base effects resulting from a considerable rise in the prices of fuels and excise goods, mainly tobacco products (the effect of increases in the excise tax rate) in the corresponding period of 2009 as well as by the persistently limited demand and wage pressures.

**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).

## 2.1.2. Core inflation

In June - September 2010 the majority of core inflation measures decreased (Figure 2.4). The index of core inflation net of food and energy prices fell from 1.5% y/y in June to 1.2% y/y in September 2010. This was mainly driven by the negative base effect of the prices of excise products (mainly tobacco products) as well as decline in the price growth of services connected with dwelling maintenance (mainly administered prices). The limited demand pressure, as indicated by the falling price growth in the group of *recreation and culture services* and *restaurants and hotels* was also conducive to low core inflation.

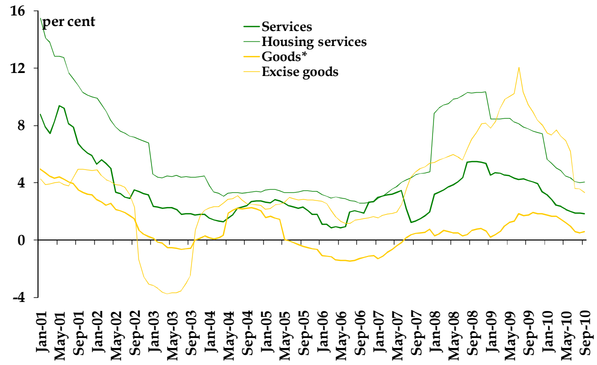
## 2.1.3. The Maastricht price stability criterion

In June - September 2010 the 12-month average HICP inflation in Poland, considered while assessing the compliance with the Maastricht price stability criterion, decreased from 3.5% to 2.9%. In the same period, according to NBP estimates, the reference value for the inflation criterion increased from 1.5% to 2.1%[12] (Figure 2.5). As a result, the gap between the 12-month average HICP inflation in Poland and the reference value in June - September 2010 narrowed from 2.0 percentage points to 0.8 percentage points.

## 2.1.4. Producer prices

Producer prices in industry (PPI) grew in 2010 Q3 by 4.0% y/y[13] (following an increase of 1.6% y/y in the preceding quarter). This was mainly driven by the significant growth in the prices in *manufacturing* (Figure 2.6). The strong rise in the annual PPI growth was primarily caused by the positive base effect resulting from the considerable fall of the index in the corresponding period of 2009. The base effect is suggested by the simultaneous decline in the

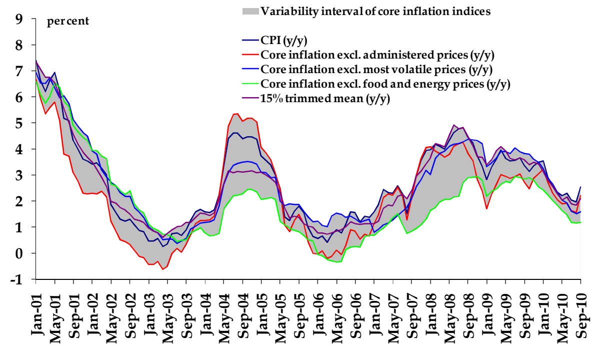
**Figure 2.3**
Changes in the prices of services and goods (y/y).




**Source:** GUS data, NBP calculations.

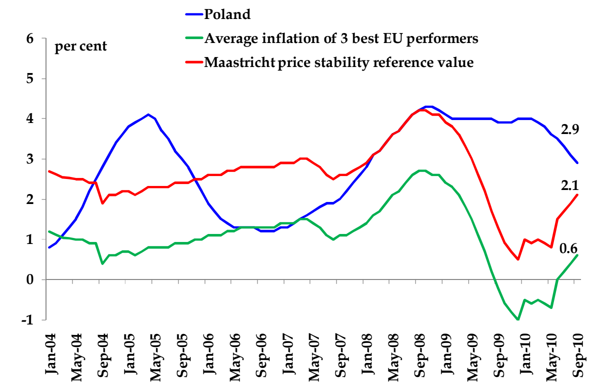
* The category of *goods* does not include food, non-alcoholic beverages or energy.

**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.

[12] Those estimates are based on the assumption that in June, July and August 2010 the reference group for the price stability criterion would include Portugal, Estonia and Slovakia, while in September 2010 - Slovakia, Portugal and Holland. A formal examination whether a particular country complies with the price stability criterion is made by the European Commission and the European Central Bank in *Convergence Reports*, the latest issue of which was published in May 2010.
[13] NBP estimate on the basis of monthly GUS data.

quarterly PPI growth in seasonally adjusted terms.

The growth in producer prices in the domestic market rose in July and August 2010 to 4.7% y/y and 5.0% y/y respectively (as compared to 2.7% y/y in 2010 Q2; Figure 2.6). At the same time the growth in producer prices in the exported goods market rose to 1.1% y/y and 1.5% y/y respectively (as compared to -3.6% y/y in 2010 Q2), which was associated with the decline in zloty appreciation in annual terms.

### 2.1.5. Import prices

In 2010 Q2 zloty-denominated import prices decreased by 3.5% y/y as compared to the decline of 4.9% y/y registered in the preceding quarter. The reduction in the scale of decrease was driven by the weaker appreciation of the zloty in year-on-year terms, observed in 2010 Q2. Another factor limiting the decline in export prices in the analysed period was growth in commodity prices in the global markets, mainly crude oil prices (Figure 2.7).

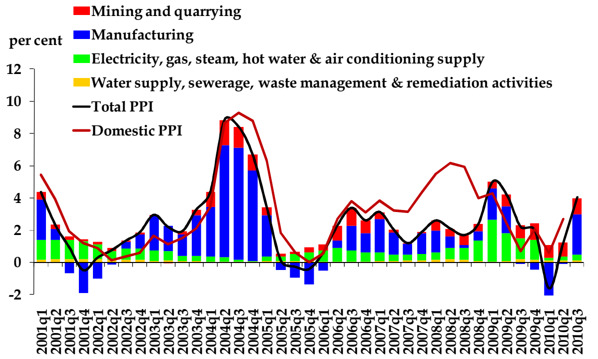
### 2.1.6. Inflation expectations

Inflation forecasts of the financial sector analysts over a one-year horizon, remaining since the beginning of 2009 at a level close to the NBP inflation target, rose to 2.9% in August and September 2010 and to 3.0% in October 2010 (Figure 2.8). According to the forecasts of the financial sector analysts, annual inflation in December 2010 and the average annual inflation in 2010 amounted in October 2010 to 2.7% and 2.5% respectively.

Inflation expectations of enterprises in the 12-month horizon (an objectified measure) have been relatively stable since the beginning of 2009. In 2010 Q3 inflation expected by enterprises amounted to 2.4% as compared to 2.3% in the preceding quarter.

The objectified measure of inflation expectations of individuals usually remains close to inflation observed at the moment of the survey, which results from the adaptive character of those expectations. In August 2010,

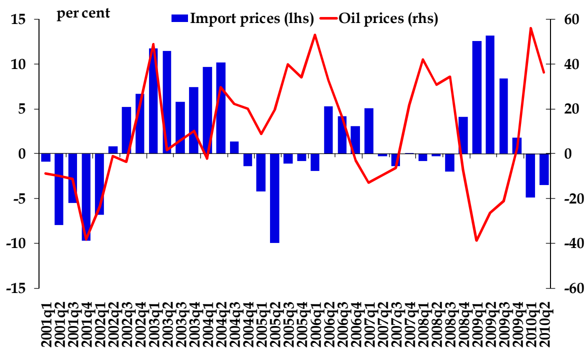
**Figure 2.6**
Domestic PPI, total PPI and the composition of annual growth of total PPI by sections of industry.




**Source:** GUS data.

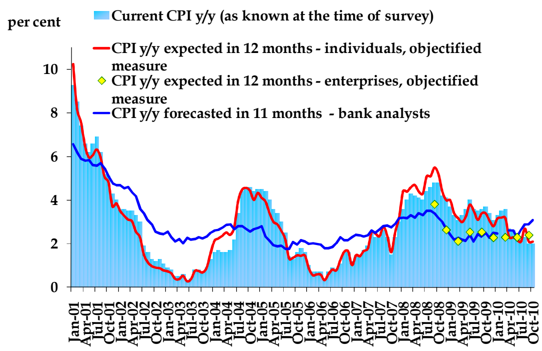
* Total PPI includes producer prices in the domestic market and export producer prices.

**Figure 2.7**
Changes in import prices and in oil prices in PLN terms.




**Source:** GUS data.

**Figure 2.8**
Inflation expectations of individuals and enterprises and inflation forecasts of bank analysts.




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

however, this measure registered a considerable increase which was mainly connected with the deteriorating structure of responses to the survey questions[14]. In September and October 2010 inflation expectations of individuals were again revised downwards, close to actual inflation (see. Box 2).

## Box 2. Inflation expectations in Poland

Inflation expectations have a significant impact on inflation, and thus on the monetary policy pursued. From the central bank 's point of view two features of expectations are of particular importance: the degree of their rationality and the degree of their anchoring. Rational expectations are an anticipative reflection of future developments of macroeconomic processes and discount, on a current basis, future macroeconomic effects of the applied tools of economic policy thus presenting the so-called anticipative character. On the other hand, anchored expectations are expectations which regardless of the fluctuations in current inflation remain stable and stand at the level consistent with the monetary policy objective.

Particular groups of agents formulate their inflation expectations in various ways. The degree of anchoring of inflation expectations at the inflation target in the case of agents specialising in macroeconomic forecasting is different than in the case of other agents. While formulating their inflation forecasts financial sector analysts in Poland take into consideration primarily the NBP inflation target - its estimated weight in formulating the expectations exceeds 80% in the case of this group of agents. On the other hand, individuals place more emphasis on changes in current inflation, and the weight of the inflation target in their formulation of expectations does not exceed 20%[15]. Yet, it is worth mentioning that at present this weight is higher than in the period of introducing the inflation targeting strategy in Poland.

Inflation expectations of individuals in Poland display a high, although gradually decreasing degree of adaptiveness. The percentage of agents formulating anticipative (rational) expectations is relatively small and does not exceed 15%. The differentiation of expectations in this group of agents results from social and demographic factors such as sex, age, level of education and income (see: Stanisławska, 2010). The studies conducted at the NBP (Łyziak, 2010) indicate that the weight of the anticipative factor while formulating inflation expectations by individuals in Poland is slightly higher than the average in the EU economies, albeit lower than in certain old EU member states. Inflation expectations of individuals in Poland are strongly influenced by changes in the general sentiment about the economic outlook (especially unemployment) and financial situation of households (see Stanisławska, 2010). The perception of inflation by individuals is also affected by changes in the prices of goods frequently purchased by individuals, even given the relatively stable CPI inflation (see Łyziak, 2009).

**References:**

Łyziak T., Mackiewicz J., Stanisławska E. (2007), Central bank transparency and credibility. The case of Poland, 1998-2004, European Journal of Political Economy, no. 23(1), pp. 51-66.

Łyziak T. (2009), Is inflation perceived by Polish consumers driven by prices of frequently bought goods and services?, Comparative Economic Studies, no. 51, pp. 100-117.

[14] This could be driven by the announced increases of VAT rates and a deterioration in the general assessment of the economic situation.

[15] Updated estimates from the paper by Łyziak, Mackiewicz, Stanisławska E. (2007), based on various indicators of inflation expectations of individuals (quantified with different methods on the basis of survey data from various public opinion poll centers). Similar results were obtained by Stanisławska (2008). They suggest that when formulating their inflation expectations both bank analysts and individuals take into account primarily past inflation and - to a lesser extent - interest rate. Yet, analysts' forecasts display a more anticipative character and to a larger degree take into account the central bank's inflation target.

Łyziak T. (2010), Measuring and examining forward-lookingness of consumer inflation expectations in Europe, in: E. Stanisławska, E. Tomczyk [ed.], Inflation Expectations – a View from Different Perspectives, Oficyna Wydawnicza SGH, pp. 43-92.

Stanisławska E. (2010), Differences in consumers' inflation expectations - the case of Poland, w: E. Stanisławska, E. Tomczyk [ed.], Inflation Expectations – a View from Different Perspectives, Oficyna Wydawnicza SGH, pp. 111-124.

## 2.2. Demand and output

In 2010 Q2 GDP in real terms increased by 3.5% y/y, according to a preliminary GUS estimate, as compared to 3.0% y/y in 2010 Q1 (Figure 2.9). Domestic demand in 2010 Q2 grew by 3.9% y/y as compared to a rise of 2.2% y/y in the previous quarter.

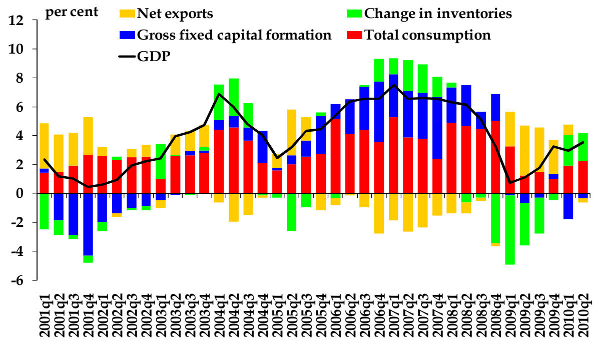
The growth of individual consumption in 2010 Q2 accelerated again while still remaining below its multi-year average. In turn, public consumption growth rate remained unchanged in 2010 Q2.

The growth of gross fixed capital formation was still negative in 2010 Q2, although the pace of investment decline was much slower than in 2010 Q1. The moderation of the pace of investment decline in 2010 Q2 was the effect of a less pronounced decrease in private investment. At the same time enterprises in 2010 Q2 continued to rebuild their inventories, and consequently the share of this category in GDP growth proved positive and significant once again.

Together with a gradual improvement of economic climate abroad the growth rate of exports rose in 2010 Q2. At the same time a quick recovery in import demand took place, supported by a boost in the domestic economy and the zloty stronger than a year before. Since imports were recovering quicker than exports, the contribution of net exports to GDP growth was negative in 2010 Q2 – for the first time since 2008 Q4.

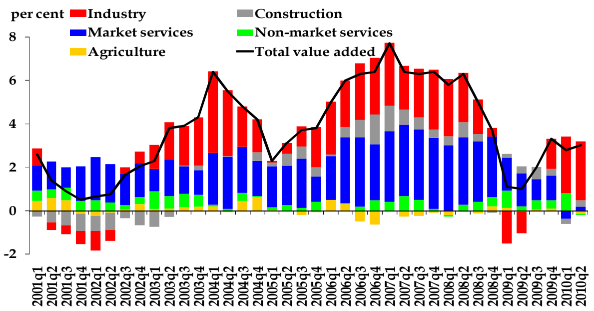
In 2010 Q2 the biggest share in the increase in gross value added – for the third quarter in a row – was attributable to industry. A positive, though modest, contribution to the increase in gross value added was also made by construction and market services (Figure 2.10).

**Figure 2.9**
Contribution of aggregate demand components to GDP growth.



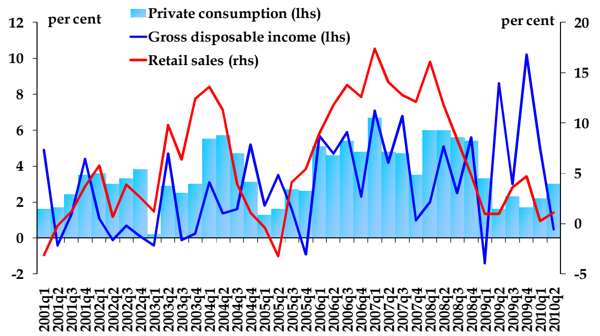

**Source:** GUS data.

**Figure 2.10**
Sector contribution to annual growth of gross value added.




**Source:** GUS data, NBP calculations.

**Figure 2.11**
Growth of private consumption, gross disposable income and retail sales (y/y, constant prices).




**Source:** GUS data.

### 2.2.1. Consumption demand

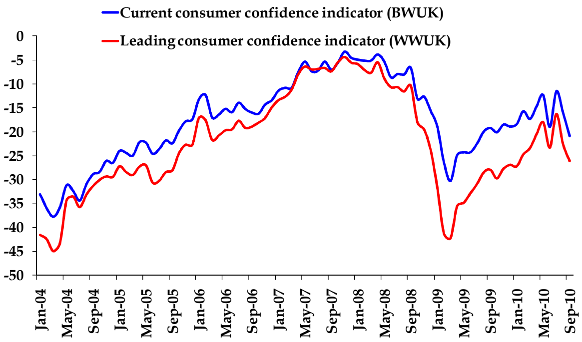
The first half of 2010 saw a gradual acceleration in the growth of consumption demand. According to a preliminary GUS estimate, in 2010 Q2 the growth rate of individual consumption rose to 3.0% y/y, as compared to 2.2% y/y in 2010 Q1 and 1.7% y/y in 2009 Q4 (Figure 2.11).

In 2010 Q1 the growth of consumer demand accelerated despite a weakening in the growth of disposable income of households. The weakening income growth in 2010 Q1 was connected with a low increase of average monthly wages in real terms (by 1.1% y/y) and a drop in the number of the employed in the national economy (by 0.3% y/y). Furthermore, the growth rate of disposable income of households was being lowered by the decline in the dynamics of gross operating surplus of private enterprises and by a drop in the growth rate of social benefits. The acceleration in individual consumption and a weakening growth rate of disposable income resulted in a decline in the saving rate in 2010 Q1.

The second quarter of 2010 saw further decline in the annual growth of disposable income which was due to a negative base-effect associated with an increase in the dynamics of disposable income in 2009 Q2. At the same time a slight acceleration in the rate of wage growth in the economy in real terms (to 1.5% y/y), an increase in the number of the employed (cf. Section 2.3) as well as higher (compared with the previous quarter) rates of growth of gross operating surplus of private enterprises and social benefits contributed to the improvement of income dynamics.

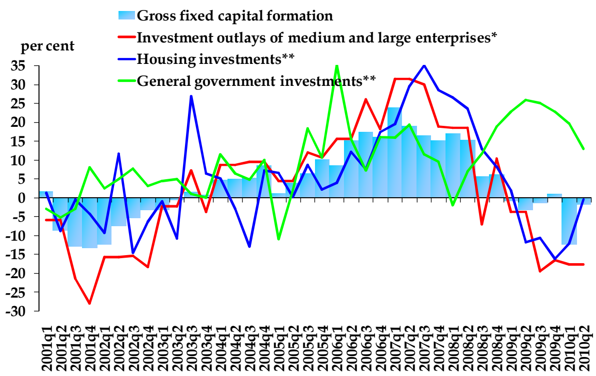
In July and August 2010 retail sales in real terms rose, respectively, by 2.4% y/y and 5.1% y/y, i.e. faster than in the first half of 2010 (by 0.3% y/y and 1.1% y/y in 2010 Q1 and Q2, respectively). The acceleration of the growth of retail sales may point to a further recovery in consumption demand in 2010 Q3. At the same

**Figure 2.12**
Consumer confidence indicators.




**Source:** GUS, NBP data.

**Figure 2.13**
Investment in the economy (y/y).

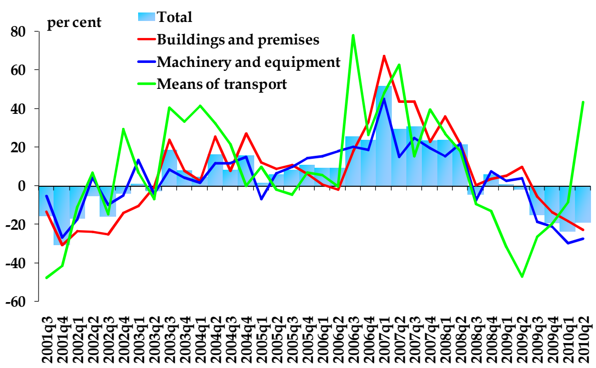



**Source:** GUS data, Ministry of Finance data, NBP estimates.

* 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 2.14**
Gross fixed capital formation in the enterprise sector (in nominal terms, y/y).




**Source:** GUS data, NBP calculations.

time, however, a deterioration in households' sentiment visible in economic climate surveys may signal that the improvement in consumption demand has been halted[16] (Figure 2.12).

### 2.2.2. Investment demand

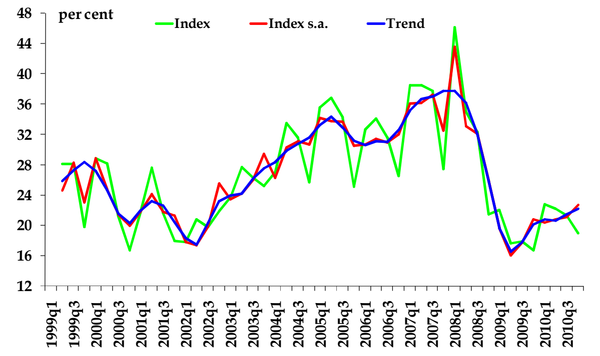
In 2010 Q2 investment in the economy declined further, although its drop was much slower than in 2010 Q1. According to GUS, investment dropped by 1.7% y/y in 2010 Q2 (compared to a drop of 12.4% y/y in the previous quarter; Figure 2.13).

Estimates for 2010 Q2 indicate a weaker growth of public investment and further decline in corporate investment; at the same time, housing investment stopped falling (Figure 2.13).

In 2010 Q2 investment outlays of enterprises (in nominal terms) continued to fall across all major categories, with the exception of means of transport (Figure 2.14). A deep decline was recorded in outlays on buildings (a plunge of 22.9% y/y) as well as on machinery and equipment (a decline of 27.5% y/y). A strong increase in the outlays on means of transport was to a large extent related to the abolition of VAT discounts on the purchase of cars with goods vehicle approval certificates. It was also supported by a low base of 2009, when enterprises drastically reduced this sort of investment.

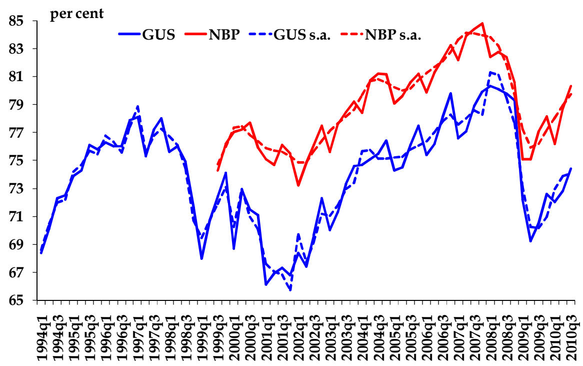
The results of NBP business conditions surveys[17] indicate that, despite further improvement in the economic situation, enterprises' interest in undertaking new investment in 2010 Q3 remained small. The seasonally adjusted new investment index – though it has increased slightly – remains below its multi-year average level (Figure 2.15). A decisive majority of commenced investments, however, will be carried on, which is signalled by a very high level of the investment continuation index.

**Figure 2.15**
Index of new investments (percentage of enterprises planning to start new investments within the coming quarter).




**Source:** NBP business tendency survey.

**Figure 2.16**
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 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.

**Table 2.1**
Selected financial efficiency indices in the enterprise sector.

| per cent | 2006 | 2007 | 2008 | 2009 | 2009 q1 | 2009 q2 | 2009 q3 | 2009 q4 | 2010 q1 | 2010 q2 |
|---|---|---|---|---|---|---|---|---|---|---|
| Return on sales ratio | 5.5 | 5.6 | 5.0 | 5.0 | 5.1 | 5.2 | 5.0 | 4.9 | 4.8 | **5.5** |
| Net profitability ratio | 4.7 | 5.0 | 3.3 | 4.1 | 2.2 | 5.8 | 4.7 | 3.6 | 4.0 | **4.7** |
| Cost level index | 94.3 | 93.9 | 95.8 | 95.0 | 97.1 | 93.3 | 94.3 | 95.5 | 95.0 | **94.4** |
| | end of period | | | | | | | | | |
| Liquidity ratio of the first degree | 34.9 | 33.7 | 33.6 | 38.5 | 31.9 | 33.4 | 34.9 | 38.5 | 38.7 | **37.5** |

**Source:** GUS data.

[16] In August and September all components of the economic climate survey released by GUS decreased. The strongest contribution to the decline in BWUK and WWUK was made by the deterioration of the change in general economic conditions in the country in the forthcoming 12 months.
[17] *Economic Climate in the Enterprise Sector in 2010 Q3 and Forecasts for 2010 Q4, NBP.*

NBP's business conditions surveys suggest that the investment activity of enterprises could have increased slightly in 2010 Q3. At the same time it might be expected that enterprises' interest in investment will differ across firms. The fact that in 2010 Q2 investments of exporters stopped falling while investments of firms producing mainly for the domestic market declined further significantly, might signal a faster revival of investment of exporters.

New investment is encouraged by the growing level of production capacity utilisation (Figure 2.16), a very good financial standing of enterprises, including their good liquidity situation, as well as the gradual easing of bank credit policies. At the same time, uncertainty surrounding the outlook for economic growth abroad and in Poland as well as the associated worsening of enterprises' expectations of future demand in 2010 Q3 are factors limiting firms' interest in investing.

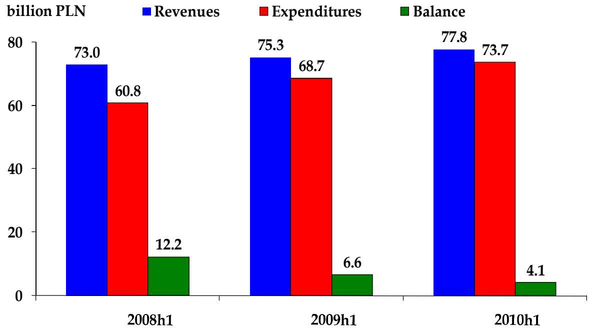
In 2010 Q2 the majority of financial efficiency indicators in the enterprise sector improved, including return on sales and net profitability, while liquidity ratios remained at high levels (Table 2.1). The good liquidity standing of companies may have a positive impact on their investment activity, in particular since a significant part of enterprises declares that they finance investment with their own funds (high level of liquid funds should also facilitate access of enterprises to external financing).

### 2.2.3. Government demand

In January - September 2010 the central budget deficit reached approx. PLN 39.5 billion, which accounts for 73.3% of the annual plan[18].

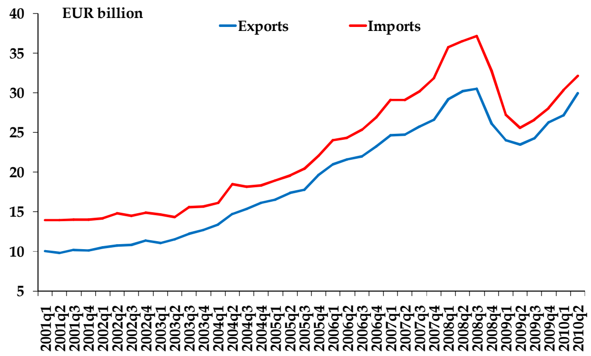
The total central budget revenue at the end of September 2010 was 10.5% lower than in the corresponding period of 2009, while tax and non-tax revenues increased in the first three quarters of 2010 by 2.6% y/y. Indirect tax

**Figure 2.17**
Revenues, expenditures and balance of local government units.



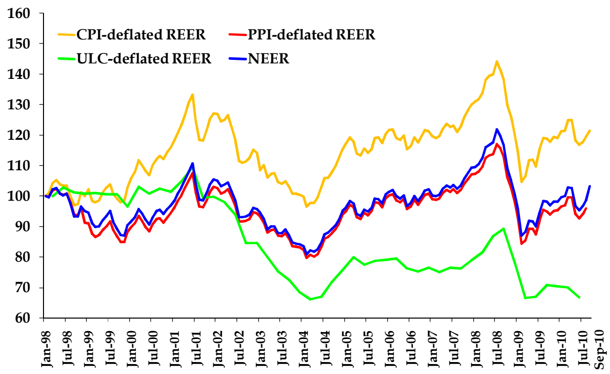

**Source**: Ministry of Finance data.

**Figure 2.18**
Value of Polish exports and imports.




**Source:** NBP calculations based on GUS data (seasonally adjusted).

**Figure 2.19**
Zloty real and nominal effective exchange rate (increase denotes appreciation; January 1998=100).




**Source:** NBP and European Commission data.

[18] In 2009, 75.1% of the annual deficit plan was achieved at the end of September.

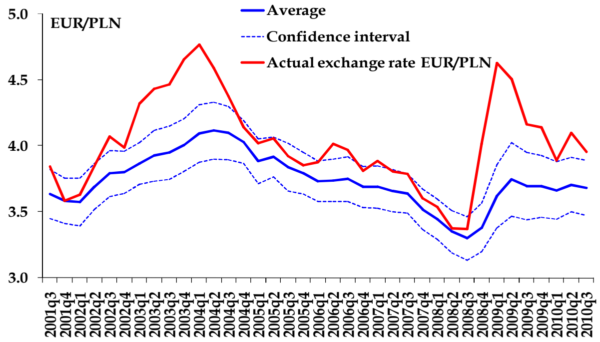
revenues at the end of September 2010 increased by 6.6% y/y (the VAT by 8.5% y/y, the excise tax by 3.2% y/y), while revenues from direct taxes fell in the analysed period by 8.3% y/y (the PIT by 2.4% y/y, and the CIT by 17.0% y/y), primarily due to higher tax returns under the annual settlement for 2009. The expenses of the central budget in this period dropped by 1.4% y/y[19].

It should be emphasised that, due to the exclusion of EU funds from the central budget since 2010, a comparison of the amount of both aggregate total revenues and expenditures with the previous year's levels is difficult. Low growth rates of those aggregates are in part the consequence of excluding from the central budget the EU-reimbursed expenses for the implementation of programmes co-financed with EU funds and the revenues from the reimbursement of such expenses by the European Commission.

In the first half of 2010 local government units recorded a surplus in the amount of PLN 4.1 billion, i.e. PLN 2.5 billion lower than in 2009 (Figure 2.17). The total revenue of local governments rose in the first half of 2010 by 3.4% y/y, of which own revenue grew by 1.3% y/y.[20] The expenditures of local governments in the same period grew by 7.3% y/y.

By the end of September 2010, the Social Security Fund had received the entire subsidy planned from the central budget for this year (PLN 37.9 billion). In the following months of 2010 the gap between Social Security Fund expenses on benefit payments and its revenues from contributions will be complemented with funds from the Demographic Reserve Fund

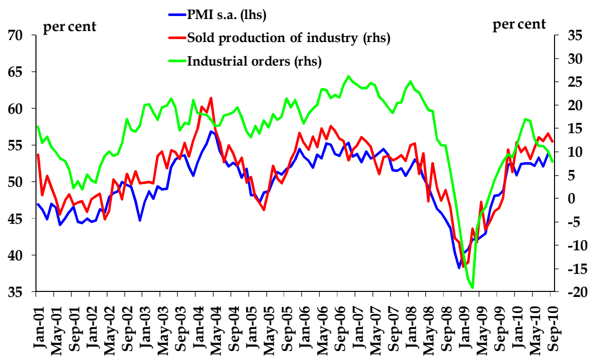
**Figure 2.20**
Average threshold exchange rate (EUR/PLN) of exports profitability declared by enterprises.




**Source:** NBP data and estimates.

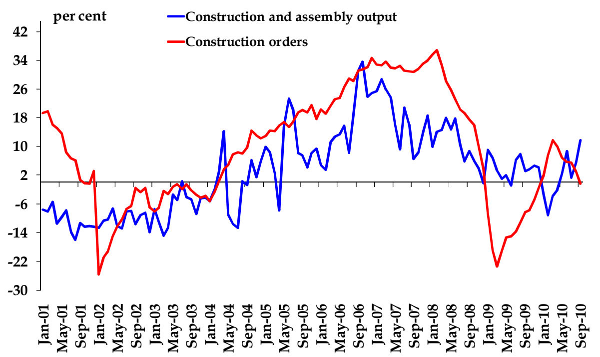
The threshold exchange rate at which exports become profitable is determined as the average of responses to a question (see below) included in the survey of NBP quick monitoring addressed at enterprises (*Economic Climate in the Enterprise Sector*). Survey question: "What is the threshold level of the foreign exchange rate at which exports will become (is) unprofitable (in zloty)?"

**Figure 2.21**
PMI and annual growth of sold production of industry and of industrial orders.




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

**Figure 2.22**
Annual growth of construction and assembly output and construction orders.




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

[19] A lower contribution to the EU and lower property expenditure than in the corresponding period of 2009 acted towards low growth of total central budget expenditure in the first eight months of 2010. The lower EU contribution resulted from differences in the payment schedule in 2009 and 2010 – they were higher in the first months of 2009, as the European Commission obliged Member States to accelerate the payment of EU contribution on account of increased EU expenditure in the face of the economic crisis. Low growth of property expenditure in the analysed period of 2010 may to a large extent be explained by the base effect related to very high property expenses of the Ministry of National Defence in January 2009 on the settlement of liabilities incurred in 2008.

[20] A moderate growth of own revenue is primarily due to a less advantageous than last year balance of the annual settlement of PIT and CIT for 2009.

(PLN 7.5 billion)[21] and a loan from the central budget (PLN 5.4 billion)[22]. The Labour Fund and the National Health Fund recorded deficits in the first eight months of 2010, while in the corresponding period of 2009 they had achieved surpluses.

According to the autumn EDP[23] notification, the deficit of the public finance sector in relation to GDP (in ESA95 terms) will be higher by 0.7 percentage points in 2010 than in 2009 and it will amount to approx. 7.9% of GDP. Although it may be expected that systemic changes (including a VAT increase) and the economic recovery will be conducive to decreasing the deficit in relation to GDP in 2011, this relation will still remain at a very high level. A detailed discussion of the situation of the general government sector in 2011 is presented in the Opinion of the Monetary Policy Council to the Draft of the Budget Act for the Year 2011.

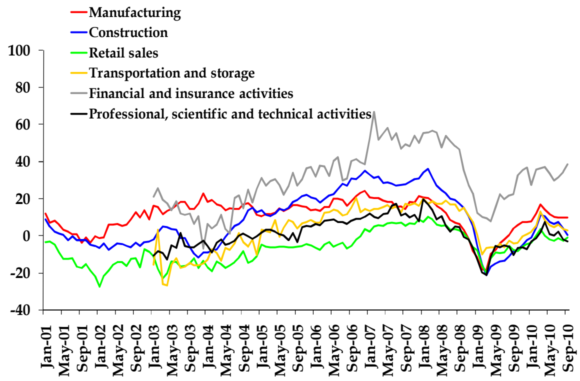
### 2.2.4. Exports and imports[24]

In 2010 Q2, amidst ongoing economic recovery both in Poland and in Poland's major trading partners, positive tendencies prevailed in the Polish foreign trade (Figure 2.18).

In 2010 Q2 the value of Polish exports (in EUR) increased by 10.2% q/q and by 27.5% y/y in seasonally adjusted terms (as compared with a rise of correspondingly 3.4% q/q and 13.1% y/y in 2010 Q1). This increase was primarily connected with the recovery in global demand, which led to the intensification of corporate trade, as suggested by a strong rise in exports to Germany and Central and Eastern European countries[25].

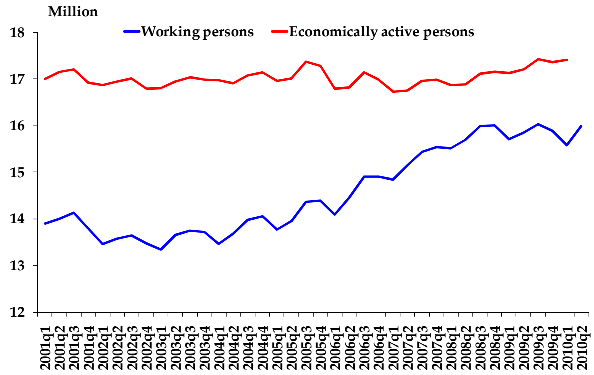
The acceleration of Polish exports, characterised by a relatively high import intensity, supported an increase of imports. At the same time the

**Figure 2.23**
Indicators of future economic activity in selected sections.



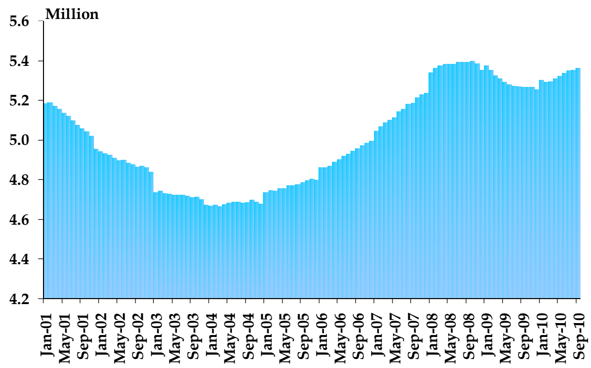

**Source:** GUS business tendency survey.

**Figure 2.24**
Working persons working in the economy and economically active in the economy according to BAEL.




**Source:** GUS data.

**Figure 2.25**
Employment in corporate sector.




**Source:** GUS data.

[21] Pursuant to the Act of 3 December 2009 amending the Act on the Social Security System (Journal of Laws of 2009, No. 218, item 1690).
[22] From the Financial Plan of the Social Security Fund incorporated into the draft Budget Act for the Year 2011 it transpires that the fund's liabilities due to loans from the central budget at the end of 2010 will amount to approx. PLN 10.9 billion, compared to PLN 5.5 billion at the end of 2009.
[23] Excessive Deficit Procedure.
[24] Information about the value of Polish exports and imports refers to GUS data (in EUR) adjusted for seasonal factors.
[25] In 2010 Q2 Polish exports to Germany rose by 0.8bln EUR (12.4% q/q), and to Central and Eastern Europe by 0.4 bln EUR (10.3% q/q), which constituted almost a half of the increase in Polish exports in this period (seasonally adjusted data).

growth of imports was lowered by the deceleration in the purchases of investment goods abroad. In 2010 Q2 the value of Polish imports (in EUR) increased by 5.9% q/q and by 25.5% y/y in seasonally adjusted terms (as compared with a rise of correspondingly 8.2% q/q and 11.6% y/y in 2010 Q1).

The nominal zloty exchange rate in 2010 Q2 and Q3 stopped appreciating (Figure 2.19) which contributed to maintaining the price competitiveness of exports. This was confirmed by NBP business conditions surveys indicating that the actual exchange rate is still weaker than the average threshold exchange rate of export profitability declared by enterprises (Figure 2.20).

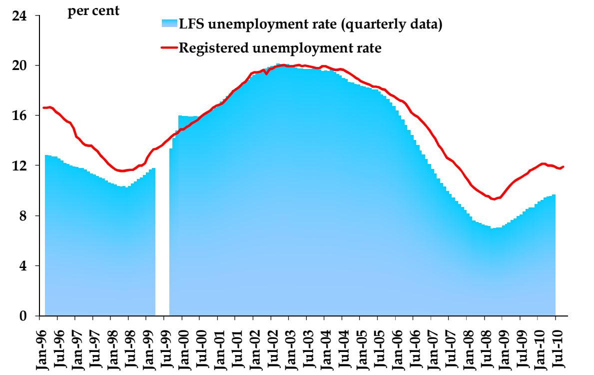
### 2.2.5. Output

Data on industrial output in January-September 2010 indicate continued high activity in this sector (Figure 2.21). However, the decreasing dynamics of portfolio of orders starting from April 2010 may signal a possible recovery slowdown in industry. The construction and assembly output, following a steep decline at the beginning of 2010 (related primarily to weather conditions), rose gradually in the subsequent months. However, since April 2010 the dynamics of portfolio of orders in construction has also been diminishing (Figure 2.22) and was close to zero in September 2010. The possibility of deceleration in output growth may additionally be indicated by GUS general business tendency indicators which after a strong growth in 2010 Q1 worsened slightly in two subsequent quarters (Figure 2.23).

## 2.3. Labour market

Situation in the labour market has been improving gradually. In 2010 Q2 the number of working persons according to the BAEL Labour Force Survey, following two quarters of a downward trend, increased by 0.9% y/y (as compared to a decline of 0.9% y/y in 2010 Q1 Figure 2.24). This was mainly driven by the halting of the decline (in year-on-year terms) in the number of the employed in industry and an increase in the number of the employed in

**Figure 2.26**
Unemployment rate registered by labour offices and unemployment rate according to LFS.

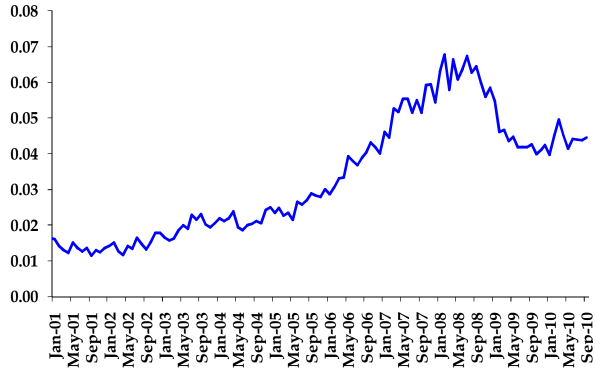



**Source:** GUS data (seasonally adjusted).

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.

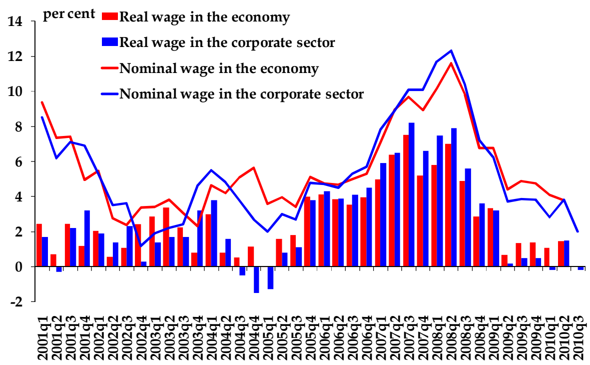
**Figure 2.27**
Labour market tensions index (number of vacancies per one unemployed).



**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.

**Figure 2.28**
Annual growth of wages in the economy and corporate sector.




**Source:** GUS data. NBP calculations.

services. In May - September 2010 employment in the enterprise sector also increased. (Figure 2.25)[26].

In 2010 Q2 the number of economically active persons continued to rise according to the BAEL Labour Force Survey (by 2.8% y/y as compared to 1.7% in the preceding quarter, Figure 2.24). The growth in the number of economically active persons was driven mainly by the increase in the economic activity ratio of young persons (i.e. aged 15-24) and persons at pre-retirement age (i.e. aged 45-59/64), which could be connected with the abolition of the compulsory military service and the withdrawal (starting from 2009) of the possibility of early retirement. At the same time there was an increase in economic activity in other age groups.

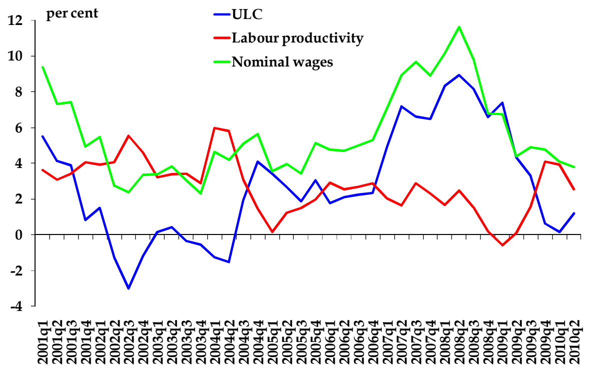
In 2010 Q2 the seasonally adjusted unemployment rate according to the BAEL survey stabilised at 9.7%. The registered unemployment rate in seasonally adjusted terms in September 2010 ammounted to 11.9% (as compared to 12.0% in May 2010, Figure 2.26).

The seasonally-adjusted number of job vacancies reported to labour offices stabilised. As a result, also the relation of job vacancies to the number of the unemployed was relatively stable (Figure 2.27).

The results of the NBP business conditions surveys[27] indicate that after over a year of growing optimism, the forecasts of employment for 2010 Q4 formulated by enterprises have not improved, although they continue to exceed the long-term average. As compared with the previous quarter, the employment forecast indicator declined slightly (by 0.3 percentage points in seasonally adjusted terms) which resulted from the declining share of enterprises forecasting a rise in employment.

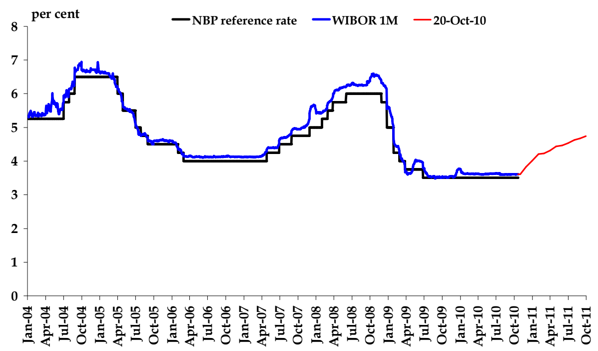
The improvement in the labour market situation was accompanied by the persisting moderate nominal wage growth in the economy. Nominal wages in 2010 Q2 increased by 3.8% y/y (as

**Figure 2.29**
Annual growth of labour productivity. wages and unit labour costs (ULC) in the economy.




**Source:** GUS data. NBP calculations.

**Figure 2.30**
NBP reference rate, 1-month WIBOR and 1-month interest rate implied by FRAs.




**Source:** Reuters data. NBP calculations.

**Figure 2.31**
The spread between the 3-month interbank deposit rate and the OIS rate in Poland.


**Source:** Reuters data. NBP calculations.

[26] Average monthly employment growth in the enterprise sector is currently higher than in 2005 and 2008 but lower than in 2006-2007.

[27] *Economic Climate in the Enterprise Sector in 2010 Q3 and Forecasts for 2010 Q4*, NBP.

compared with 4.1% y/y in 2010 Q1), while real wages grew by 1.4% y/y (as compared with 1.1% y/y in 2010 Q1). The nominal wage growth in the enterprise sector in 2010 Q2 increased to 3.8% y/y (from 2.8% y/y in 2010 Q1), and real wage growth increased to 1.5% y/y (as compared to -0.2% y/y in the preceding quarter). In 2010 Q3 nominal wage growth in the enterprise sector decreased to 2.0% y/y causing a reduction in real terms.

Labour productivity growth in 2010 Q2 decreased to 2.5% y/y (against 3.9% y/y in 2010 Q1), which was largely driven by a rise in employment, adversely affecting labour productivity growth in the short term. Despite a simultaneous decrease in wage growth this resulted in growth in unit labour costs in the economy (to 1.2% y/y in 2010 Q2 against 0.2% y/y in the previous quarter; Figure 2.29). At the same time unit labour costs in industry have been decreasing since August 2009 (-8.3% y/y in 2010 Q2 as compared to -8.9% y/y in 2010 Q1) reflecting strong growth of labour productivity in this sector typical for economic recovery.

## 2.4. Financial markets

### 2.4.1. Financial assets prices and interest rates

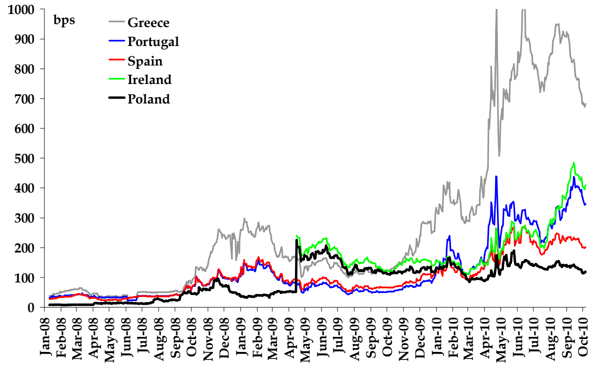
Since the publication of the previous *Report* the NBP interest rates have remained unchanged (Figure 2.31). In the interbank market the one- and three-month interest rates as well as the spread between the interest on 3-month deposits and the OIS rate have also been stable (Figure 2.32).

According to the results of the Reuters survey of 11 October[28], about two thirds of bank analysts anticipated the reference rate to increase by the end of 2010. FRA contracts indicate that the expected 1M WIBOR rate will range at 3.75-4.00% at the end of the year, and at 4.50% in mid-2011.

**Figure 2.32**
Yields of Polish benchmark bonds.

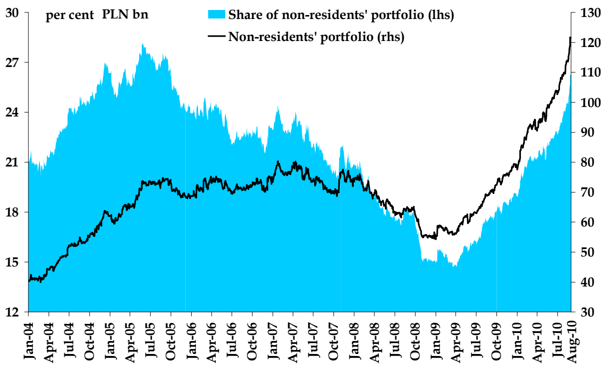

**Source:** Reuters data.

**Figure 2.33**
CDS rates of Poland vis-a-vis peripheral euro area economies.




**Source:** Reuters data.

**Figure 2.34**
Non-residents' involvement in the Polish Treasury bond market.




**Source:** National Depository for Securities (KDPW) data.

[28] 50% of analysts expected the reference rate to increase to 3.75%, 19% - to 4.00%, whereas the others expected it to remain unchanged.

Since the publication of the previous *Report* spreads between the yields on Polish long- and short-term government bonds have narrowed. This was due to a significant decrease of yields on 10- and 5-year bonds with 2-year bond yields changing only slightly. The decline in yields on Polish bonds with longer maturities resulted from the publication of favourable data on the Polish economy, which supported the market participants' continued relatively favourable assessment of Poland's fiscal outlook. This assessment is reflected in lower CDS rates for Polish bonds than for those of peripheral euro-area countries (Figure 2.33) and in a lower than in the case of some of those countries spread vis-a-vis German bond yields[29]. Yields on 2-year bonds were more stable, as they were to a larger extent affected by expectations concerning the level of short-term interest rates. In the recent period non-residents have further increased their involvement in the Polish debt market (Figure 2.34).

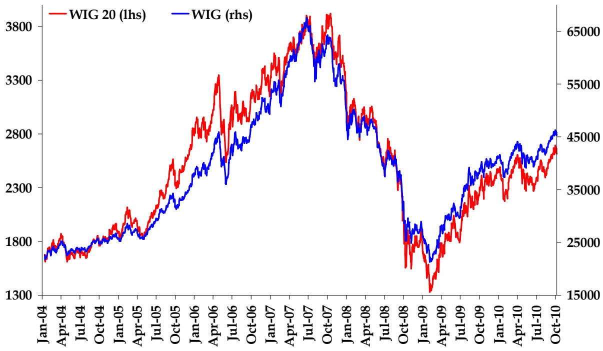
In September 2010 the yields on Polish long-term bonds in average annual terms, used for assessing the compliance with the Maastricht interest rate criterion, amounted to 5.9%, that is below the estimated reference value for this criterion (6.0%).

Since the publication of the previous *Report* equity prices on the Warsaw Stock Exchange have increased (Figure 2.35) while the involvement of non-residents remained stable (Figure 2.36).

### 2.4.2. Home prices

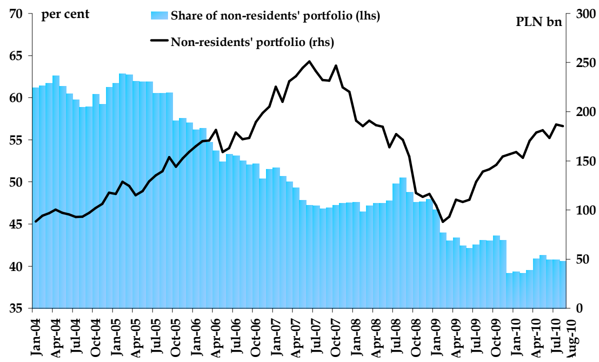
2010 Q2 saw no significant changes in the housing market in major Polish cities[30]. Asking prices in the primary and secondary markets decreased slightly, while sale prices in both these markets remained stable (Figure 2.37).

**Figure 2.35**
WIG and WIG20 stock exchange indices.



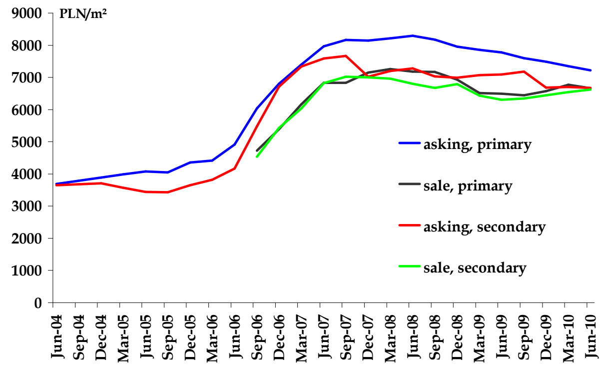

**Source:** Reuters data.

**Figure 2.36**
Non-residents' involvement in the Polish equity market (measured by the market value of shares)




**Source:** NBP data.

**Figure 2.37**
Average* prices of flats in Poland's 7 big cities (Gdansk, Gdynia, Krakow, Lodz, Poznan, Warszawa, Wroclaw).




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

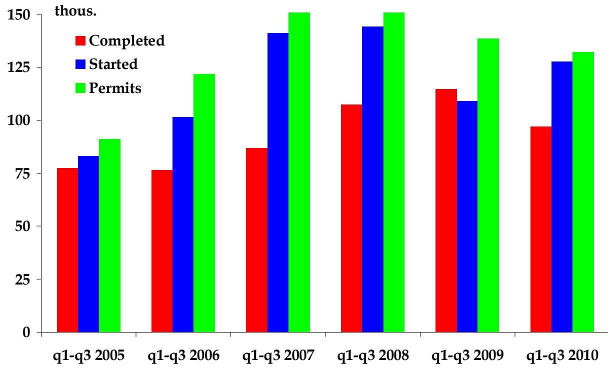
* Asking prices - average weighted by the number of offers; sale prices in the primary market - average weighted by the share of the housing stock in a given city in the total housing stock of all 7 cities; sale prices in the secondary market - average adjusted (with the use of a hedonic index) for differences in the quality of flats.

[29] In the period 1-20 October 2010 yields on 10-year Polish bonds were on average 312 basis points higher than yields on German bonds of the same maturity, while Greek, Irish and Portuguese bond yields were, respectively, 747, 390 and 367 basis points higher. In the case of Hungarian and Czech bonds, this spread amounted to 446 and 110 basis points, respectively.

[30] More information about the situation in the Polish housing market can be found in an NBP publication entitled *Report on the Polish residential market in 2002-2009* available at the NBP website (www.nbp.pl).

In the first half of 2010, the number of completed flats fell by approx. 15% y/y. However, the profit margins in the residential construction sector remain high, which encourages developers to commence new investment projects. In the first half of 2010, the number of construction projects started was significantly higher than in the corresponding period of 2009, which should translate into a greater number of completed flats in the coming quarters (Figure 2.38).

**Figure 2.38**
The number of completed flats. construction permits issued and construction projects started.




**Source:** GUS data.

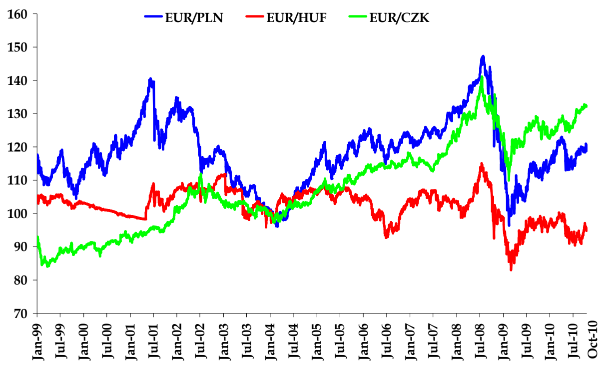
### 2.4.3. Exchange rate

Since the publication of the previous *Report* the nominal exchange rate of the zloty appreciated by 14% against the US dollar and by 4% against both the euro and the Swiss franc.

The zloty appreciated against all the three currencies till mid-August 2010 but then started to weaken against the dollar and the Swiss franc, although it stabilised against the euro. The depreciation of the zloty lasted till the first days of September 2010 and was driven by the worsening of financial market sentiment due to surging fears of a slowing economic recovery in the United States following the publication of negative macroeconomic data on this economy.

September 2010 brought sentiment improvement in the global financial markets, which was conducive to the appreciation of most Eastern and Central European currencies, including the zloty. In October this year the zloty exchange rate displayed no clear upward or downward trend.

**Figure 2.39**
Nominal exchange rates of the Polish zloty. the Czech koruna and the Hungarian forint against the euro (January 2004=100; increase denotes appreciation).



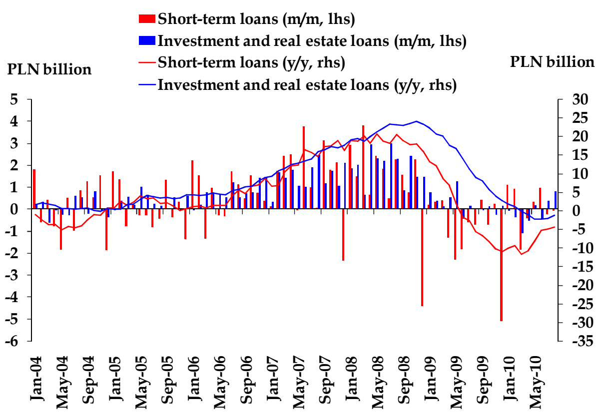

**Source:** Ecowin data.

## 2.5. Credit and money[31]

### 2.5.1. Loans

Following the decline in the first five months of 2010 the volume of corporate loans in the period June - August increased by PLN 0.9 (Figure 2.40). In year-on-year terms, corporate loans continued on a downward trend, yet the scale of their decline in the past few months was smaller

**Figure 2.40**
Loans to enterprises.




**Source:** NBP data.

[31] The monetary data presented in this chapter refer to values adjusted for the impact of fluctuations in zloty exchange rate against main foreign currencies.

than in the previous period.

It follows from survey studies of enterprises[32] that the percentage of enterprises applying for loans remained at a relatively low level (seasonally adjusted data; Figure 2.41), while there was a rise in the share of loan applications approved by banks. A slight increase in the demand for corporate loans in 2010 Q2 is suggested by the results of the surveys carried out among senior loan officers[33].

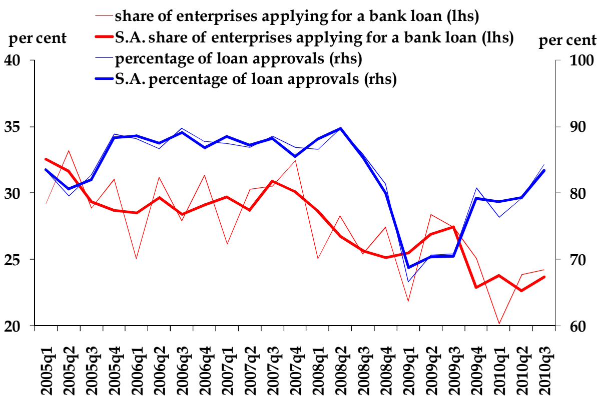
The revival in the market for housing loans to households has persisted. Their volume increased by PLN 8.9 billion in the period from June to August 2010. (Figure 2.42).

The results of survey studies of banks show that the rise in household demand for housing loans registered by the majority of banks has been a driving force behind the rise in housing loans in 2010 Q2. At the same time, there was a certain easing of banks' credit policy in this market segment i.e. the majority of banks decreased their margins and slightly loosened certain loan granting criteria.

The majority of newly granted housing loans (in July 2010 64.7%) were extended in PLN, yet since the beginning of 2010 the share of foreign currency denominated loans, especially EUR denominated loans, has been rising (Figure 2.44). The rise in the share of foreign currency loans may be driven by the anticipated introduction of regulatory changes which are likely to limit the availability of housing loans to households.

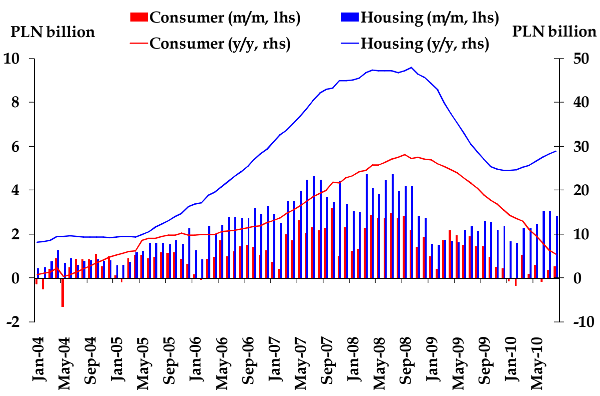
In the period from June to August household consumer debt increased by a mere PLN 0.7 billion. The increase in consumer loans continued to be significantly lower than in the years 2008-2009 (Figure 2.42), which was reflected in further annual decline in this loan category.

**Figure 2.41**
Share of enterprises applying for loans and percentage of approved loan applications.



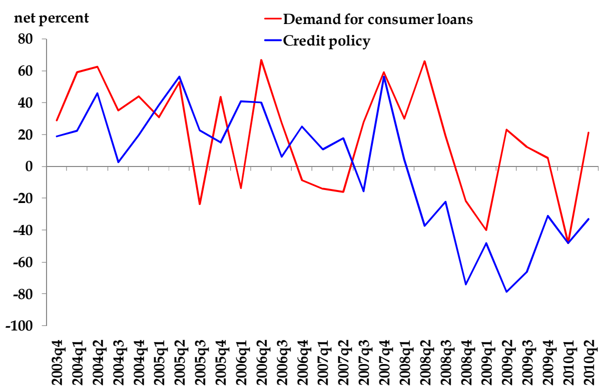

**Source:** NBP data.

**Figure 2.42**
Loans to households.




**Source:** NBP data.

**Figure 2.43**
Demand for credit and banks' credit policy as regards consumer loans to households.




**Source:** NBP data.

Weighted responses of banks. Positive value of both indicators should be interpreted respectively as a rise in the demand for credit or easing of lending policy with respect to the previous quarter.

[32] *Economic Climate in the Enterprise Sector in 2010 Q3 and Forecasts for 2010 Q4*, NBP.
[33] *Senior Loan Officer Opinion Surveys on Bank Lending Practices and Credit Conditions, 2010 Q3*, NBP.

2010 Q2 saw another tightening of household consumer loan granting criteria, yet, the conditions of granting those loans did not change in the majority of surveyed banks[34] (Figure 2.43). The basic reason for banks' tightening their credit policy remains the deteriorated quality of loan portfolio.

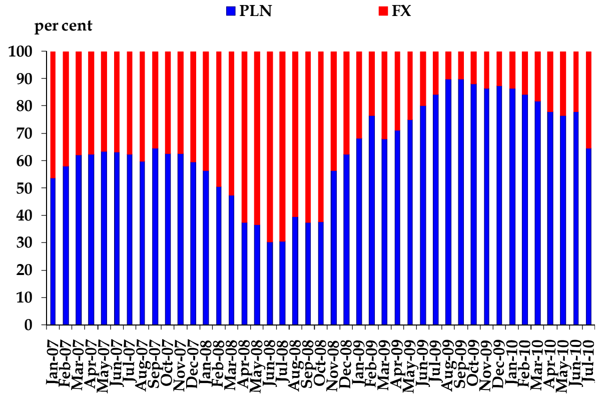
In the period from June to August average interest charged on newly granted PLN loans to enterprises increased slightly (Figure 2.46). Yet the interest charged on newly granted PLN housing loans to households continued to decline, reaching in August the level of 6.4%, the lowest level since August 2007. Given a relatively stable level of the WIBOR 3M rate, the decline in the interest charged on this loan category suggests an easing in housing loan granting conditions as regards bank margins. In the period from June to August 2010 there was also a decline in the interest charged on household consumer loans which might reflect a certain relaxation of banks' lending conditions.

### 2.5.2. Deposits and monetary aggregates

In the period from June to August 2010 the volume of corporate deposits at banks increased by PLN 2.7 billion (Figure 2.46), with an insignificant decline of their annual growth rate as compared with May 2010 (to 15.2%). The liquidity situation of the corporate sector in 2010 Q3 was relatively favourable. 70.0% of the enterprises surveyed by the NBP under business condition surveys declared absence of any liquidity problems, which is close to the average from the period 2004-2010[35].

Household deposits in the period from June to August 2010 increased by PLN 9.5 billion, and their annual growth stabilized at the level of approx. 9-10% (Figure 2.47). In the period from June to July 2010 the value of investment fund assets increased by PLN 1.8 billion (i.e. by 2.1%) of which net contributions of new funds accounted for merely PLN 0.2 billion. The value of quoted shares held by households increased in this period by PLN 1.5 billion (i.e. by 3.7%).

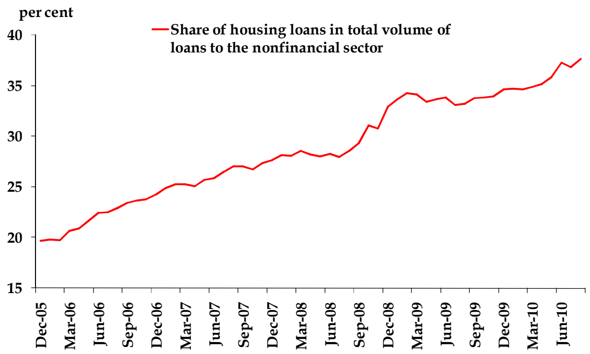
**Figure 2.44**
Currency structure of newly granted housing loans to households.




**Source:** NBP data.

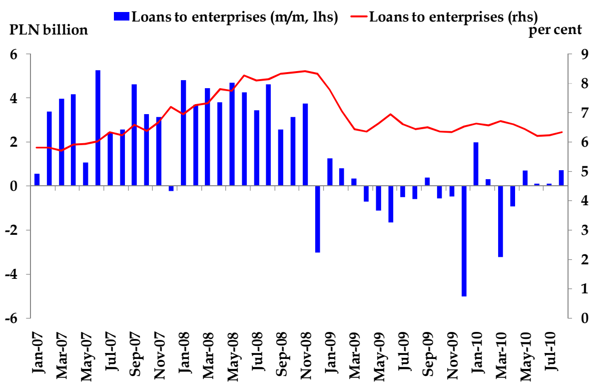
Structure prepared based on information acquired for interest-rate reporting purpose from the sample of 20 banks whose share in the market of loans to non-financial sector accounts for approx. 75%.

**Figure 2.45**
Share of housing loans in the total of loans.




**Source:** NBP data.

**Figure 2.46**
Monthly increases and average interest charged on newly granted loans to enterprises




**Source:** NBP data.

[34] *Senior Loan Officer Opinion Surveys on Bank Lending Practices and Credit Conditions, 2010 Q3*, NBP.
[35] *Economic Climate in the Enterprise Sector in 2010 Q3 and Forecasts for 2010 Q4*, NBP.

Since November 2009 the annual growth of M3 money has remained at the level of 7-8% [36] (Figure 2.49). The M1 liquid component, whose annual growth in the period from June to August 2010 oscillated around the level of 13%, registered faster growth than that of the M3 broad money. After 8 months of decline, in June 2010 the annual growth of currency in circulation became positive again and rose steadily to reach 2% at the end of August 2010.

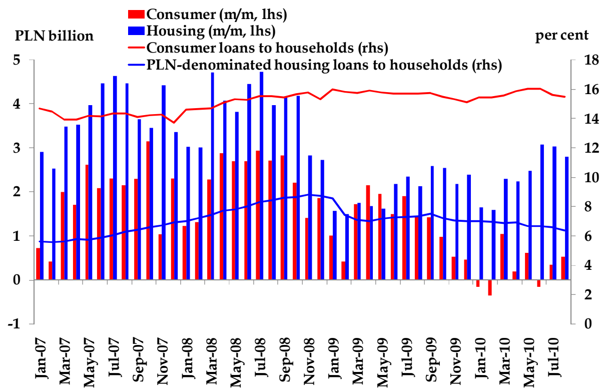
## 2.6. Balance of payments

In 2010 Q2 the current account deficit amounted to EUR 1.5 billion (versus EUR 1.1 billion in 2010 Q1). This deterioration was driven primarily by a deepening deficit in the income account. However, it was partially offset by a growing surplus on services (Figure 2.50). In July and August 2010 the current account deficit amounted to EUR 1.5 and EUR 1.1 billion, respectively.

2010 Q2 saw a continued net inflow of foreign capital to Poland, yet it was lower than in the previous quarter. The financial account recorded a surplus of EUR 5.7 billion (as compared to EUR 9.3 billion in 2010 Q1), which was primarily the effect of a further net inflow of portfolio investment amounting to EUR 4.1 billion. In July and August 2010 there was an inflow of EUR 7.8 billion into the financial account, again mostly due to portfolio investment (EUR 5.6 billion).

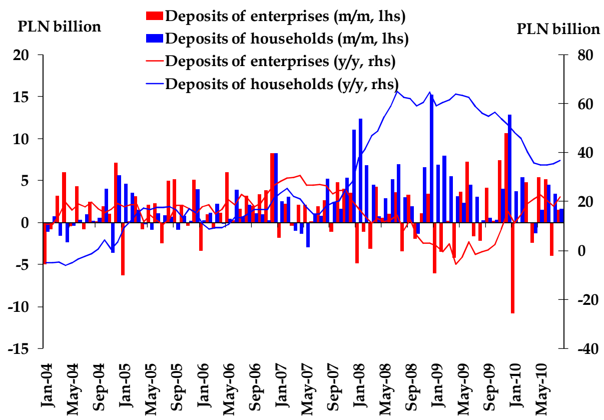
In 2010 Q2 foreign investors mainly invested in Treasury bonds issued on the domestic market. In July and August 2010, the exposure of foreign investors in this market continued to increase – the combined value of the Treasury bonds purchased amounted to EUR 5.4 billion. This was accompanied by a rise in the aggregate value of deposits made by non-residents in Polish banks. Foreign direct investment on the other hand fell to EUR 0.4 billion (versus EUR 3.8 billion in 2010 Q1).

**Figure 2.47**
Monthly increases and average interest charged on newly granted PLN loans to households.



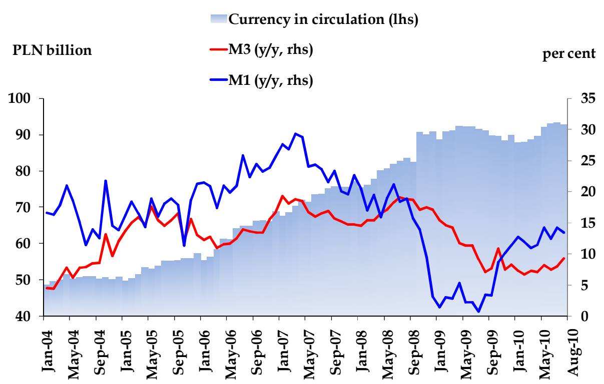

**Source:** NBP data.

**Figure 2.48**
Bank deposits of households and enterprises.




**Source:** NBP Data.

**Figure 2.49**
Currency in circulation and annual growth rate of M1 and M3.



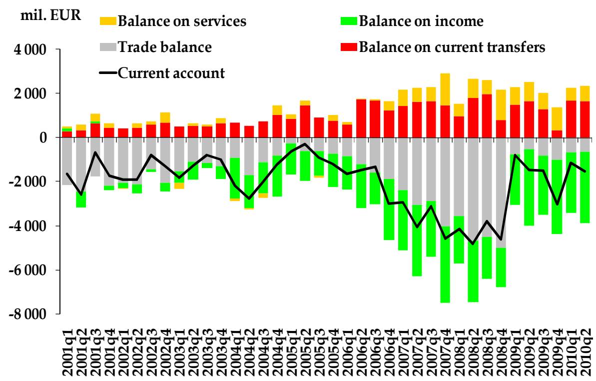

**Source:** NBP data.

[36] The rise in the annual growth rate of the M3 aggregate in August 2010 to 9.3% y/y was mainly the effect of a low reference base: the value of broad money rose by PLN 5.9 billion, while in August 2009 a drop of PLN 3.0 billion was recorded.

In 2010 Q2 Polish external debt in EUR decreased compared to 2010 Q1 - by 2.1 billion EUR to EUR 200.7 billion. However zloty depreciation observed in 2010 Q2 contributed to a rise in external debt in PLN by PLN 48.7 billion to PLN 831.9 billion.

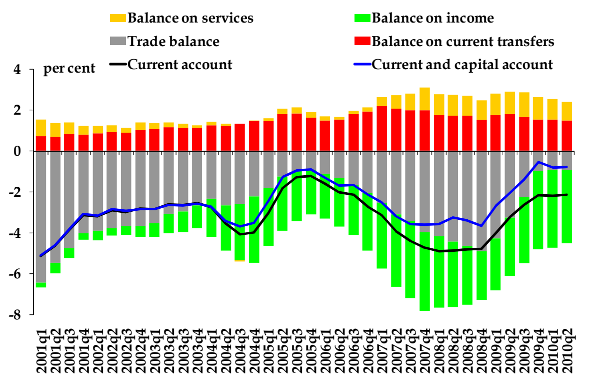
In 2010 Q2 the current account deficit (in terms of four consecutive quarters) eased back to 2.1% of GDP (as compared to 2.2% in 2010 Q1). At the same time the combined deficit on the current and capital accounts amounted to approx. 0.8% of GDP (similarly to 2010 Q1; Figure 2.51). 98% of the current account deficit recorded in 2010 Q2 was financed by FDI capital inflows.

**Figure 2.50**
Current account balance.



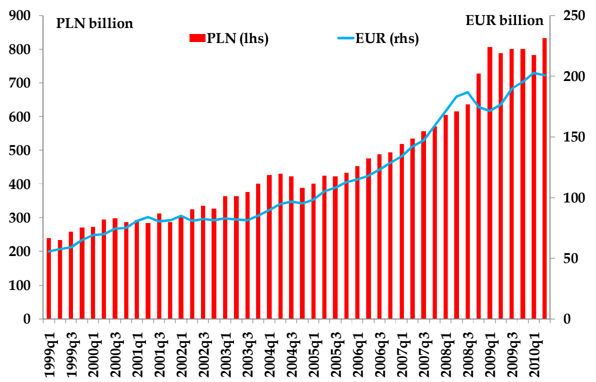

**Source:** NBP data.

**Figure 2.51**
Current and capital account to GDP (4-quarter rolling window).




**Source:** NBP data.

**Figure 2.52**
External debt in EUR and PLN.




**Source:** NBP data.

Chapter 3.

# Monetary policy in June - October 2010

At the meetings in June, August, September and October 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 and the discount rate at 4.00% on an annual basis. At the meeting in October the Council decided to increase the required reserve rate by 0.5 percentage points from 3.0% to 3.5%. This decision applies to the required reserve to be maintained from 31 December 2010.

What follows in the next part of the chapter are the previously published *Minutes of the Monetary Policy Council decision-making meetings* held in June, August, and September 2010, as well as the *Information from the meeting of the Monetary Policy Council* in October 2010.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

While discussing the impact of the interest rate disparity on the exchange rate, some members of the Council indicated that at the moment this disparity did not have any significant impact on exchange rate developments, as suggested by similar exchange rate developments observed in emerging economies regardless of whether they had already embarked on a monetary policy tightening or not. Those members emphasized that should many countries continue to observe tensions in the public finance sector, the exchange rate's sensitivity to interest rate changes might remain limited.

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

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

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

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

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

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

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

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

While discussing the situation in the labour market, it was pointed out that growing employment in the enterprise sector was accompanied by low wage growth. It was emphasized that such improvement in the labour market situation was favourable from the point of view of inflationary developments as it curbed the risk of a simultaneous increase in demand and cost pressure. Some members of the Council pointed out that neither data concerning planned changes in wages in enterprises nor wage expectations were indicative of the risk of considerable acceleration in wage growth.

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

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

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

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

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

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

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

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

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

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

During the discussion about interest rates in Poland and abroad, some Council members pointed to the continuation of expansionary monetary policy by major central banks in developed countries. According to those members, under such circumstances, increase in interest rate disparity relating to a potential rise in the NBP interest rates could contribute to increased capital inflow to the Polish economy and to an excessively rapid zloty appreciation. Other Council members argued, however, that the impact of the increased interest rate disparity on the zloty exchange rate might be limited. In this context, those members indicated that a few central banks in developed and developing countries had recently increased interest rates. According to those members of the Council, the impact of the increased interest rate disparity on the zloty exchange rate might also be limited by other factors affecting the exchange rate, including the situation in the public finance sector. It was further indicated that amidst strong inflow of portfolio capital connected with high borrowing needs of the government, changes in investor attitudes to emerging economies could constitute a major risk for the zloty exchange rate developments.

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

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

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

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

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

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

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

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

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

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

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

Some Council members argued that the current wage increase was not large, and that the NBP economic climate survey showed that the percentage of enterprises planning to raise wages remained moderate, which might be indicative of wage discipline being maintained in the enterprise sector. Other Council members stressed that the percentage of employees who, according to declarations of companies, were to be covered by pay rises in Q4 approached its long-term average. Those members assessed that the dampening effect of low growth of unit labour costs on inflation may begin to wane, as evidenced by the first – since 2008 Q2 – acceleration in unit labour cost growth in the economy in 2010 Q2. Moreover – according to those Council members – raising the minimum wage in 2011 might be a factor increasing the wage pressure.

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

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

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

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

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

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

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

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

**Information from the meeting of the Monetary Policy Council held on 26-27 October 2010**

The Council decided to keep the NBP interest rates unchanged, i.e. 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% on an annual basis.

Modest recovery in the global economy has continued, and its pace in the second half of 2010 is likely to be lower than in the first half of the year. Economic growth in the developed countries is curbed by high unemployment and ongoing adjustments in the balance sheets of households, enterprises and financial institutions. The rapid growth in the major emerging economies has been decelerating slightly, which is driven by tightening of the economic policy in some of those countries aimed at limiting the risk of growing macroeconomic imbalance. The effects of high fiscal imbalance and its planned reduction in the developed economies, as well as the effects of monetary expansion, including non-standard measures undertaken and envisaged by major central banks continue to be an important uncertainty factor for the global economic growth.

In the recent period expectations of increased scale of monetary expansion in the United States were accompanied by improved investors' sentiment in the financial markets. Both factors, on the one hand, supported the appreciation of currencies against the US dollar, including that of the zloty as well as of currencies of other emerging economies. On the other hand, they were also conducive to a rise in prices of some commodities in the world markets.

The data on the Polish economy in 2010 Q3 signal slightly higher economic growth as compared to the previous quarter. Industrial output continues to grow rapidly. In the recent period the growth of construction and assembly output accelerated. Production capacity utilization has been steadily rising. Enterprises continue to have very good financial and liquidity situation. At the same time, despite improvement in current activity, in the majority of sectors expectations of enterprises about demand and output have deteriorated. Enterprises continue to increase employment, albeit the decline in the registered unemployment rate has halted (in seasonally adjusted terms). Rise in employment is supported by continued high wage discipline in enterprises. In 2010 Q3 wage growth declined in the corporate sector. Growing number of economically active persons may have a dampening effect on wage growth.

Lending to enterprises remains limited, mainly due to reasons related to the demand for credit. Stable growth in mortgage loans to households continues. The share of foreign currency loans in the newly granted mortgage loans to households is on the rise again.

In September 2010 the annual CPI inflation increased to the level of the NBP inflation target set at 2.5%. This rise in CPI inflation was mainly driven by an increase in the growth of food prices and – to a lesser degree – of energy prices. Core inflation net of food and energy has not changed. At the same time, other core inflation measures and PPI growth increased. The majority of inflation expectation measures are close to the NBP inflation target. In the coming months a further rise in CPI inflation may be expected, which shall be driven by growing food and energy prices. Moreover, in 2011 the level of prices may be slightly increased by the announced change in VAT rates.

The Council has 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 October projection – under the assumption of constant NBP interest rates – there is a 50-percent probability of inflation running in the range of 2.4-2.6% in 2010 (as compared to 2.3-2.9% in the June projection), 2.5-3.5% in 2011 (as compared to 2.1-3.3%) and 2.4-3.7% in 2012 (as compared to 2.2-3.7%). In turn, the October projection sees the annual GDP growth with a 50-percent probability in the range of 3.3-3.7% in 2010 (as compared to 2.5-3.9% in the June projection), 3.3-5.5% in 2011 (as compared to 3.3-5.9%) and 2.8-5.5% in 2012 (as compared to 2.2-5.0%).

In the Council's assessment, the currently limited inflationary and wage pressure in the Polish economy and – not accounted for in the baseline scenario of the October inflation and GDP projection – the possibility of growing capital inflows to the emerging economies, including to Poland, amidst the extended period of expansionary monetary policy of major central banks, combined with the risk of further weakening of the global economic growth justify keeping the NBP interest rates unchanged.

At the same time, the Council will continue to analyse the signs of possible rise in inflationary pressure.

The Council decided to increase the required reserve rate by 0.5 percentage points from 3.0% to 3.5%. This decision applies to the required reserve to be maintained from 31 December 2010. As a result of this decision the required reserve rate will return to the level effective before 30 June 2009.

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

In the opinion of the Council, introducing measures aimed at preventing fast growth in foreign currency lending to households is important for macroeconomic stability. Such measures can also contribute to increasing the effectiveness of monetary policy transmission mechanism.

The Council maintains its view that Poland should join the ERM II and the euro area at the earliest possible date, after meeting the necessary legal, economic and organisational conditions.

The Council has adopted the *Inflation Report – October 2010*, *the Balance of Payments of the Republic of Poland for 2010 Q2* and the *Opinion of the Monetary Policy Council on the Draft Budget Act for 2011*.

# Chapter 4.

# Projection of inflation and GDP

The inflation and GDP projection was prepared at the Economic Institute of the National Bank of Poland. The content-related supervision over the work connected with the projection was entrusted to a member of the NBP's Management Board, Mr. Zbigniew Hockuba. The works on the projection were coordinated by the Bureau of Macroeconomic Forecasts of the Economic Institute. The projection was prepared with the use of the macroeconomic model NECMOD.[37] 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

The recent data indicate weakening of upward trends in the world economy, in particular in the developed countries. Despite better than expected data on GDP growth in the euro area, in 2010 Q2, the rate of growth in this economy is expected to weaken in subsequent quarters. Less optimistic news come from the US economy, where the GDP growth rate slowed in 2010 Q2, while the latest data on low employment growth in the private sector, stagnation in the real property market and dampening indicators of economic climate, point to the possibility of a persisting low growth rate in the upcoming quarters. In the light of available information, the scenario adopted in the current projection assumes that in 2011, as a result of wearing off the positive effects of loose fiscal policy, the GDP growth rate in the United States and the euro area will decrease. Due to the large uncertainty about the sustainability of current economic activity and amid the lack of inflationary pressure, the beginning of interest rate increases by the euro-area and US central banks, as expected by the financial markets, shifted to the second half of 2011. Rising demand for food in developing countries, lower global cereal harvests, connected with worse agro-meteorological conditions and increasing involvement of speculative capital, were conducive to the growth in agricultural commodity prices observed since the beginning of 2010. In the projection horizon, those effects are expected to expire gradually and the index of agricultural commodity prices is expected to return to its levels from the turn of 2009/2010. The world prices of energy commodities are to remain on a moderate rising trend, which will be connected with the continuing – though slightly weaker than in the past few quarters – recovery in the world economy and the steadily rising demand for food, particularly in the developing countries of Asia.

[37] Current version of the model's documentation is available at the NBP website.

## Aggregate demand

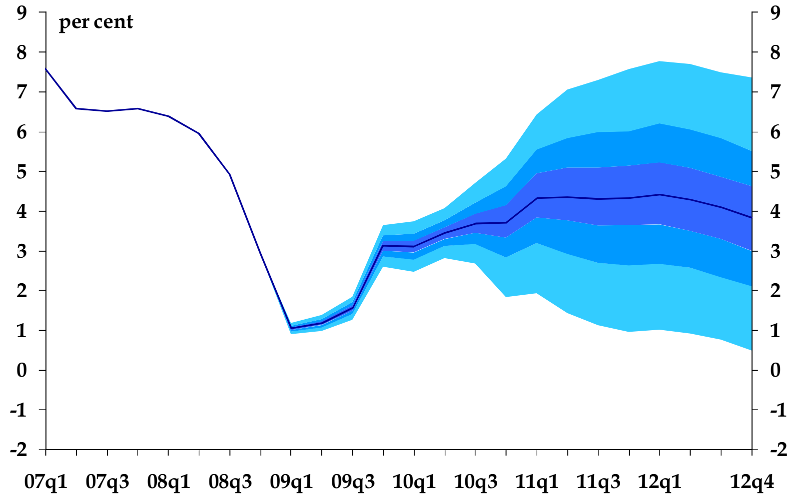
In the short and medium projection horizon (2010-2011) the economic growth will be mainly driven by a stable increase in individual consumption, fast growth in public investment supported by EU funds and the rebuilding of inventories by enterprises. In the long horizon, apart from private consumption, economic growth will also be sustained by relatively fast increase in private investment. In the years to come, net exports will have a slight negative contribution to GDP growth.

After the slowdown at the turn of 2009/2010 followed by the increase in 2010 Q2 and Q3, the growth rate of individual consumption in the projection horizon will remain at a relatively stable level, slightly above 3% y/y. This is due to forecasted gradual improvement in the labour market situation, and consequently, faster growth of wage fund. On the other hand, consumption is suppressed by rising VAT and excise tax rates (which limit the income from operating surplus) and falling net transfers to households which shrink as the economic climate in Poland improves. Taking into account the increase in inflation, in 2011-2012, the growth rate of real disposable income of household will remain lower than the GDP growth rate.

In 2011-2012, with the average growth rate of gross fixed capital formation close to 8%, the rate of investment will once again exceed the level of 21%. In the short projection horizon, the total investment growth will be affected by the growth rate of public gross fixed capital formation supported by the influx of EU structural funds, among others, in connection to the implementation of projects related to the preparations for the European Football Championship EURO 2012. In 2012, the positive contribution of public investment will be gradually wearing off, while the growth in gross fixed capital formation will be sustained by the rising investment demand on the part of private enterprises. The growth rate of corporate investment is growing from the beginning of projection horizon, which can be linked to: improving economic climate in Poland and abroad, growing production capacity utilisation and decreasing real cost of capital (resulting from gradual inflation growth and the assumption of a fixed NBP reference rate made in the projection) – particularly in relation to growing labour costs. The steadily improving – in the projection horizon – economic situation of households, supported by the gradual easing of banks' credit policies in terms of mortgage loans observed over the past few quarters, will translate into a rebuilding of housing investments, which will start to grow from the end of 2010 at the rate of over 5% y/y.

Alongside the rebuild in trade relations, following their significant reduction connected with the world financial crisis, a high increase in the volume of exports and imports was recorded in the first half of 2010. In 2011-2012 the growth of exports and imports will slow down, even though it will still outpace the rate of GDP growth. The continuation of domestic demand in the projection horizon, in combination with slightly weakening demand for Polish exports, will be conducive to maintaining the negative contribution of net exports to GDP growth. However, net exports contribution will be only slightly below zero, which will result from the relatively stable exchange rate and the structure of domestic growth, in particular low import intensity of public investment.

**Figure 4.1**
Central GDP projection and fan chart.




**Source:** NBP.

## Macroeconomic equilibrium

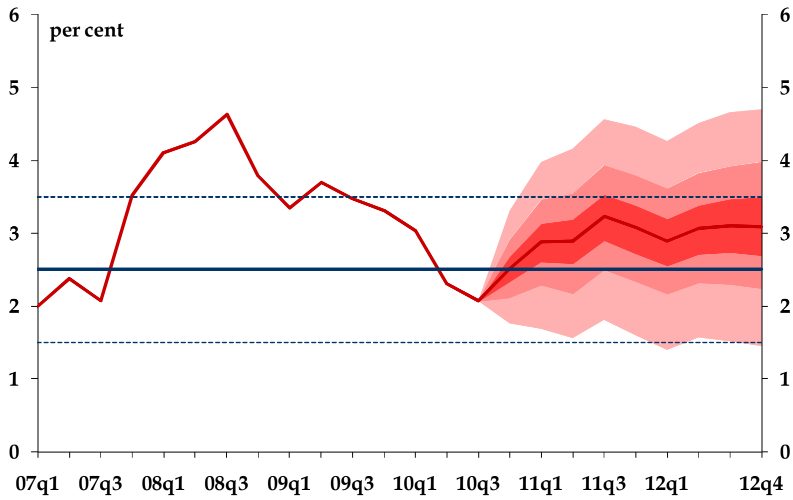
The growth rate of potential GDP, which was over 4% y/y in 2005-2009, slows down in the short projection horizon, stabilising at the level close to 3% y/y in 2011 and 2012. The growth rate of potential output is decelerated by a slower pace of private capital formation, due to the delayed effect of the reduced investment activity of private enterprises in 2009-2010 and also by the growing equilibrium unemployment rate (NAWRU). The rise in NAWRU can be attributed to the increase in production costs connected with growing prices of imported input goods. Additionally, NAWRU growth is driven by the relative increase in consumer prices in relation to producer prices, which stands behind reduction in the level of real wages. This results, among others, from the relatively high growth in food prices, as well as VAT and excise tax increases.

As the demand gap widens, the situation in the labour market steadily improves with employment and real wages increasing throughout the projection horizon. Due to the relatively limited decline in employment during the economic downturn at the turn of 2008 and 2009, the projection does not envisage any significant reduction in the unemployment rate – it will fall by approx. 1 percentage point till the end of 2012. Moreover, in the short projection horizon the number of the economically active will increase due to the effect of return migration and favourable changes in the demographic structure of population, particularly the growing number of people aged 25-44, characterised by a high participation rate. The decline in the actual unemployment level amid concurrent growth of NAWRU will widen the gap on unemployment, translating into a gradual acceleration in real wages, which will outpace productivity growth at the end of the projection horizon.

In the projection horizon, the exchange rate appreciation will be driven by systematic strengthening of the equilibrium exchange rate, among others, due to the positive balance of transfers associated with the inflow of EU funds and a faster growth of potential output in Poland than in the euro area. In turn, the appreciation tendency of the zloty exchange rate may be weakened by large uncertainty persisting in world financial markets and a high fiscal risk premium level (the projection only accounts for fiscal policy changes that follow from acts adopted by the Parliament or contained in the draft of the Budget Act) and decreasing interest rate disparity (stemming from the assumption of fixed NBP reference rate amid concurrent interest rate hikes abroad). Considering both, the factors strengthening the zloty exchange rate and quantifying the risk factors that can hamper the appreciation of the Polish currency, it was assumed that the exchange rate in 2011-2012 will remain at a relatively stable level.

Trade and income balance deficit deepening in subsequent quarters will be, to a large extent, financed from the inflow of EU funds. As a consequence, the external imbalance measured by the level of current and capital account deficit will range between -1% and -2% of the GDP, over the projection horizon.

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




**Source:** NBP.

## Inflation

At the starting point of the projection (2010 Q3), core inflation is further lowered to the level of 1.2% y/y, due to delayed effect of declining import prices and unit labour costs and a still low demand pressure. Since early 2011 until the end of the projection horizon, a steady increase in core inflation can be expected, up to a level above 2% y/y from 2012 Q2. In the short projection horizon, this increase will be primarily driven by the increasing growth rate of import prices (in year-on-year terms) and an increase of the basic VAT rate in January 2011. In the longer horizon, the growth rate of import prices will decelerate and core inflation will rise due to the gradually building wage pressure resulting form the economic recovery and the accompanying improvement in the labour market.

In the short projection horizon, a strong growth of agricultural commodity prices in the world markets, combined with an unfavourable supply situation in the domestic market, will translate into an accelerated inflation of food prices. In the longer projection horizon, the food price inflation will fall again due to disappearance of supply disturbances in commodity markets, however, this decline will be hindered by rising domestic demand and production costs resulting from the economic recovery.

Energy price inflation will remain at a level close to 5% y/y throughout the projection horizon. The high growth rate of energy prices will be supported by growing energy commodity prices (by 7.3% y/y, on average, throughout the projection horizon). Therefore, regulated prices are expected to grow steadily, also due to the declared high investment needs of the energy sector, (i.e. a continuation of the price regulation policy which results in the expected increase in natural gas prices since April 2011, as well as electricity prices increase, since the beginning of 2011).

At the beginning of 2011, CPI inflation will remain above the inflation target – at the level of approx. 3% y/y. A relatively high energy prices inflation will contribute to the CPI inflation growth throughout the projection horizon. Additionally, in the short-term horizon, CPI inflation will be supported by the growing food price inflation. In the longer projection horizon, with the continuation of economic recovery supported by low real interest rates, a greater role in inflation growth will be played by demand factors and the growing cost pressure from the labour market. With the assumption of unchanged central bank reference rate, the probability of average annual inflation running in the range of 1.5%-3.5% decreases from 71% in 2011 to 64% in the final year of the projection.

**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 of the projection | within the range (1.5%-3.5%) |
| **2010q4** | 0.02 | 0.48 | 0.98 | 0.50 | 0.97 |
| **2011q1** | 0.03 | 0.30 | 0.81 | 0.49 | 0.79 |
| **2011q2** | 0.04 | 0.31 | 0.78 | 0.49 | 0.74 |
| **2011q3** | 0.02 | 0.20 | 0.63 | 0.50 | 0.61 |
| **2011q4** | 0.04 | 0.25 | 0.69 | 0.50 | 0.66 |
| **2012q1** | 0.06 | 0.32 | 0.76 | 0.51 | 0.70 |
| **2012q2** | 0.04 | 0.26 | 0.68 | 0.51 | 0.64 |
| **2012q3** | 0.05 | 0.27 | 0.66 | 0.50 | 0.61 |
| **2012q4** | 0.06 | 0.28 | 0.65 | 0.50 | 0.59 |

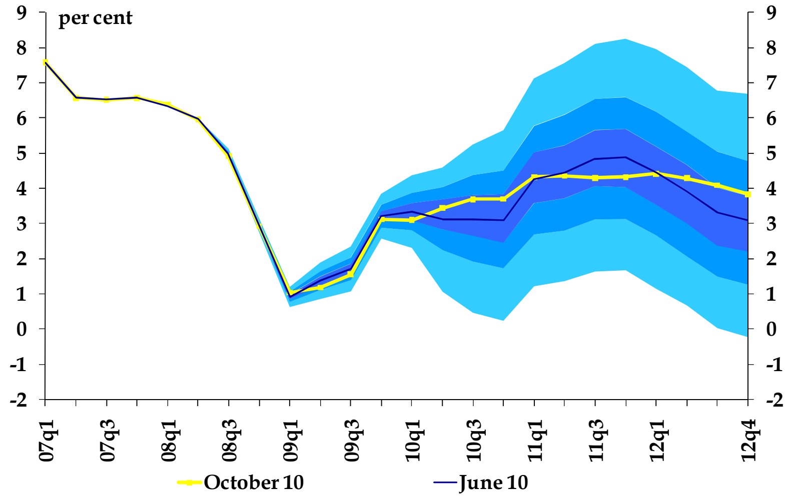
**Source:** NBP.

## October projection compared to June projection

At the starting point (2010 Q3) and in the short horizon of the current projection, GDP growth rate will be higher than projected in the previous forecasting round, accompanied by the higher growth of domestic demand and a lower contribution of net exports. In the second half of 2011, the GDP growth rate will stabilize at a level slightly above 4% y/y, which is below the value of the June projection, due to a base effect (i.e. higher GDP growth rate in the current year), an increase in tax rates (mainly VAT) as well as lower than forecasted in June GDP growth rates abroad, and a slower inflow of transfers from the EU budget. In the long projection horizon, growth decelerates, but the speed of decline is lower than in the June projection, which results from the improved labour market situation, which translates into higher consumer demand, and from postponing a part of investments co-financed with the EU funds, from 2011 to 2012.

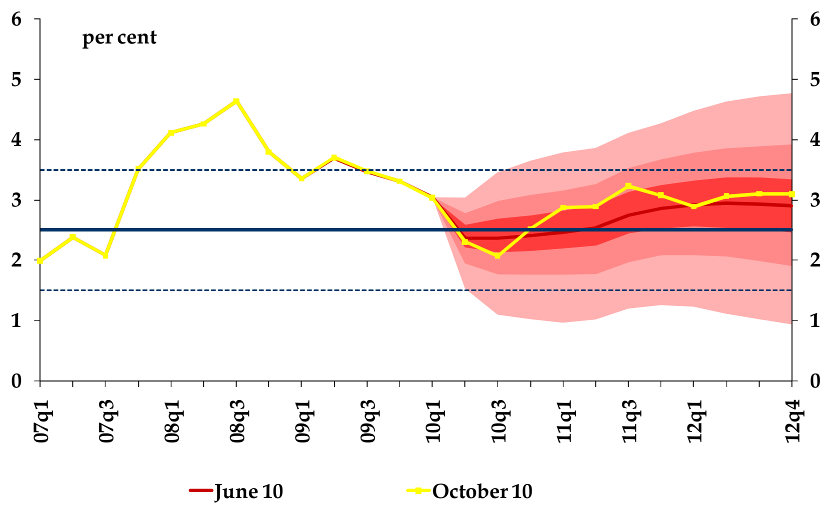
At the starting point of the projection, inflation stands at 2.1% y/y, i.e. 0.3 percentage points below the June projection, which is a consequence of a faster-than-expected drop in core inflation, accompanied by a higher increase in food prices and a similar growth rate of energy prices. However, since the fourth quarter of 2010, consumer prices are rising faster than in the June projection, what, in the short horizon, is due mainly to the higher food prices inflation caused by soaring agricultural commodities prices in the world markets, poor harvest in Poland as compared to last year, and rising production costs in agriculture. Energy prices throughout the whole projection horizon will stay above the values from the June projection, due to the faster increase in administered prices, in particular the price of electricity (and gas), which will result, among others, from including the costs of declared investment needs of the energy sector. In addition, changes of indirect taxes, in early 2011, will contribute to the increase in energy prices inflation and core inflation. In the long horizon, the effect of growth of tax rates and food prices gradually wears off but the consumer price inflation will remain slightly above the value from the June projection, due to higher unit labour costs, which result from a faster than expected in June improvement in the labour market.

**Figure 4.3**
October projection compared to June projection: GDP.




**Source:** NBP.

**Figure 4.4**
October projection compared to June projection: CPI.




**Source:** NBP.

## Main areas of uncertainty

### External environment

The external environment remains the most important source of uncertainty for the inflation projection. A high degree of uncertainty still applies to forecasts of economic growth in the developed countries. On the one hand, the response of those economies to the inevitable withdrawal of governments and central banks from the policy of strong fiscal and monetary stimulation remains difficult to predict. On the other hand, high uncertainty persists in the global financial markets (including foreign exchange markets) due to the recently growing concerns about the effects of increased indebtedness of the developed countries and future foreign exchange policy of the largest economies. Another source of uncertainty is the degree to which the growing demand from the world economy and supply factors will affect the prices of energy and agricultural commodities.

### Foreign exchange rate

Uncertainty connected with the zloty foreign exchange rate, signalled in the previous forecasting rounds, has persisted. On the one hand, high deficit of the public finance sector and the possibility of the public debt exceeding subsequent prudential thresholds poses a risk of zloty exchange rate depreciation, especially amidst persisting uncertainty in the global financial markets. On the other hand, a relatively high level of economic growth in Poland, as compared to the countries of the region and the euro-area countries, may – amidst persisting liquidity surplus in the global financial markets – intensify the inflow of foreign direct investments and portfolio investments and contribute to the appreciation of the zloty.

### Food and energy prices in Poland

Because of a significant impact of regulation on energy and food prices, similarly to the previous forecasting rounds, they remain an important source of risks for inflation. High uncertainty is also associated with the future EU environmental protection policy (including the implementation of standards on emissions of carbon dioxide), and regulatory activities in the food market. In addition, energy prices will be significantly affected by the tariff policy of the Energy Regulatory Office, given high investment needs of the energy sector in Poland.

### Fiscal policy

Fiscal policy remains a major risk factor for future inflation and GDP, especially in the long-term projection horizon. The response to the growing debt of the general government sector may include subsequent systemic changes, increasing the revenues and limiting the expenditure of that sector in 2012. As a result, the probability of GDP running below the central path is growing, while the impact of changes in fiscal policy on CPI inflation is subject to high uncertainty, since – depending on the adopted solutions – this may be a factor conducive to higher or lower consumer prices. An additional risk for GDP level in the projection horizon are public finance sector investments associated with the level of EU funds' utilisation by the public sector.

**Discussion of data released after 17 September 2010**

The data released at the turn of September and October (including the expectations for a subsequent tightening of the monetary policy by the FED), increase the probability of the effective zloty exchange rate running below the central path, which may decrease the inflation rate over the short-term projection horizon. The rise in the energy commodity price index, accompanying the depreciation of the US dollar driven by higher prices of crude oil and hard coal in the global markets, may have the opposite effect.

## Summary of risks to inflation and GDP Projection

It is estimated that over the projection horizon, risks for inflation are well-balanced, while in the case of GDP growth the risk factors indicate a possibility of this variable running below the central path. The main risk for inflation is associated with the path of the zloty exchange rate, both against the euro and the US dollar. The exchange rate also remains the crucial source of uncertainty for economic growth. Persistently significant risks are associated with the situation abroad. They are connected with the pace of the global economy’s recovery from the recession and the scale of the fiscal and monetary policy tightening in developed countries. The possibility of GDP running below the central path stems from the risk of lower than expected utilisation of EU funds and a possible fiscal policy tightening.

**Table 4.2**
Central path of inflation and GDP projection.

| | 2009 | 2010 | 2011 | 2012 |
|---|---|---|---|---|
| **Consumer Price Index (per cent y/y)** | 3.5 | 2.5 | 3.0 | 3.0 |
| **Food prices (per cent y/y)** | 4.1 | 2.5 | 4.0 | 3.3 |
| **Energy prices (per cent y/y)** | 5.5 | 5.9 | 5.1 | 5.2 |
| **Core inflation net of food and energy prices (per cent y/y)** | 2.7 | 1.6 | 2.1 | 2.3 |
| **GDP (per cent y/y)** | 1.7 | 3.5 | 4.3 | 4.2 |
| **Domestic demand (per cent y/y)** | -1.0 | 3.5 | 4.5 | 4.4 |
| **Individual consumption (per cent y/y)** | 2.1 | 2.9 | 3.4 | 3.2 |
| **Collective consumption (per cent y/y)** | 1.8 | 2.5 | 2.0 | 2.9 |
| **Gross fixed capital formation (per cent y/y)** | -1.1 | -1.6 | 8.2 | 8.5 |
| **Contribution of net exports (percentage points y/y)** | 2.9 | -0.1 | -0.3 | -0.3 |
| **Exports (per cent y/y)** | -7.9 | 12.3 | 8.6 | 9.2 |
| **Imports (per cent y/y)** | -13.6 | 12.2 | 9.0 | 9.6 |
| **Gross wages (per cent y/y)** | 5.2 | 4.1 | 5.4 | 6.6 |
| **Total employment (per cent y/y)** | 0.4 | 0.6 | 1.0 | 0.6 |
| **Unemployment rate (per cent)** | 8.3 | 9.6 | 9.4 | 8.9 |
| **NAWRU (per cent)** | 10.6 | 10.8 | 11.3 | 11.9 |
| **Labour force participation rate (per cent)** | 55.0 | 55.7 | 56.0 | 55.9 |
| **Labour productivity (per cent y/y)** | 1.3 | 2.8 | 3.4 | 3.6 |
| **Unit labour costs (per cent y/y)** | 3.7 | 1.0 | 1.9 | 2.9 |
| **Potential output (per cent y/y)** | 4.3 | 3.6 | 3.0 | 3.0 |
| **Output gap (percentage of potential GDP)** | -0.8 | -0.9 | 0.4 | 1.6 |
| **Index of agricultural commodity prices (USD; 2008=1.00)** | 0.84 | 0.95 | 0.91 | 0.89 |
| **Index of energy commodity prices (USD; 2008=1.00)** | 0.54 | 0.70 | 0.74 | 0.79 |
| **Foreign price level (per cent y/y)** | 1.4 | 0.6 | 1.4 | 2.0 |
| **Foreign GDP (per cent y/y)** | -4.0 | 1.6 | 1.5 | 1.9 |
| **Current account and capital account balance (percentage of GDP)** | 0.0 | -1.4 | -2.0 | -1.2 |
| **3M WIBOR (per cent)** | 4.32 | 3.83 | 3.73 | 3.73 |

**Source:** NBP.

LFS data is the data source for total employment, labour force participation rate and unemployment rate. 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 May - August 2010

- **Date:** 18 May 2010

**Subject matter of motion or resolution:**

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

**Voting of the MPC members:**

| | | |
|---|---|---|
| For: | P. Wiesiołek<br>E. Chojna-Duch<br>Z. Gilowska<br>A. Glapiński<br>J. Hausner<br>A. Kaźmierczak | Against: |

- **Date:** 18 May 2010

**Subject matter of motion or resolution:**

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

**Voting of the MPC members:**

| | | |
|---|---|---|
| For: | P. Wiesiołek<br>E. Chojna-Duch<br>Z. Gilowska<br>A. Glapiński<br>J. Hausner<br>A. Kaźmierczak | Against: |

- **Date:** 24 May 2010

  **Subject matter of motion or resolution:**

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

  **Voting of the MPC members:**

  | For: | | Against: | |
  |---|---|---|---|
  | | P. Wiesiołek | | J. Hausner |
  | | E. Chojna-Duch | | A. Rzońca |
  | | Z. Gilowska | | J. Winiecki |
  | | A. Glapiński | | A. Zielińska-Głębocka |
  | | A. Kaźmierczak | | |

- **Date:** 30 June 2010

  **Subject matter of motion or resolution:**

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

  **MPC decision:**

  Motion did not pass.

  **Voting of the MPC members:**

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

- **Date:** 30 June 2010

  **Subject matter of motion or resolution:**

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

  **MPC decision:**

  Motion did not pass.

**Voting of the MPC members:**

For: A. Bratkowski
J. Hausner
A. Rzońca

Against: M. Belka
E. Chojna-Duch
Z. Gilowska
A. Glapiński
A. Kaźmierczak
J. Winiecki
A. Zielińska-Głębocka

- **Date:** 30 June 2010

**Subject matter of motion or resolution:**

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

**MPC decision:**

Motion did not pass.

**Voting of the MPC members:**

For: A. Bratkowski
E. Chojna-Duch
J. Hausner
A. Rzońca

Against: M. Belka
Z. Gilowska
A. Glapiński
A. Kaźmierczak
J. Winiecki
A. Zielińska-Głębocka

- **Date:** 30 June 2010

**Subject matter of motion or resolution:**

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

**MPC decision:**

Motion was passed

**Voting of the MPC members:**

For: M. Belka
A. Bratkowski
Z. Gilowska
A. Glapiński
J. Winiecki
A. Zielińska-Głębocka

Against: E. Chojna-Duch
J. Hausner
A. Kaźmierczak
A. Rzońca

- **Date:** 23 August 2010

  **Subject matter of motion or resolution:**

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

  **Voting of the MPC members:**

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

- **Date:** 24 August 2010

  **Subject matter of motion or resolution:**

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

  **MPC decision:**

  Motion did not pass.

  **Voting of the MPC members:**

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

- **Date:** 24 August 2010

  **Subject matter of motion or resolution:**

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

  **MPC decision:**

  Motion did not pass.

  **Voting of the MPC members:**

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