Inflation Report
March 2012

National Bank of Poland
Monetary Policy Council

Warsaw, March 2012

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. In terms of the contents, works on the projection were supervised by Andrzej Sławiński, General Director of the Economic Institute. The projection was prepared with the use of the NECMOD macroeconomic model. 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. In turn, the periodisation of the analysis (breakdown into sub-periods) is conditioned by the development of particular variables. The cut-off date for the data in this *Report* was 23 February 2012.

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

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SUMMARY

In the second half of 2011, global economic growth remained weak, albeit business conditions varied considerably across countries. In the United States GDP growth in quarterly terms accelerated, in the euro area it remained close to zero, while in the largest developing economies economic growth in annual terms - though it stayed positive - eased down. In the second half of 2011, fiscal problems experienced by the euro area countries contributed to persistent uncertainty concerning future trends in the global economy and negatively affected the sentiment of economic agents. In some developed economies high unemployment, persistently tight property market and the continuing adjustments in the balance sheets of financial and non-financial sectors continue to drag on growth.

Since the publication of the previous *Report* a gradual decline in commodity prices and a weaker economic activity across the world favoured lowering inflation both in advanced and developing economies, though in most countries it persisted at elevated levels. In the developed and largest developing economies increasing headline inflation was mitigated by slower growth in energy prices. At the same time, in the Central and Eastern European countries with a floating exchange rate regime, a rise in inflation was driven by depreciation of their currencies.

Recently the turmoil in the global financial markets has persisted. Yet, in January and February 2012, it has been slightly mitigated owing to more favourable than previously expected situation in the US economy, lower uncertainty about economic outlook in the euro area and the positive market response to the measures announced by major central banks at the turn of 2011 and 2012. Stock markets indices in the United States, Europe and South America continued to increase which was supported by stabilization of market expectations regarding these economies, while indices in the Asian stock exchanges posted a decline due to downward revision of market expectations about developments in these countries. Yields on US and German bonds remained low. At the same time, volatility in the foreign exchange markets declined somewhat. In the euro area countries most severely affected by the sovereign debt crisis, the market participants still raised concerns about the debt sustainability of these economies and about the condition of the European banking sector. As a result, the yields and CDS spreads on Treasury bonds of those countries remained high.

Since the publication of the previous *Report* major central banks have further loosened their monetary policies. The Fed, the Bank of England and The Swiss National Bank have kept their interest rates at historically low levels, while in January 2012, the Fed also extended the period of holding interest rates unchanged by the end of 2014, from mid-2013 previously and, in February 2012, the Bank of England increased the scope of the asset purchase programme. The European Central Bank (ECB), in turn, decreased interest rates twice at the end of 2011. Furthermore, the ECB conducted additional long-term operations providing liquidity to financial institutions in the euro area and increased the range of assets accepted as collateral. Many central banks of emerging economies and small developed economies have also eased their monetary policy. Yet, some central banks of emerging economies have continued monetary policy tightening. Some central banks of emerging economies have further

intervened in the foreign exchange markets. Yet, the appreciation of their currencies in early 2012 made them withdraw gradually from the market.

Following a decline to 3.9% from June to September 2011, the annual consumer price growth in Poland increased again, reaching 4.6% in December 2011. According to preliminary GUS data, in January 2012 the annual CPI inflation decreased to 4.1%. Though, in the analysed period, it remained markedly above the NBP inflation target of 2.5%. Accelerated inflation in 2011 Q4 was driven by increases in all main price categories - the weakest in prices of services, whose growth was relatively stable. In the analysed period, a rise in inflation was mainly related to a considerable depreciation of the zloty in the second half of 2011. The weakening of the zloty led to higher prices of energy (including, in particular, the prices of fuels) and food. Accelerating inflation in 2011 Q4 was also fuelled by a rise in administered and regulated prices. In turn, a decrease in inflation in January 2012 was mainly driven by the waining impact of VAT increases in the previous year as well as the fall in the prices of medicines. The impact of demand on CPI inflation in 2011 Q4 was limited. This is indicative of a markedly weaker growth in consumer demand in this period caused by deteriorating situation in the labour market as compared to the previous quarter (decline in wage growth, rising unemployment), and weakening growth in household lending.

Increasing CPI inflation in the period October - December 2011 was accompanied by a rise in all core inflation measures (core inflation net of food and energy prices increased from 2.8% in October to 3.1% in December 2011). The rise in core inflation was also the effect of administered and regulated price increases as well as the zloty depreciation. According to preliminary NBP estimates, in January 2012 core inflation net of food and energy prices decreased to about 2.6%, which was mainly the result of a decline in the prices of medicines and, to a lesser degree, waining effect of VAT increases in the previous year. Producer prices in industry increased in the second half of 2011 which was mainly the effect of zloty depreciation and a related rise in crude oil prices expressed in PLN. In 2011 Q3 the annual growth of import prices in PLN terms continued to run at a high level, albeit slightly lower than in the previous quarter and in 2011 Q4 it increased. In July 2011-February 2012, 12-month inflation forecasts by financial sector analysts were revised downward staying in the inflation fluctuation band 1.5%-3.5% and substantially exceeding actual inflation rate. At the same time inflation expectations of individuals and enterprises increased in October 2011-February 2012 exceeding both upper limit of the band and actual inflation.

In the second half of 2011, relatively buoyant GDP growth was sustained. GDP rose by 4.2% y/y in 2011 Q3 and by 4.3% y/y 2011 Q4, as against 4.3% y/y in 2011 Q2. In comparison to the previous quarters, domestic demand growth slowed down in the second half of 2011. Growth in domestic demand was supported by stronger rise in investment and dampened by both slower than in the previous quarters growth in consumption and negative contribution from changes in inventories in 2011 Q4. There was a slight gain in the momentum of exports and some slowdown in imports.

2011 saw a deficit of the public finance sector diminished substantially. This improvement was supported by a range of measures aimed at curbing the deficit, listed in the *2011 Budget Act,* a relatively high growth in nominal GDP and a reduction of social security contribution transferred to Open Pension Funds (OFE) as enacted in March 2011.

In 2011 Q3, the financial situation of enterprises remained sound, in spite of a decline in the financial result against its 2011 Q2 value. Profitability and liquidity ratios remained relatively strong, with large enterprises and exporters enjoying particularly comfortable liquidity position.

In the second half of 2011, employment growth in the economy remained slow, while employment growth in the enterprise sector decelerated. The increase in the number of the economically active persons was accompanied by a rise in the unemployment rate. The incoming data indicate that nominal-terms growth in both wages and unit labour costs have remained moderate in the recent period. At the same time, real wage growth has been low amidst elevated inflation.

Since the publication of the previous *Report* the Monetary Policy Council has left the NBP interest rates unchanged with the reference rate at 4.50%. Yield curve has flattened, with yields increasing somewhat at the short end of the curve. This reflects the disappearance of market expectations of NBP rate cuts in a six-month horizon. In turn, the yields on 10-year bonds have dropped due to some improvement in global market sentiment, additionally propped up by a positive market assessment of the planned fiscal tightening. At the same time, the CDS rates for Poland remain lower than the average in emerging market level. Yet, due to the persisting uncertainty in financial markets, they remain elevated compared to the period prior to the global financial crisis. In spite of some moderation, the risk aversion continues to be high, which brought about a slight reduction in the exposure of non-residents to the domestic debt market. It stays, however, at a relatively high level. Stock prices on the Warsaw Stock Exchange have increased in the wake of improvement in global sentiment. In the second half of 2011, asking and sale housing prices in the primary and secondary markets remained in a slightly decreasing trend.

Following the depreciation in November and at the beginning of December 2011, which was related to the persistence of uncertainty in global financial markets due to the sovereign debt crisis in the euro area, at the end of 2011 the zloty started to strengthen, along with other currencies in the region. This was related to the alleviated tensions in financial markets following the releases of better than expected data from developed countries and some abatement of uncertainty in the euro area. In November and December 2011, the NBP sold certain amounts of foreign currencies in exchange for the zloty, which contained volatility of the zloty.

Recently period corporate lending has continued to increase. At the same time, monthly increases in housing loans have subsided slightly. The majority of newly granted housing loans were PLN loans. Furthermore, the indebtedness of households resulting from consumer loans continued to decline. The growth of broad money accelerated again and was significantly higher than the nominal GDP growth. The more liquid components of M3 classified as the M1 aggregate continued to rise at a slower pace than the broad money.

In the second half of 2011, the current account deficit narrowed as compared with the second half of 2010 driven by narrowing deficit on goods as well as increasing surplus on services and on current transfers. The deficit on goods decreased due to stronger drop in the growth of imports, which might have been triggered, to some extent, by deteriorating price competitiveness of foreign goods related to zloty depreciation. At the same time, improved absorption of EU funds for investment projects was reflected in stronger inflow of funds to the capital account. The capital inflows in 2011 Q3 partly offset and in 2011 Q4 more than offset the combined current and capital account deficit. However, there was a decrease in net capital inflows as compared to the second half of 2010, In 2011 Q3 most indicators measuring Poland's external imbalance improved. In particular, this refers to Poland's foreign debt which decreased as well as Poland’s net international investment position which improved significantly mostly driven by exchange differences and valuation errors.

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 November and December 2011 as well as January and February 2012 together with the *Information from the meeting of the Monetary Policy Council* in March 2012 are presented in Chapter 3. Minutes from the MPC meeting held in March will be published on 22 March 2012 and so will be included in the next *Report*. MPC voting records in the period October 2011-January 2012 can be found in Chapter 5. Moreover, Chapters 1 and 2 of this *Report* include three boxes: "Competitiveness of the euro area member states and its determinants", “Quantitative easing of major central banks” and “Inflation expectations according to the NBP Survey of Professional Forecasters”.

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 March projection based on data available up to 24 January 2012 (cut-off date for the projection) – under the assumption of constant NBP interest rates – there is a 50-percent probability of inflation running in the range of 3.6-4.5% in 2012 (compared to 2.5-3.9% in the November projection), 2.2-3.6% in 2013 (as against 2.2-3.7%) and 1.2-3.0% in 2014. In turn, with a 50-percent probability the March projection sees the annual GDP growth in the range of 2.2-3.8% in 2012 (compared to 2.0-4.1% in the November projection), 1.1-3.5% in 2013 (as against 1.5-4.0%) and 1.9-4.4% in 2014. Information incoming after 24 January 2012, including in particular lower than expected inflation in January and significant zloty appreciation, allow for the assessment that CPI inflation in 2012 and 2013 will be lower than indicated in the March projection of Economic Institute by respectively 0.3-0.4 and 0.2-0.3 percentage points.

Chapter 1

EXTERNAL ENVIRONMENT OF THE POLISH ECONOMY

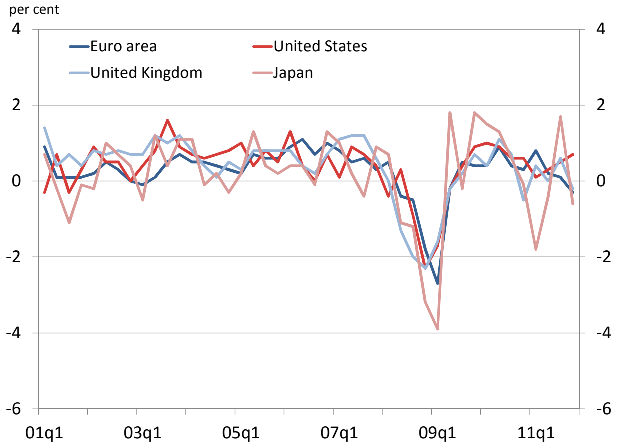
1.1. Global economic activity

In 2011 Q3, global economic growth remained weak. At the same time, business conditions varied considerably across countries. In the United States and Japan, GDP growth accelerated, while in the euro area it remained slightly above zero[1] (Figure 1.1). In the largest developing economies, economic growth eased down (Figure 1.6). Incoming data show global economic growth in 2011 Q4 continuing at a sluggish pace comparing to its long-term average. Stronger GDP rise in the United States was accompanied by stagnation in the euro area. In most major emerging economies business activity weakened.

In the second half of 2011 fiscal problems experienced by the euro area countries contributed to persistent uncertainty concerning future trends in the global economy and negatively affected the sentiment of economic agents (Figure 1.2), thus propping up tensions in the global financial markets. The impact of fiscal expansion, including a high level of public debt – along with the effects of monetary expansion – remained a crucial uncertainty factor for the

Figure 1.1

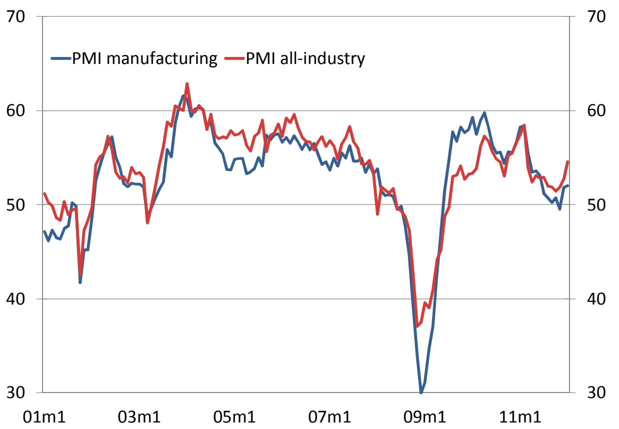
Economic growth in selected developed countries (q/q).



Source: Eurostat data.

Figure 1.2

Global economy PMI index.



Source: Markit data.

[1] The quarterly growth figures presented in this chapter are seasonally adjusted.

global economic outlook. In some developed economies high unemployment, persistently tight property market and the continuing process of balance sheet adjustment in in the financial and non-financial sectors continue to drag on growth.

According to the advance estimate, GDP growth in the USA in 2011 Q4 accelerated to 0.7% q/q (as against 0.5% q/q in 2011 Q3, Figure 1.1). This was largely the effect of a considerable increase in inventories coupled with a steeper than in the previous quarters contribution of private consumption (especially consumption of durable goods) amid a mildly positive contribution of investment. On the other hand, a decline in public consumption and shrinking net exports dragged on demand rate of growth.

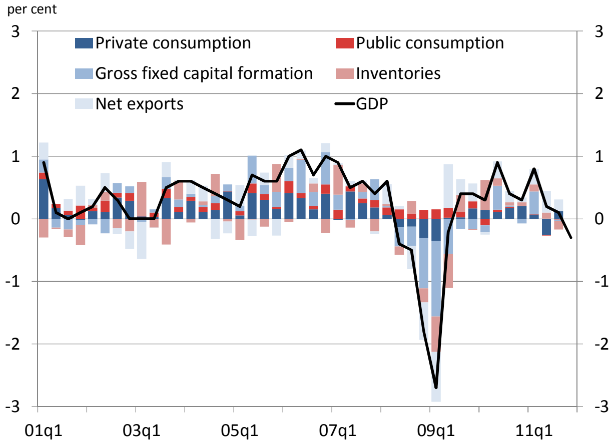
Data on labour market in the USA reveal a gradual increase in employment and a declining unemployment rate in recent months. In turn, in the enterprise sector, improved sentiment was accompanied by favourable industrial production data. At the same time, in spite of a steady improvement in consumer confidence indices, both in terms of current situation and future outlook, retail sales growth, after a significant increase at the turn of Q2 and Q3 of the previous year, slowed down in the subsequent months. Real property market remained depressed partly as a consequence of limited loan availability.

In the euro area, economic growth eased down to 0.1% q/q in 2011 Q3 (from 0.2% q/q in 2011 Q2). It was driven – although to a lesser extent than in 2011 Q2 – by increasing net exports. Private consumption also supported the euro area growth, however its rise was slow. Contribution of public consumption and investment was close to zero, while contribution of change in inventories – negative.

Data concerning 2011 Q4 indicate a further weakening in economic activity in the euro area.

Figure 1.3

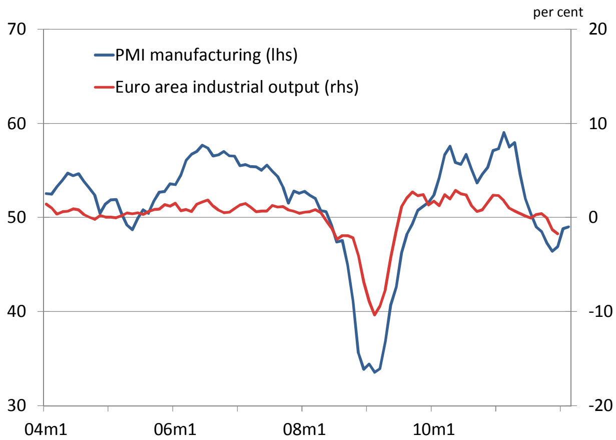
GDP growth in the euro area (q/q).



Source: Eurostat data.

Figure 1.4

Euro area industrial production growth* and PMI for manufacturing.

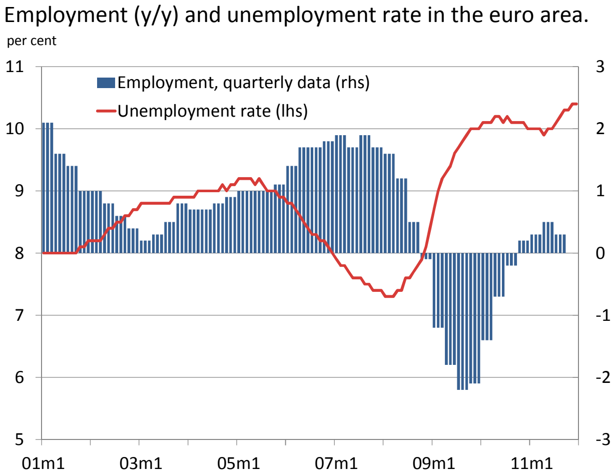


Source: Eurostat data, Markit

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

Figure 1.5

Employment (y/y) and unemployment rate in the euro area.



Source: Eurostat data.

According to flash estimate, GDP growth was in this period negative and amounted to -0.3% q/q. Fall in retail sales in 2011 Q4 points to weakening consumption, which was negatively influenced by the tightening labour market conditions (Figure 1.5). At the same time industrial production was decreasing (Figure 1.4). On the other hand, the rise in the PMI index, which had increased unexpectedly in January by 1.9, up to 48.8, could have been a positive signal for business activity in the euro area. However in February the rise in the PMI index slowed down.

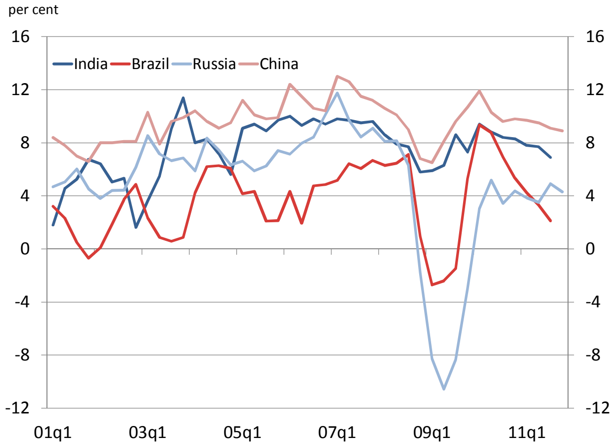
Business conditions in the second half of 2011 varied considerably across countries. In Germany (Poland's main trading partner), economic growth, which continued to be supported by external factors (i.e. a relatively high economic growth in Asia) as well as internal ones (favourable labour market conditions) accelerated to 0.6% q/q in 2011 Q3 (as against 0.3% q/q in 2011 Q2). However, the incoming data, including preliminary estimate of GDP in 2011 Q4 (-0.2 % q/q), indicate weaker conditions in Germany at the end of 2011. Also in France GDP growth in the second half of 2011 was relatively high (in 3Q and 4Q 2011 it amounted to 0.3% q/q and 0.2% kw/kw, respectively). Yet, in many countries of the euro area, especially those which have been most severely affected by the sovereign debt crisis, in the second half of 2011 economic activity was decreasing.

Stalling economic growth in the euro area results, above all, from the sovereign debt problems faced by some euro area countries, which lead to high uncertainty and lack of credit demand on the part of households. A structural factor hindering return to higher growth rate and improvement in fiscal conditions of some euro area countries is low competitiveness of their economies (see Box 1 *Competitiveness of the euro area member states and its determinants*).

In the United Kingdom, GDP growth in 2011 Q3 accelerated to 0.6% q/q as against 0.1% q/q in

Figure 1.6

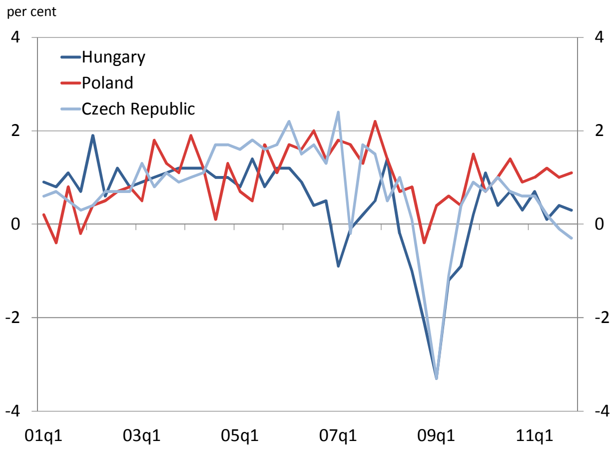
Economic growth in China, India, Brazil and Russia (y/y).



Source: Reuters, OECD.

Figure 1.7

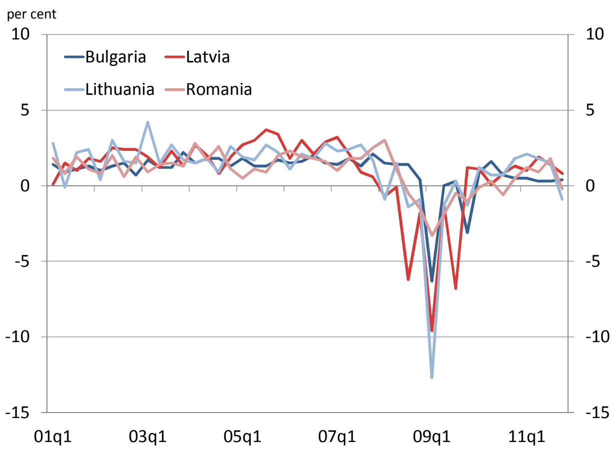
GDP growth in the Czech Republic, Hungary and Poland (q/q).



Source: Eurostat data.

Figure 1.8

GDP growth in Bulgaria, Lithuania, Latvia and Romania (q/q).



Source: Eurostat data.

2011 Q2 (Figure 1.1), partially due to the waning one-off factors which curbed growth in 2011 Q2. According to preliminary data, 2011 Q4 growth was negative, which was mainly driven by a decrease in industrial output.

Incoming data point to a further slowdown of economic growth in major emerging economies (Figure 1.6), although the scale of the slowdown continues to vary. In most cases, weaker economic activity largely resulted from the prior tightening of macroeconomic policy. In China, GDP growth decreased to 8.9% y/y (in 2011 Q4; as against 9.1% y/y in 2011 Q3) and in India to 6.9% y/y (in 2011 Q3; as against 7.7% y/y in Q2 2011).

In new EU member states outside the euro area, GDP growth continued at a moderate pace in 2011 Q3, but in 2011 Q4 in some of these countries it decreased considerably (Figure 1.7 and 1.8). In Hungary, economic growth in the second half of 2011 continued to be positive, while in the Czech Republic it was negative, which was probably related to lower domestic demand.

Box 1. Competitiveness of the euro area member states and its determinants

Since the euro area was created, its share in the global trade fell from 32.5% in 1999 to 26.4% in 2010. This was driven mainly by changes in price competitiveness of the countries participating in the world trade as well as in its geographical and sectoral structure, together with concurrent significant rise in commodities prices (leading to higher shares of commodity exporting countries in the world trade). As a consequence, the share of developing countries in world exports and imports rose steadily while the significance of the developed economies in this respect declined. It is worth noting that the decline in the euro area share in the world trade was less pronounced than that of other developed countries. In addition, this occurred in spite of a significant real appreciation of the euro which continued until the end of 2009.[2] This means that the euro area economy proved relatively flexible in adjusting to global changes, by, among others, increasing its trade relations with developing countries.

[2] Between 1999 and 2009, appreciation of the euro amounted to 11% in real terms (real effective exchange rate against 41 trading partners deflated with CPI). According to the estimates of the European Commission the 10% appreciation of the real effective exchange rate translated into extra-euro area exports shrinking by approx. 5-6% (EC 2010). At the same time, the actual decline in the euro area share in global exports was smaller than that indicated by falling price competitiveness of this economy. This means that certain non-price factors improved the international competitiveness of the euro area.

Subsequently, i.e. in 2010, the euro experienced a strong depreciation, bringing the real effective exchange rate back to its 1999 levels (data on international trade presented in this box refer to the period up to 2010; thus, changes in the exchange rate also refer to this period).

At the same time, the differences among the euro area countries in their potential to compete in the international market were and continue to be significant. This is reflected in changing shares of individual euro area countries in the total world exports (Figure R.1.1). Although those shares have declined for the vast majority of the euro area economies since 1999, the scale of the decrease has varied across countries. Throughout the period following 1999, Germany has been the euro area leader in international trade, generating almost 8% of world exports (including intra-euro area deliveries; data for 2010), though its share in the world trade also somewhat decreased. With regard to significance in the global trade the German economy is well ahead of the following euro area economies, i.e. the Netherlands (approx. 4% share in the total world exports), France (approx. 3.5%), Italy (approx. 3%) and Belgium (approx. 2.5%), which may be related to high degree of production internationalization in the German economy. The share of other euro area countries in total exports does not exceed 2%. It should be added that among the above mentioned countries, France saw the deepest drop in its share in world exports (by 2.3 percentage points between 1999 and 2010).

The main factors responsible for differences in international competitiveness of individual euro area countries are briefly described below.

Price competitiveness

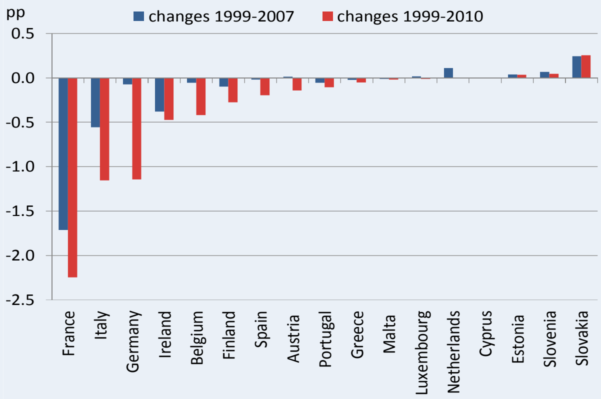
An important factor behind differences among the euro area countries is their price competitiveness. The scale of changes in price competitiveness and its impact on the volume of exports of a given economy depends not only on relative price developments, but also on the share of respective markets (in particular, extra-euro area markets) in the economy's exports and their product structure.

When comparing changes in relative export prices it can be noticed that both – in the pre-crisis period – and throughout the entire period under review, the highest rise in price competitiveness was recorded in the Finnish, German and French economies (Figure R.1.2). At the same time, relative export prices increased the sharpest in Slovakia and Estonia, and, amongst the so-called old member states, in Italy and Greece[3].

When analysing the factors affecting the developments in price competitiveness of respective countries, special attention should be paid to unit labour costs (ULC). Their pre-crisis trends indicate that throughout the euro area real wages rose at a slower pace than labour productivity. However, unit labour costs did not fall equally sharply in all the countries; especially, not in all the countries their decline matched the decline recorded in Germany. Thus, the loss of price competitiveness resulted from deterioration in relative labour costs vis-a-vis the German economy rather than from rising labour costs in the domestic markets.

Figure R.1.1

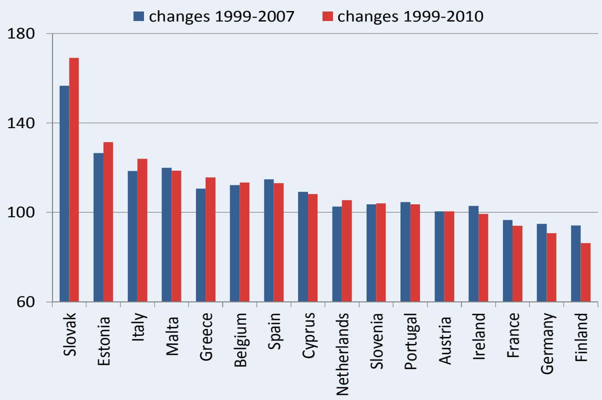
Changes in shares in world exports (including intra-euro area exports).



Source: Ameco data

Figure R.1.2

Changes in relative export prices (1999=100, versus 36 trading partners).



Source: European Commission data (2011).

[3] The so-called old euro area member states include: Belgium, Germany, Ireland, Greece, Spain, France, Italy, Luxembourg, the Netherlands, Finland, Portugal and Austria. The remaining countries, i.e. Estonia, Cyprus, Malta, Slovenia, Slovakia, are the so-called new euro area member states.

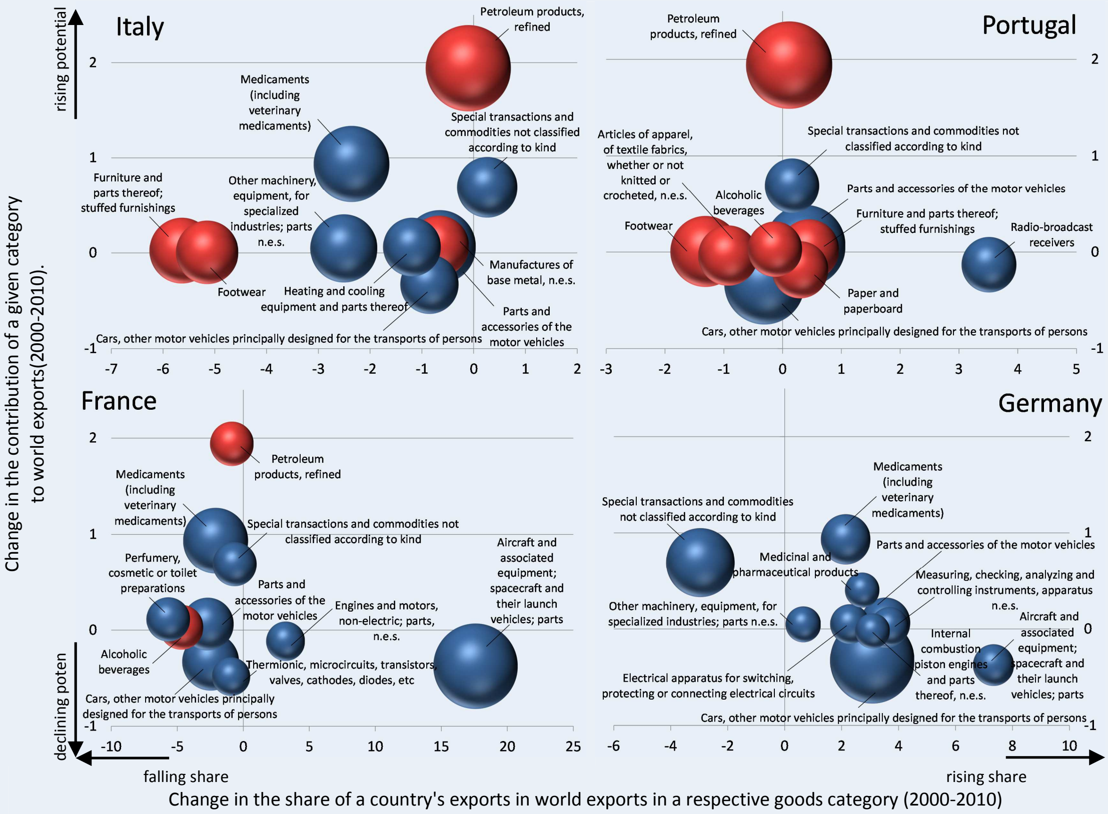
Yet, price factors were not the only determinants of changes in exports. The countries which recorded the sharpest decline in their share in world exports in 1999-2010 included France, Ireland and Finland, that is countries experiencing a slump in relative export prices. At the same time, in all the euro area countries which increased their share in world exports in the analysed period (Slovakia, Slovenia, Estonia, Cyprus), relative export prices rose, sometimes even considerably (Estonia, Slovakia).

Structural factors and globalisation

Apart from price factors, the volume of euro area exports is affected by their geographical and sectoral structure. When analysing the sectoral specialisation of the euro area as measured with the Balassa index, it can be noticed that the region specialises mainly in medium- and high-technology products (cf. Di Mauro, Forster and Lima, 2010). Also in this respect, however, there are marked differences across the euro area countries (Figure R.1.3). In some of euro area member states (Portugal, Italy and Greece), low-tech industrial products are of relatively high significance in their structure of exports. With low-cost competitors, such as China or India, entering the world markets euro area economies whose export structure was similar to the one observed in the above mentioned emerging economies, started to lose their share in the world trade.

Figure R.1.3

Exports of selected euro area countries by 10 major SITC-3 product groups (ranked according to the value of exports in 2010).



Source: Comtrade data.

The size of the bubble denotes the share of a given product group in the country's exports. A red bubble means products classified as low- or low-medium-technology products according to the OECD classification.

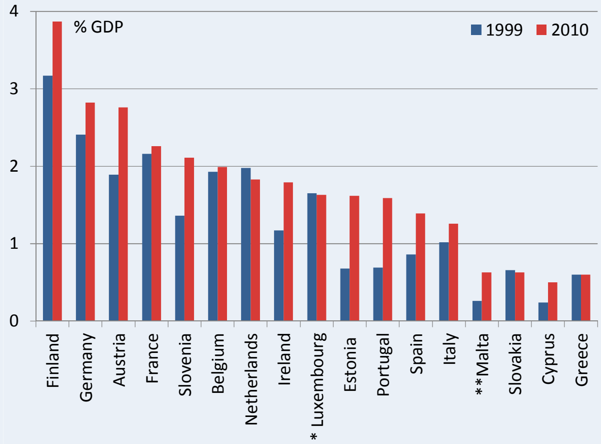
In turn, the example of France shows that apart from price competitiveness and export structure, the economy's international competitiveness is also strongly affected by institutional factors indicated below.

Institutional factors

The loss of international competitiveness experienced by France, and also by some other euro area economies (Portugal, Spain, Greece) results largely from limited flexibility and adaptability to global changes observed in these economies. On the one hand, low share of outlays on research and development and low percentage of implemented patents, and – on the other hand – limited availability and poor quality of workforce coupled with labour market rigidities, are factors dampening productivity in particular in some of the mentioned countries (Figure R.1.4, Figure R.1.5). Also, the findings of the rankings showing the degree of rigidity in the product markets (in particular, their excessive regulation and difficulties in conducting business) point to a less effective institutional business environment – primarily in the Southern euro area countries (Greece, Italy, Portugal, Spain).

Figure R.1.4

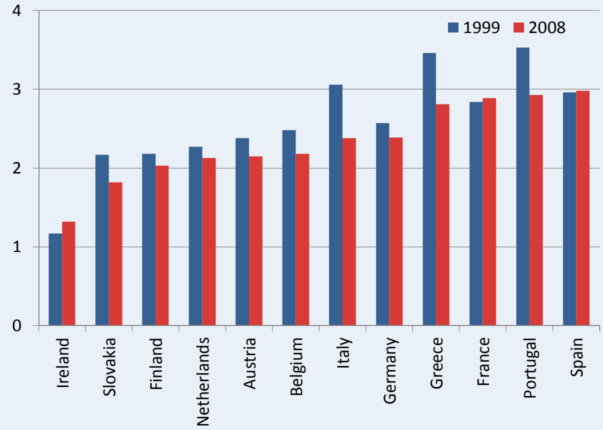
R&D expenditures.



Source: Eurostat data.
*2000 data (no data available for 1999).
**2002 data (no data available for 1999).

Figure R.1.5

Employment Protection Legislation Index.



Source: Eurostat data.
Data for the remaining euro area countries are unavailable.

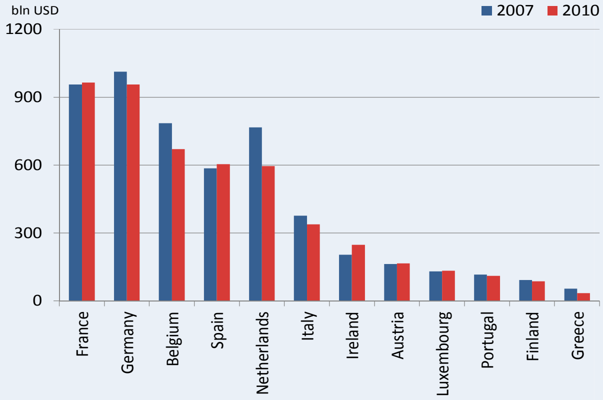
Diversified structure of FDI flows

Competitiveness of the respective euro area member states can be also measured with the foreign direct investment (FDI) flows. FDI constitute the most growth-enhancing form of capital inflow, primarily due to its positive impact on productivity of production factors and on export capacity of the economy (Harding and Javorcik 2011). Countries generating trade surpluses (Austria, Finland, Germany, Netherlands) attracted more FDI, with the capital being predominantly invested in more productive industries, than in the case of countries recording trade deficits (France, Greece, Italy, Portugal, Spain). Moreover, the latter attracted more investment in the service sector, including real estate and financial intermediation. Among deficit-generating countries Greece and Italy are examples of countries where regulatory factors and a relatively lower quality of production factors constitute the largest barriers to capital inflow (Figure R.1.6).

The economy's competitiveness can be also measured with its capacity to export capital in the form of FDI, benefiting from competitive advantage of entities engaged in offshore investment (Figure R.1.7). Among the euro area countries, Germany and France display the highest propensity to export capital in the form of FDI. The advantage of the German internationalization model over the French one lies however in the fact that German entities outsource only part of their production process, which enables them to achieve higher margins and exercise stricter control over production[4].

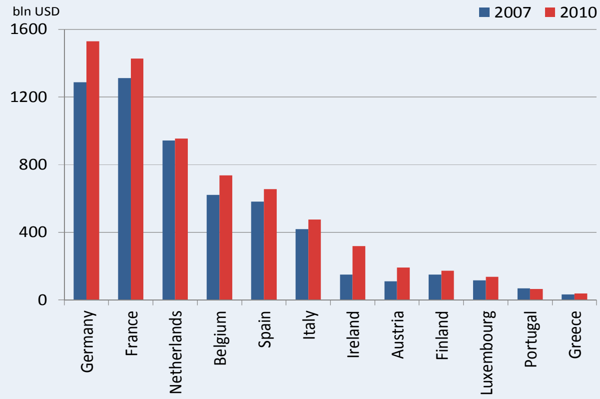
[4] In the case of Germany, production fragmentation and locating it in CEE countries was one of the factors leading to a reduction in labour costs (Danninger and Joutz 2007).

Figure R.1.6
FDI inflows to the largest FDI recipients in euro area (stocks).



Source: OECD data.

Figure R.1.7
FDI outflows from the largest FDI exporters in euro area (stocks).



Source: OECD data.

To sum up, loss of competitiveness experienced primarily by the Southern euro area member states resulted from several factors – some of global character (related to the emergence of low-cost competitors in the international markets) and some of domestic nature (on the one hand leading to deteriorating price competitiveness and, on the other hand, curbing productivity growth through technological and structural weaknesses). Thus, improvement in international competitiveness of these countries requires various measures, many of which constitute long-term challenges. It is also worth noting that the loss of competitiveness is often highlighted as one of factors increasing vulnerability of euro area economies to the crisis (particularly, in the case of economies with a significant external debt) and, at the same time, impeding restoring economic growth in the affected countries.

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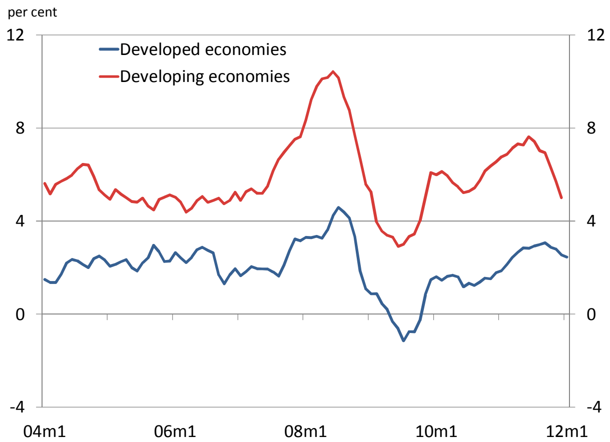
1.2. Inflation developments abroad

Since the publication of the previous *Report* a gradual decline in commodity prices (see Chapter 1.4 *Global commodity markets*) and a weaker economic activity across the world supported a lowering in inflation both in advanced and developing economies (Figure 1.9). However, despite some decline, inflation in most countries persisted at heightened levels comparing to long-term averages.

In recent months, the decreasing headline inflation in the United States – largely a result of slower energy price growth – was accompanied by a further rise in core inflation (Figure 1.10). At the same time, euro area inflation which remained elevated since September, in

Figure 1.9
Inflation in major developed and developing economies* (y/y).



Source: IMF,OECD, Ecowin data, NBP calculations.
*Weighted average inflation in the developed economies and key emerging ones (accounting for 80% of the GDP in this group of countries in 2010). Country groups in accordance with the IMF division. Weights adopted for the respective countries are based on their GDPs.

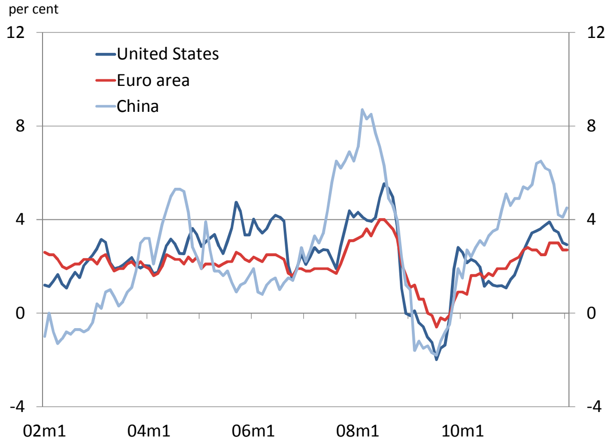
December dropped to 2.7% (also to a large extend due to slower energy price growth) and in January 2011 – according to flash estimate – stayed unchanged. In both economies, inflation expectations remained stable.

Inflation in emerging countries, in spite of a decrease (a significant drop was observed especially in China), continued to run at an elevated level, which was driven by the relatively high share of food and energy (whose prices rose significantly in 2011) in the consumer baskets, coupled with stronger than in advanced countries pass-through of food prices to non-food prices.

In 2011 Q4, inflation in the Central and East European countries declined, although its trends varied across economies (Figure 1.11). In most countries with a floating exchange rate regime (i.e. Poland, the Czech Republic and Hungary), inflation rose, which could be attributed to depreciation of their currencies. In contrast, most countries with a fixed exchange rate regime saw inflation decrease. In both country groups, rising energy prices put an upward pressure on inflation, although all countries of the region also recorded an increase in core inflation in 2011 Q4. In January 2012 inflation in some countries of the region considerably increased, which was driven by the rise in VAT rates (in the Czech Republic and Hungary) as well as in aministered prices (in Estonia).

Figure 1.10

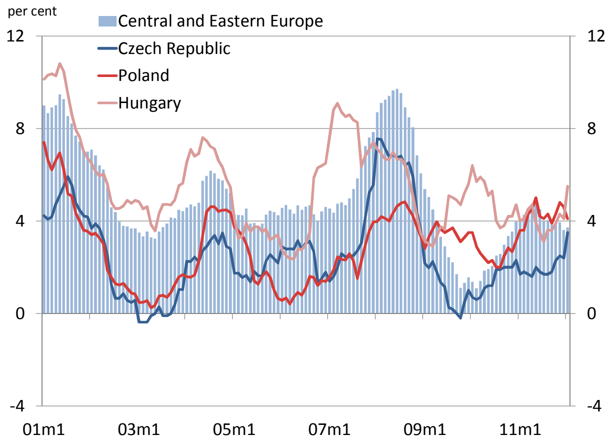
CPI inflation in major economies (y/y).



Source: OECD, Eurostat, IMF data

Figure 1.11

CPI inflation in the Central and Eastern Europe region* and its major economies (y/y).



Source: Statistical offices' data.

*The average of inflation indices in Bulgaria, the Czech Republic, Estonia, Latvia, Lithuania, Poland, Romania, Slovakia and Hungary.

1.3. International financial markets and monetary policy abroad

Since the publication of the previous *Report,* the turmoil in the global financial markets has persisted. Yet, in January and February 2012, it has been slightly mitigated owing to more favourable than previously expected situation in the US economy, lower uncertainty about economic developments in the euro area and the positive market response to the measures announced by major central banks as at the turn of 2011 and 2012.

Since the publication of the previous *Report,* market expectations about developments in Asian economies have been revised downwards, while expectations regarding the developments in the euro area, the United States and South America have gradually stabilized. This was reflected in diverging equity price trends between the European, North American and most South American stock markets whose indices increased and the Asian stock exchanges, where indices posted a decline (Figure 1.12).

Due to slowdown in economic growth and difficulties in implementing fiscal consolidation programmes in the euro area countries most severely hit by the sovereign debt crisis, the market participants still raised concerns about the debt sustainability of these economies and about the condition of the European banking sector. As a result, the yields and CDS spreads on Treasury bonds of those countries, despite some decline, remained high (Figure 1.13). In order to stabilize the European capital markets, the European Central Bank extended the scope of refinancing operations.

Amidst persisting uncertainty in the financial markets, yields on assets considered safe by investors (American and German bonds) remained low (Figure 1.14). At the same time, volatility in the foreign exchange markets declined somewhat. The appreciation of the US dollar against the euro came to a halt in mid-January 2012 (Figure 1.15). Stabilization in the foreign exchange market might have been driven by coordinated action of mayor central banks involving a reduction in the cost of US dollar swaps by 50 basis points.

Since the publication of the previous *Report,* major central banks have further loosened their

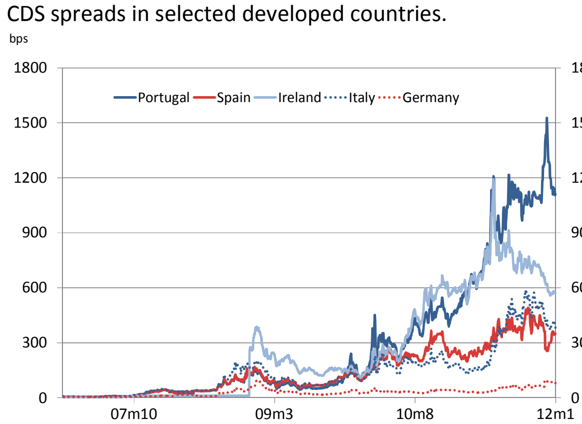
Figure 1.12

Stock market indexes in Germany (DAX 30), Japan (Nikkei 225) and the United States (S&P 500), January 2004 = 100.

Source: Reuters data, NBP calculations.

Figure 1.13

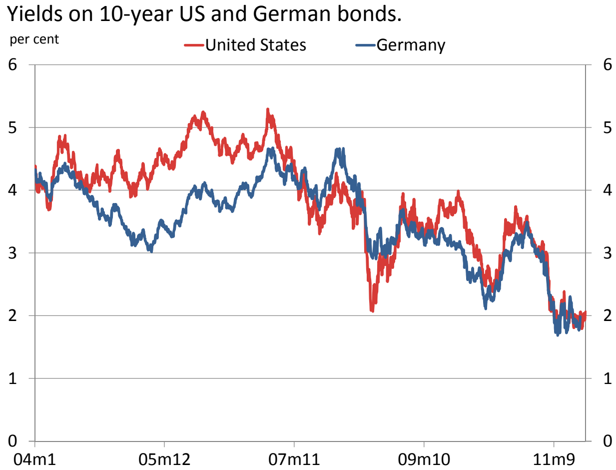
CDS spreads in selected developed countries.



Source: Bloomberg data, NBP calculations.

Figure 1.14

Yields on 10-year US and German bonds.



Source: Bloomberg data.

monetary policies (Figure 1.15; see Box 2 *Quantitative easing of major central banks*).

The Fed kept the short-term interest rates close to zero (0.00-0.25%) and in January 2012 extended the period of keeping interest rates unchanged by the end of 2014, from mid-2013 previously. Moreover, the Fed continued to extend the maturity of its holdings of Treasury securities, keeping the size of the previously announced asset purchase programs unchanged.

Since the publication of the previous *Report*, the Bank of England has left the short-term interest rates unchanged at 0.50%. Yet, in February 2012 the Bank increased the scope of the asset purchase programme by GBP 50 billion to a total of GBP 325 billion.

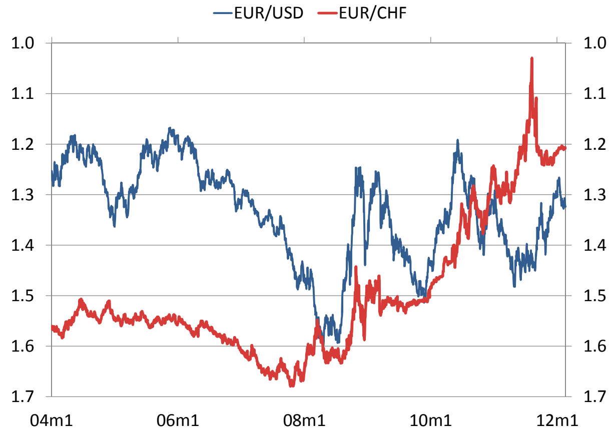
The Swiss National Bank (SNB) kept the target range for the three-month LIBOR at the 0.00-0.25%. Moreover, the SNB maintained its willingness to conduct unlimited foreign exchange interventions, should the Swiss franc appreciate to less than 1.20 to the euro, which contained the appreciation of the Swiss franc.

At the end of 2011, the European Central Bank (ECB) decreased interest rates twice, by a total of 0.5 percentage points, which brought the reference rate to 1.00%. In February 2012, the ECB signalled the possible end of the loosening cycle. The Bank also conducted additional long-term operations providing liquidity to financial institutions in the euro area (see Box 2 *Quantitative easing of major central banks*) and increased the scope of assets accepted as collateral under its covered bond purchase programme. Besides, the ECB proceeded with the purchase of government bonds of the countries most severely affected by the sovereign debt crisis, albeit in December 2011 and January 2012 at an increasingly slower pace.

Since the publication of the previous *Report,* many central banks of emerging economies and

Figure 1.15

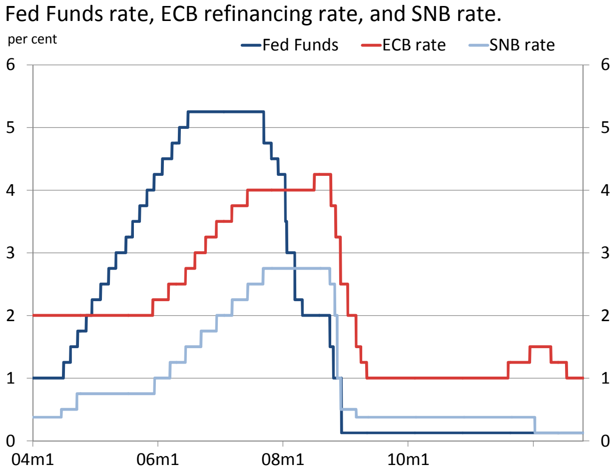
The EUR/USD and EUR/CHF exchange rate (increase denotes appreciation of the base currency).



Source: Bloomberg data.

Figure 1.16

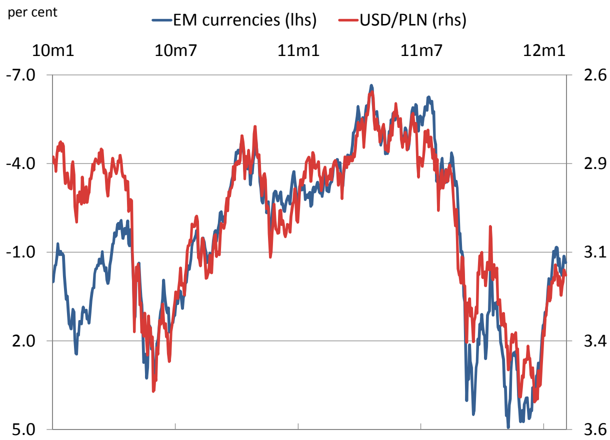
Fed Funds rate, ECB refinancing rate, and SNB rate.



Source: Central banks' data.

Figure 1.17

Aggregated change in the emerging economies (EM) exchange rate index vis-a-vis the USD/PLN rate (increase denotes appreciation of the base currency).



Source: NBP calculations based on Bloomberg data.

The EM currency index comprises the currencies of the following countries: Argentina, Brazil, Chile, Colombia, Mexico, Peru, Korea, Thailand, Indonesia, the Philippines, South Africa, Russia, Israel and Turkey.

small developed economies have eased their monetary policy. Yet, some central banks of emerging economies have continued monetary policy tightening. Some central banks of emerging economies have further intervened in the foreign exchange markets. Yet, the appreciation of their currencies in early 2012 made them withdraw gradually from the market (Figure 1.17).

Box 2. Quantitative easing of major central banks

Major central banks have recently kept their short-term interest rates close to zero bound. In their opinion, however, economic developments in their countries justified using expansionary monetary policy stance. Faced with a lack or limited possibility of further short-term interest rate cuts, central banks have undertaken measures to directly increase liquidity in the banking sector. For this purpose they have engaged in outright purchases and repurchase agreements, extended the maturity of refinancing operations or expanded the eligible collateral. The above measures have been undertaken primarily by major central banks, i.e. the Federal Reserve Bank (Fed), the Bank of England (BoE) and the European Central Bank (ECB)[5]. It has to be noted, however, that despite significant similarities, the actions of the major central banks differ in declared aims and institutional forms. Nonetheless, the QE policy has led to a significant surge in both monetary base and balance sheets of the central banks involved (Figure R.2.1).

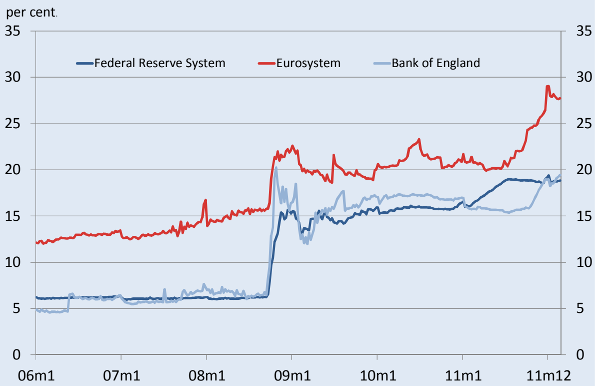
In the USA, shortly after the collapse of Lehman Brothers, i.e. at the end of 2008, the Fed initiated additional liquidity-providing operations and embarked on outright purchases of assets. These measures were intended to reduce interest rates, mainly on mortgage loans, by means of increasing liquidity in the US financial sector. While most Fed liquidity schemes have already expired or been closed, the quantitative easing scheme involving outright purchase of assets (Large-Scale Asset Purchase, LSAP) has been expanded considerably. In the first round of the scheme implementation (LSAP1), the Fed purchased mortgage-backed securities (MBS), and since August 2010, as the second round of the scheme (LSAP2) commenced, it has been purchasing mainly long-term US Treasury bonds (Figure R.2.2). The Fed has purchased government bonds with the total value of USD 900 billion. Moreover, it has purchased USD 175 billion worth of private assets. In September 2011, the Fed also embarked on the extension of the average maturity of its asset holdings, by selling shorter-term maturity bonds and buying longer-term maturity bonds (the so-called 'Operation Twist'). Relaunching central bank swap lines at the end of 2011 was another instrument to inject US dollar liquidity into the global economy (as they enabled central banks to obtain dollars for their own domestic currency). As a result of all those actions, the Fed's balance sheet have increased to USD 2.9 trillion from USD 0.9 trillion in late 2006 and now accounts for 18.8% of the US GDP (Figure R.2.1).

The Bank of England set up additional permanent liquidity supply schemes for the financial sector as early as at the end of 2008, and in March 2009 it announced the quantitative easing scheme (QE), which was extended in October 2011 and February 2012. Since the launch of the scheme, the Bank of England has been purchasing mainly Treasury bonds. As a result, the Bank of England's balance sheet has expanded to GBP 311 billion from GBP 85.6 billion in late 2006 and accounts for 19.4% of UK's GDP.

[5] Such measures have also been taken for a prolonged period by Bank of Japan.

Figure R.2.1

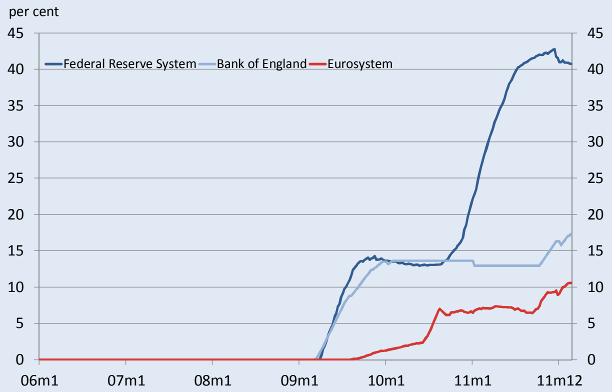
Central banks' assets in relation to GDP.



Source: Fed, ECB, BoE, Ecowin Economic, NBP calculations

Figure R.2.2

Treasury securities purchased since October 2008 in relation to central banks' assets.



Source: Fed, ECB, BoE, NBP calculations

Since August 2007, the ECB has been engaged in additional liquidity-providing operations, gradually expanding their maturity and extending the eligible collateral. Specifically, the ECB has extended the maturity of longer-term refinancing operations (LTRO) and introduced the covered bond purchase programme (CBPP), whose first edition ended in July 2010. Moreover, since May 2010, the ECB has been purchasing government bonds, issued mainly by peripheral countries under the Securities Markets Programme (SMP). Unlike the programmes of the Bank of England and the Fed, the ECB government bond purchase programme is designed "to address the severe tensions in certain market segments" (ECB 2010) rather than inject liquidity into the financial sector. For this reason, under the SMP programme the ECB conducts sterilization operations, i.e. operations absorbing the liquidity resulting from bond purchase.

In 2011 Q4, apart from decreasing interest rate, the ECB decided, as a part of further monetary easing, to supplement the liquidity schemes already in place, among other things, with a new round of the CBPP programme, annual and three-year-term LTRO[6] operations and further expanding the eligible collateral. Although refinancing operations are designed for financial institutions, their final outcome may be similar to that of the QE programmes, as the secured long-term financing makes financial institutions better positioned to purchase Treasury bonds. The ECB's balance sheet has increased to EUR 2.7 trillion from EUR 1.2 trillion in late 2006, which accounts for 27.7% of the euro area GDP.

Asset purchase by a central bank may impact the real economy through a number of channels. Purchase of debt securities increases their prices and hence reduces interest rates. Assuming that the QE programme is efficient, i.e. contributes to reducing longer-term interest rates, it may influence the behaviour of economic agents in a similar manner as the conventional monetary policy transmission mechanism does. Other transmission channels of asset purchase programmes include (Joyce et al. 2011, Krishnamurthy Vissing-Jorgensen 2011):

1) liquidity channel: asset sale to a central bank under the QE programme lead to increases in liquidity of the financial institutions. Yet, the extent of resulting recovery in lending activity, and consequently in consumer and investment decisions of economic agents, depends on the creditworthiness of potential borrowers and the capital position of a particular financial institution (see Box *Non-conventional measures in monetary policy of major central banks*, Inflation Report, June 2009, Joyce et al. 2011, Bridges et al. 2011);
2) portfolio channel, which involves portfolio rebalancing of financial institutions: decrease in supply of government bonds may lead to lower yields on other domestic assets, as financial institutions adjust their investment portfolios. This is accompanied by a fall in relative prices of foreign assets and increase in their relative rate of return, which may lead to capital outflows and domestic currency depreciation.

[6] First three-year LTRO from 21 December 2011 amounted to EUR 489.2 billion, while in case of the second three-year LTRO on 29 February 2012, commercial banks borrowed EUR 529 billion.

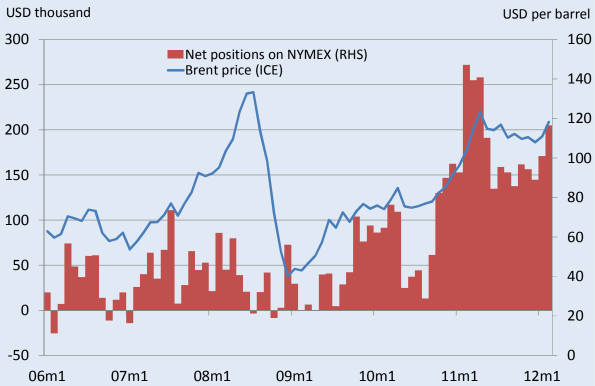
Yet, the scale of capital outflows depends upon substitutability of foreign assets for domestic ones;

3) confidence channel: introduction of QE may improve the sentiment of economic agents and mitigate the confidence crisis, thus leading to a fall in risk premium and asset price increase, and, finally, rise in aggregate consumption and investment;
4) expectation channel: introduction of QE enhances the credibility of cental bank declarations to keep interest rates at a low level for prolonged period, and thus contributes to lowering long-term interest rates.

Empirical research suggests that the announcement of Treasury bond purchases led to long-term interest rates declines by as much as 100 basis points in case of the yield on 10-year Treasury bonds under LSAP1 and of 200 basis points in case of the Greek 10-year Treasury bonds under the first round of the SMP programme. This corroborates the effectiveness of those programmes in the short-term. The findings of research on the medium-term impact of QE on interest rates are ambiguous. Some economists (Yellen 2011, Krishnamurthy, Vissing-Jorgenssen 2011) confirmed it was significant, whereas others suggest the opposite (Gagnon et al. 2011, Guidolin-Neely 2011, Swanson 2011). The impact of QE programmes on long-term interest rates might have been weakened by the concurrent surge in public debt in countries subjected to the QE programmes, which brought about an increase in bond issues by those countries, concentrated to greater extent than before on the long end of the yield curve. As the value of bond issues significantly exceeded the value of bond purchases by central banks, their market supply increased, thus exerting upward pressure on bond yields. Yet, as the US Treasury bonds are perceived as low risk assets, their yields remained low amidst elevated risk aversion.

Figure R.2.3

Prices and net positions in the crude oil market.



Source: Bloomberg, Ecowin Financial.

The implementation of the QE programmes in the United States was coupled with a rise in prices for assets, including shares, which – through wealth effect – might have contributed to accelerated growth in US private consumption at the end of 2010, despite wage stagnation. The research on the impact of QE on the real economy conducted by economists associated with central banks indicates that domestic output in the United States and Great Britain might be higher by 3% and 0.5-2%, respectively, as an effect of QE programmes (Chung et al. 2011, Joyce et al. 2011). The research also suggests that the QE programmes had a positive impact on inflation of 1 percentage point for the United States and of 0.71 – 1.5 percentage points for Great Britain, which is equivalent to effect of interest rate cut by 150-300 basis points.

The above mentioned findings should be interpreted with caution, as the research has been based on models calibrated before the crisis, which did not consider structural changes in the monetary policy transmission mechanism, which probably took place in these economies.

The implementation of the QE programmes may pose a risk not only for the economies where they are being implemented, but also for other economies. This relates especially to the QE programmes conducted by major central banks. At present, it is difficult to assess the scale and probability of those risks. Another externality associated with QE is a slowdown in both adjustment of economic agents' balance sheets and public debt reduction, as lowering long-term interest reduces incentives for debt reduction. Moreover, the improvement in sentiment of economic agents, low interest rates and high liquidity may exacerbate credit expansion, likely to boost inflation considerably. The higher the risk of inflation expectations "de-anchoring" as a result of QE, the higher the risk of elevated inflation. However, it should be emphasised that credit expansion is conditional, among other things, upon banks' capital position and the quality of their loan portfolios. Under current circumstances, financial institutions in countries conducting highely expansionary monetary policy show limited propensity to lend, which may have been reflected in strong deposit growth at major central banks accounts observed at the time QE programmes were implemented. Additional risk inherent in the QE programmes is that low interest rates may trigger search for higher yield and hence increase of investment in risky assets. This may be supportive of formation of bubbles in the asset or commodity markets. A potential externality of QE programmes is the risk of a considerable outflow of short-term capital from economies subject to QE to other economies.

Under LSAP1 and LSAP2 programmes the USA saw capital outflows intensifying. American investors prefered foreign assets, which offered a much higher yield than the US ones. This trend has been reflected in emerging markets experiencing a surge in capital inflows, elevated volatility of their currencies and considerable increase in long positions in crude oil market (Figure R.2.3). These developments could have added to rising inflationary pressure in emerging markets and growing prices of energy commodities, the latter being additionaly favoured by geopolitical uncertainty and increasing demand for commodities on the part of rapidly growing emerging economies.

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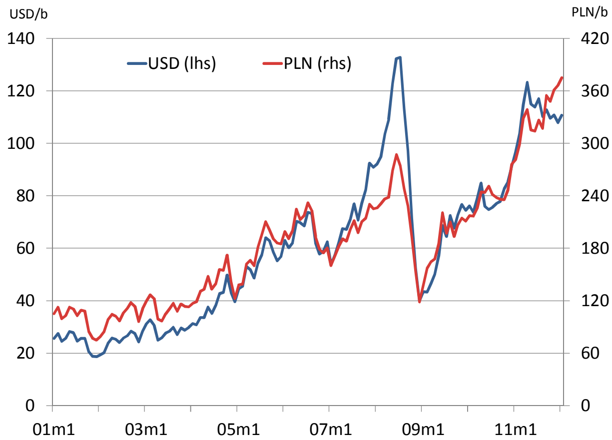
1.4. Global commodity markets

Since the publication of the previous *Report* oil prices in USD terms remained high (111 USD/b in January 2012) and in PLN terms they increased significantly (to 375 PLN/b in January 2012; from 348 PLN/b in October 2011; Figure 1.18). Recently, increased risk to future supplies of oil, following Iran's announcement of a possible blockade of the Strait of Hormuz, which constitutes the most important route for oil transport from the Persian Gulf, was a factor conducive to increased prices of this commodity. The global demand for oil – in spite of its limited growth in developing and its fall in developed

Figure 1.18

Brent crude oil prices in USD and PLN.



Source: Data of the US Department of Energy, NBP calculations.

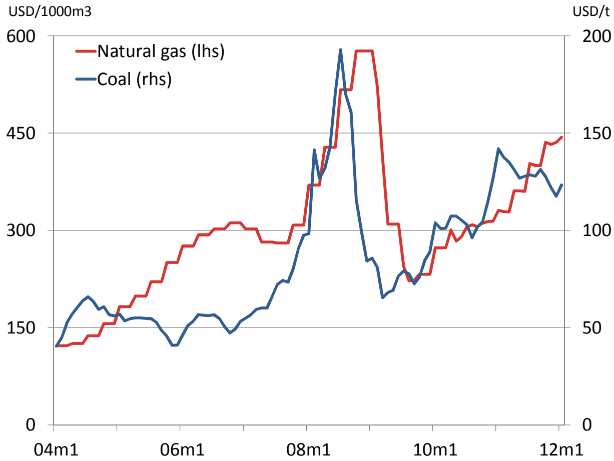
countries due to a slowdown in the global economy and high retail prices of fuels – remained high, which also supported persistently high prices of this commodity.

Following a strong increase in coal prices in January 2011, triggered by unfavourable supply factors related to floods in Australia, its prices in 2011 Q4 continued to fall. In January 2012 coal prices slightly increased (to 123 USD/t), however they remained at the level close to the one recorded in 2011 Q4 (on average 122 USD/t; Figure 1.19). Meanwhile, a reverse trend was observed in the case of gas prices, which continued to rise steadily (in 2011 Q4 their growth reached 8.4% q/q and in January 2012 1.8% m/m), as a result of the earlier increase in oil prices, which transmitted into the prices of gas with a lag.

Since the publication of the previous *Report* the global prices of the majority of agricultural commodities, particularly wheat, have decreased (Figure 1.20). The decline in agricultural commodity prices was the result of improving supply conditions with the onset of the new 2011/2012 agricultural season, and worsening outlook for the global economy. Rising food prices continued to be supported by high prices of energy and fertilizers and increasing production of biofuels. Despite a noticeable drop in the prices of agricultural commodities expressed in USD, due to the depreciation of the zloty, prices expressed in PLN significantly increased.

Figure 1.19

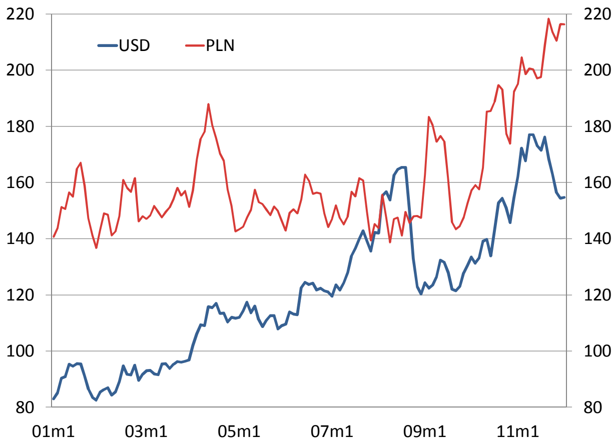
Gas and coal prices in the world markets.



Source: IMF data.

Figure 1.20

Index of agricultural commodity prices in the world markets in USD and PLN (1994 Q1=100).



Source: IMF data, NBP calculations.

The Index comprises: wheat, beef, pork, poultry, fish, sugar, bananas, oranges, colza oil and the beverages index.

Chapter 2

DOMESTIC ECONOMY

2.1. Inflation developments

2.1.1. Consumer prices

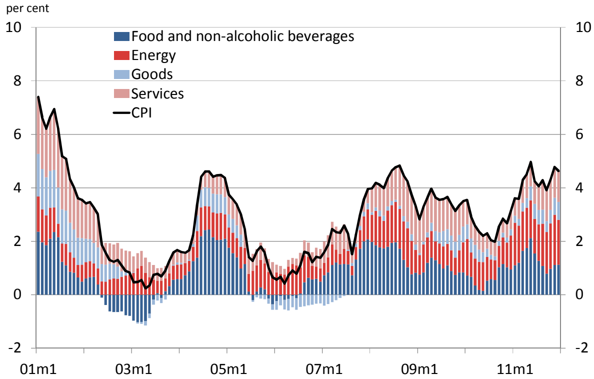
Following a decline to 3.9% from June to September 2011, the annual consumer price growth in Poland increased again, reaching 4.6% in December 2011. According to preliminary GUS data, in January 2012 the annual CPI inflation decreased to 4.1%[7]. Though, in the analysed period, it remained markedly above the NBP inflation target of 2.5% (Figure2.1, Table 1.1).

Accelerated inflation in 2011 Q4 was driven by increases in all main price categories, the weakest in prices of services, whose growth was relatively stable.

In the analysed period, a rise in inflation was mainly related to a considerable depreciation of the zloty. The weakening of the zloty led to higher prices of energy, including, in particular, the prices of fuels, and food[8] (despite a decline

Figure 2.1

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



Source: GUS data, NBP calculations.

Table 2.1

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

	2003	2004	2005	2006	2007	2008	2009	2010	2011
CPI (%)	0.8	3.5	2.1	1.0	2.5	4.2	3.5	2.6	4.3
Food and non-alcoholic beverages (pp)	-0.3	1.7	0.6	0.2	1.3	1.6	1.0	0.7	1.3
Energy (pp)	0.7	0.8	0.8	0.8	0.6	1.3	0.8	1.0	1.5
Goods (pp)	-0.1	0.5	0.1	-0.4	0.0	0.2	0.4	0.3	0.5
Services (pp)	0.5	0.5	0.6	0.4	0.7	1.2	1.2	0.6	1.0

Source: GUS data

Due to rounding off, contribution of changes in the prices of particular goods and services categories to the CPI may not sum up to the total consumer price growth.

[7] Data on inflation in January 2011 may be revised due to a change in the CPI basket weights, made at the beginning of each year. Because of the preliminary character of the data, GUS did not publish information on price developments in all components of the consumer basket. Consequently, a deeper analysis of price changes in particular groups will be presented in the next issue of *Report*.

[8] Accelerated growth in food prices was also driven by falling supply of some products, especially pork, in the Polish market and throughout the EU. On the other hand, the factor limiting the scale of growth in food prices in the analysed period was higher supply of cereals in the domestic market following new crops and the related decline in the annual growth in prices of bread and cereal products, observed since the beginning of September 2011, additionally enhanced by the impact of the negative base effect (resulting from a strong growth in cereal prices in the global markets observed a year ago). Also rising supply of fruit and vegetables in the domestic market, the result of abundant crops registered in 2011, had a similar effect.

in crude oil and agricultural commodity prices expressed in US dollars; Figure 1.18 and 1.20), as well as other imported goods. Moreover, the elevated annual inflation continued to be supported by VAT increases effective as of January 2011.

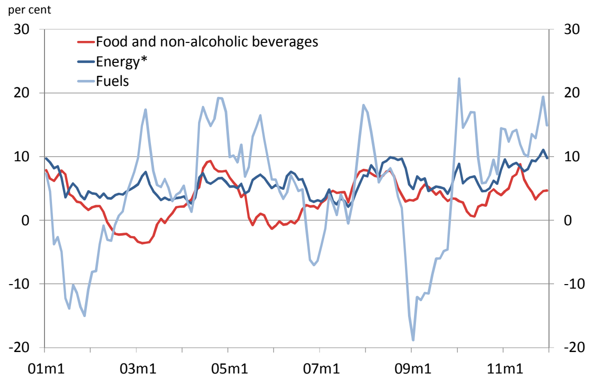
Inflation growth in 2011 Q4 was also fuelled by a rise in administered prices, including charges set by local governments (inter alia, for services connected with home maintenance and urban transport) as well as regulated prices, including a surge in the prices of medicines[9] (the effect of changes in the reimbursable drugs list). At the same time, as a result of increased rates for electricity, heating energy and natural gas for households, effective as of 2011, growth rate of energy prices remained at a stable, albeit relatively high level.

A decrease in inflation in January 2012 was mainly driven by the waining impact of VAT increases in the previous year as well as the fall in the prices of medicines (as a consequence of a new act on reimbursement of medicines[10], which entered into force as of 1 January 2012 and the subsequent changes introduced on the list of reimbursable medicines).

The impact of demand on CPI inflation in 2011 Q4 was limited. This is indicative of a markedly weaker growth in consumer demand in this period caused by deteriorating situation in the labour market as compared to the previous quarter (decline in wage growth, rising unemployment), and weakening growth in household lending.

Figure 2.2

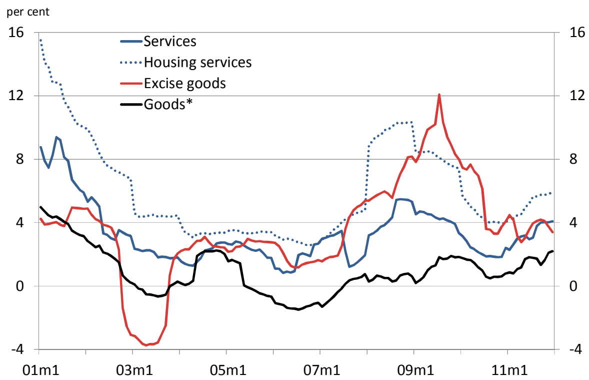
Changes in food and energy prices (y/y).



Source: GUS data, NBP calculations.
* The category of *energy* includes energy products (electricity, gas, heating, fuel) and engine fuels (for private means of transport).

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.

[9] Growth in the prices of medicines resulted from lower level of reimbursement of medicines included in the CPI, following the entry into force as of 16 November 2011 of the Ordinances of the Minister of Health (of 28 October 2011 and 4 November 2011) introducing changes to the list of reimbursed medicines.

[10] Act of 12 May 2011 on reimbursement of medicines, foodstuffs intended for particular nutritional use and medical products (Journal of Laws of 13 June 2011).

2.1.2. Core inflation

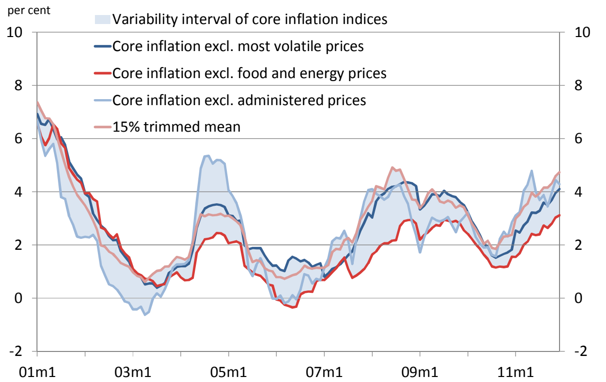
In October-December 2011, rising CPI inflation was accompanied by increases in all core inflation measures (Figure 2.4). Core inflation net of food and energy prices increased from 2.8% in October to 3.1% in December 2011.

The rise in core inflation was – similarly to the CPI – the effect of administered and regulated price increase[11] as well as the zloty depreciation. The analysed period saw increases in administered prices (including, primarily, prices of urban transport tickets and railway tickets) which resulted in higher prices of transport services. Moreover, the implementation of regulations concerning changes in the reimbursable drugs list (from 9.4% y/y in December 2011 as against 3.5% y/y in October 2011). On the other hand, depreciation of the zloty exchange rate led to higher growth in import prices, in particular, the prices of foods connected with home equipment and maintenance as well as goods included in the category of recreation, culture and hygiene.

According to preliminary NBP estimates, in January 2012 core inflation net of food and energy prices decreased to about 2.6%, which was mainly the result of a decline in the prices of medicines and, to a lesser degree, waining effect of VAT increases in the previous year[12].

Figure 2.4

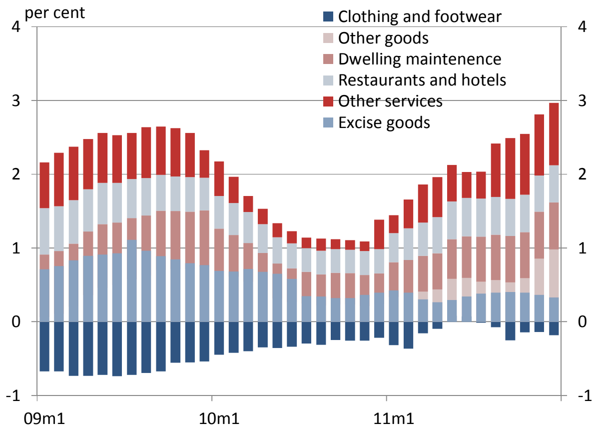
Core inflation measures (y/y).



Source: GUS data, NBP calculations.

Figure 2.5

Composition of core inflation (y/y).



Source: GUS data, NBP calculat

[11] Administered prices – as defined by the ECB – cover those components of consumer goods and services whose final prices are fully or largely influenced by the government (central, regional and local government) and the regulators. Administered prices included in the CPI in Poland cover, inter alia, home rental prices, prices of water supply and sewerage services, electricity, heating energy, passenger railway and mixed transport charges, postal services charges. Other non-market prices are regulated prices, inter alia reimbursable drugs prices, preschool tuition fees.

[12] Final data on core inflation net of food and energy prices in January together with the remaining core inflation indices will be released by NBP in March 2012, after the GUS publication of revised data on inflation and new CPI basket weights.

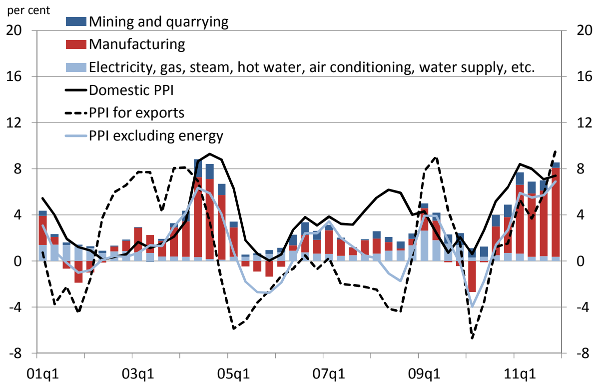
2.1.3. Producer prices in industry

Producer prices in industry (PPI) in 2011 Q4 increased by 8.6% y/y, as compared to the 7.0% y/y and 6.9% y/y rise recorded in 2011 Q2 and Q3, respectively[13]. Acceleration in the annul PPI growth was mainly fuelled by faster growth in manufacturing prices, amidst falling price growth in the remaining industry sections. Higher growth in manufacturing prices was mainly the effect of zloty depreciation and a related rise in crude oil prices expressed in PLN, despite a certain decline in those prices observed in the global markets in this period.

In 2011 Q4, PPI growth in the domestic market increased to 7.4% (from 7.1% y/y in the previous quarter), and in the export goods market increased to 9.6% y/y (from 5.9% y/y in the previous quarter; Figure 2.6).

Figure 2.6

Composition of annual growth of total PPI by sections of industry, domestic PPI, PPI for exports and PPI excluding energy.



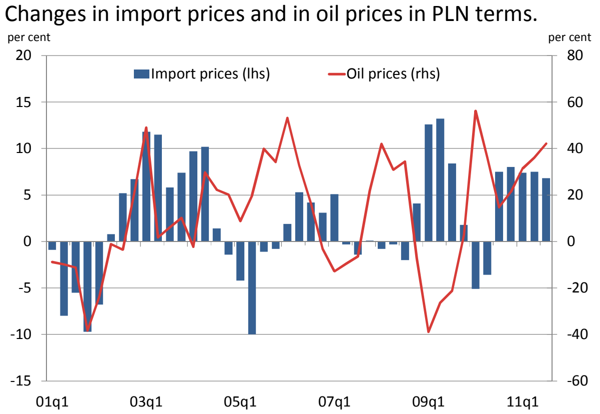
Source: GUS data.

2.1.4. Import prices

In 2011 Q3 the annual growth of import prices in PLN terms continued to run at a high level, albeit slightly lower than in the previous quarter (6.8% as against 7.5%). At the same time, prices of imported energy products, including, in particular, crude oil, grew faster than in the previous quarter (Figure 2.7). As results from the preliminary data on national accounts, 2011 Q4 saw a surge in the annual growth of import prices.The rise in import prices may be attributed to the depreciation of the zloty (in 2011 Q3 the nominal effective exchange rate of the zloty was 3.3% weaker than a year before and in 2011 Q4 – 12.4% weaker, respectively).

Figure 2.7

Changes in import prices and in oil prices in PLN terms.



Source: GUS data.

[13] In January 2012 PPI decreased to 8.0% y/y as compared to 8.2% y/y in the previous month mainly as a result of faster growth in manufacturing prices.

2.1.5. Inflation expectations

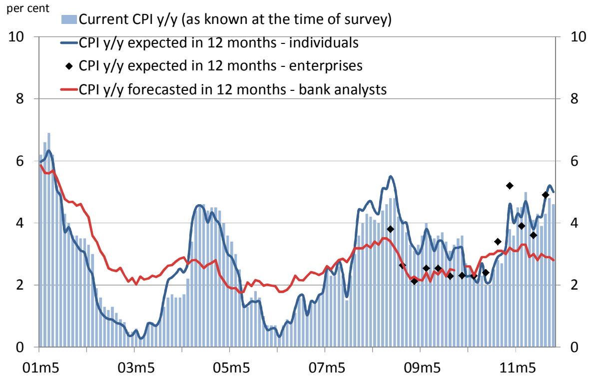
12-month inflation forecasts by financial sector analysts were revised downward to 2.9% in January 2012 (Figure 2.8), from 3.3% in June and July 2011. Since November 2011, financial sector analysts surveyed by Reuters additionally forecast average annual inflation in the following year and in two subsequent years. From November 2011 to February 2012 they revised their 2012 forecasts upward from 3.0% to 3.6%, and the 2013 forecasts from 2.6% to 2.8%. In February 2012, their average annual inflation forecast for 2014 stood at 2.7%.

Similar inflation expectations in the years 2012-2013 are also suggested by the results of the new NBP Macroeconomic Survey addressed to external experts, first published in January 2012 (see:Box 3 *Inflation expectations of professional forecasters according to the NBP Survey of Professional Forecasters*).

The objectified measure of inflation expectations of individuals, which remained slightly above 4.0% y/y from May to November 2011 (except for the month of September), increased to 5.0% in December 2011 – February 2012. The rise in inflation expectations exceeded current inflation growth. This might have been due to the fact that the concurrently observed considerable upswing in prices of certain frequently purchased goods and services (e.g. food, fuels, energy) had a strong impact on the opinions of individuals about changes in the price level. These categories are generally given priority by individuals, which is corroborated by the results of the October 2011 surveys commissioned by the NBP. According to the survey findings, during the period of price increases consumers tend to

Figure 2.8

Inflation expectations of individuals and enterprises and inflation forecasts of bank analysts.



Source: Ipsos, Reuters and GUS data, NBP calculations.
For individuals and enterprises – objectified measure.

save and work more rather than demand wage increases. This suggests limited risk of mounting wage pressure driven by higher perceived and expected inflation.

Inflation expectations of enterprises over the 12-month horizon (objectified measures) increased in 2011 Q4 to 4.9% following a decline to 3.6% in 2011 Q2 and Q3. This rise was largely the result of deterioration in the structure of responses to the survey questions.

Box 3. Inflation expectations according to the NBP Survey of Professional Forecasters

In January 2012, the NBP published, for the first time, the results of its *Survey of Professional Forecasters*[14], directed at financial sector analysts, representatives of universities and research institutes as well as experts of employee and employer organizations. Altogether 25 persons participate in the survey[15]. It will be conducted on a quarterly basis: in March, June, September and December.

Main survey questions relate to probabilistic forecasts of CPI inflation and GDP growth in the short-term horizon (current year), medium-term horizon (2 subsequent years following the current year) and long-term horizon (average for the coming 5 years). Experts participating in the survey are requested to consider possible scenarios of economic developments and provide for each variable a central point forecast and the range of its possible values. The central forecast is the median of expert's subjective probability distribution and the range of forecasted values is an interval to which the expert assigns a 0.9 probability of realisation (the bottom limit is the 5^{th} and the upper limit is the 95^{th} centile of probability distribution).

The basic method of presenting the survey results are scatter graphs showing central forecasts (medians) and uncertainty which is measured by the width of 0.9 probability interval (interquintile range between the 95-th and the 5-th percentiles). Additionally, aggregate forecasts are provided, which are the result of averaging individual probability distributions.

As results from the analysis of answers given in the survey conducted in December 2011 to the question concerning CPI developments in the years 2012 and 2013, the central forecasts are highly similar: half of them fall within the range of 3.2-3.8% for 2012 and the range of 2.5-3.0% for 2013. At the same time, however, many forecasters show a considerable uncertainty in formulating central point forecasts and do not exclude the possibility of scenarios with values differing greatly from the above mentioned ones (Figures R.3.1). The results of aggregation of individual interval forecasts are presented in Table R.3.1.

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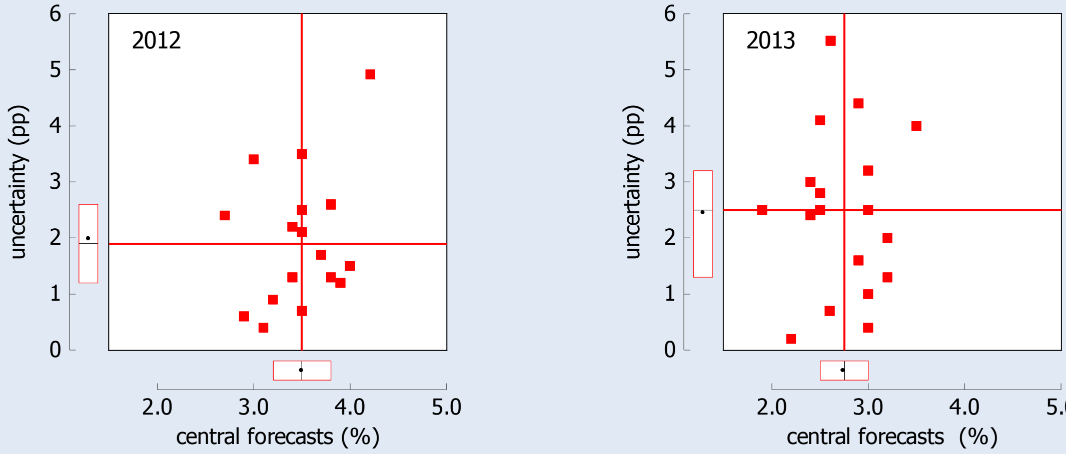
[14] For more information about the survey, including a more detailed analysis of its results and methodology applied – see: http://amakro.nbp.pl

[15] In the survey conducted in December 2011 there were 18 participating forecasters.

Figure R.3.1
Individual central forecasts of the CPI for the years 2012 and 2013 and the related uncertainty, December 2011 forecasting round.



Each point in the chart corresponds to an individual probabilistic forecast. Horizontal axis shows the value of the expert central forecast, while the vertical axis shows uncertainty as measured by the width of the range of possible values given by the expert. Information concerning the set of individual forecasts is provided with the use of rectangles marked along the chart axis. These rectangles determine the ranges covering 50% of median values of the variables presented on the axes. Markings inside the rectangles show the median (line) and the average (dot).

Table R.3.1
Forecasts of CPI inflation derived from individual interval forecasts, December 2011 forecasting round (in %).

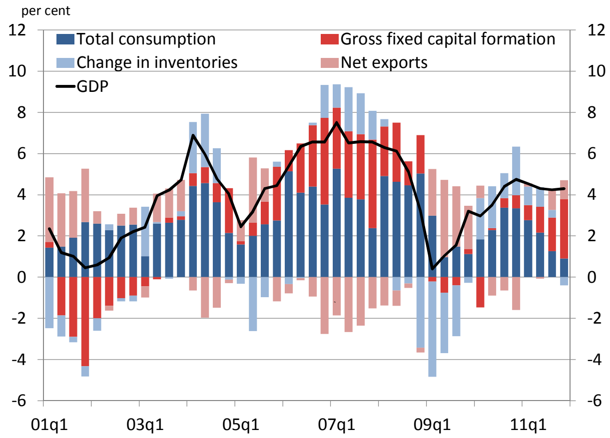
Horizon	Median	50% probability	90% probability	Probability of 1.5-3.5% range
2011	4.3	4.2-4.3	3.3-4.5	7%
2012	3.4	3.0–4.1	1.9–5.3	49%
2013	2.8	2.2–3.4	1.0–4.9	68%
2011-2015	3.1	2.6–3.7	1.6–5.0	64%
2014-2015*	2.6	x	x	x

* annual average, implied value – NBP estimate based on the results of the NBP Survey of Professional Forecasters

2.2. Demand and output

In the second half of 2011, GDP growth remained relatively strong. GDP rose by 4.2% y/y in 2011 Q3 and by 4.3% y/y 2011 Q4, as against 4.3% y/y in 2011 Q2 (Figure 2.9, Table 2.2).[16] According to the NBP estimates, GDP growth in quarter-on-quarter terms remained at a level close to the previous quarters and amounted to 1.2% q/q in 2011 Q4, as against 1.2% q/q in 2011 Q3 and 1.1% q/q in 2011 Q2, in seasonally adjusted terms.

Figure 2.9
Contribution of aggregate demand components to GDP growth.



Source: GUS data

[16] Data on GDP and its components in 2011 Q4 have been estimated by the NBP from preliminary 2011 GDP estimate by GUS.

In comparison to the previous quarters, domestic demand growth slowed down in the second half of 2011, running at 3.3% y/y in 2011 Q4 and 3.2% y/y in 2011 Q3 as against 4.3% y/y in 2011 Q2. Growth in domestic demand was supported by stronger rise in investment and dampened by both slower than in the previous quarters growth in consumption and negative contribution from changes in inventories in 2011 Q4.

Private consumption growth decreased in the second half of 2011, whereas annual public consumption declined by 0.8% y/y in 2011 Q4 and by 3.1% y/y 2011 Q3, as against a drop of 0.6% in 2011 Q2, which could be related to low public sector intermediate consumption.

The second half of 2011 saw growth in investment accelerating. At the same time, companies ceased to rebuild inventories and, as a consequence, a contribution of this category to GDP growth was close to zero.

According to national accounts data, the second half of 2011 saw a slight gain in the momentum of exports (to 7.8% y/y as against 6.7% in the first half of 2011), with some slowdown in imports (to 5.3% y/y in 2011 against 6.5% in the first half of 2011). Contribution of net exports to GDP growth in the second half of 2011 was positive and amounted to 0.9 percentage points in 2011 Q4.

Table 2.2
GDP growth.

	2008	2009	2010	2011	2010				2011			
					q1	q2	q3	q4	q1	q2	q3	q4
GDP (%)	5.1	1.6	3.9	4.3	3.0	3.5	4.4	4.7	4.5	4.3	4.2	4.3
Consump-tion (%)	6.1	2.0	3.5	2.1	2.1	2.8	4.2	4.7	3.2	2.7	1.6	1.2
Gross fixed capital formation (%)	9.6	-1.2	-0.2	8.7	-10.2	0.5	2.3	2.2	5.9	6.9	8.5	10.3
Changes in inventories (pp)	-1.1	-2.5	1.9	0.4	2.0	2.0	1.2	2.4	0.9	1.0	0.4	-0.4
Net exports (pp)	-0.6	2.7	-0.7	0.8	0.6	-0.9	-0.7	-1.6	0.2	-0.1	1.0	0.9

Source: GUS data.

2.2.1. Consumption demand

In the second half of 2011, consumption demand slowed down again. Individual consumption rose by 2.0% y/y in 2011 Q4 (as against 3.0% y/y in 2011 Q3 and 3.6 % in 2011 Q2; Figure 2.10).[17] According to NBP estimates, private consumption growth in quarter-on-quarter terms (seasonally adjusted data) amounted to 0.5% q/q in Q4 2011 as compared to 0.5% q/q in 2011 Q3 and 0.6% q/q in 2011 Q2.

[17] Data on individual consumption in 2011 Q4 are NBP estimates based on preliminary 2011 GDP estimate published by the GUS.

Consumer demand in 2011 Q3 was subdued by continued slow increase in disposable income.[18] This, in turn, was driven by a weak growth in income from hired employment,[19] which was related to slower employment growth, decrease in social transfers and elevated inflation. On the other hand, the main factor supporting growth in real disposable income was an increase, larger than a year before, in gross operating surplus, which could be indicative of a possible improvement in the financial position of the self-employed in 2011 Q3.

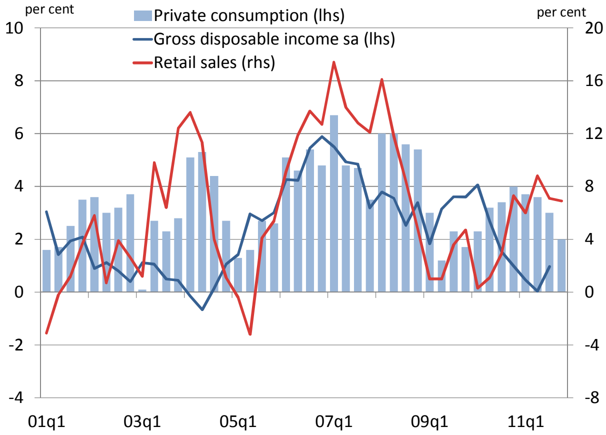
Private consumption growth in 2011 Q4 was further curbed by a steady deterioration in labour market conditions (with a declining growth in both employment and nominal wages in the enterprise sector).

Moreover, zloty depreciation, which inflated the value of the previously incurred currency loans (see Box 2 *The impact of the depreciation of the Polish zloty against the Swiss franc on households' expenditures, debt service costs and consumption.* Inflation Report, November 2011), and slower rise in lending to households contributed to restrain the growth of consumption demand. Private consumption may have also been hampered by households' less optimistic expectations about future economic developments as indicated by low consumer confidence indices (Figure2.11).

Private consumption slowed down despite continuously relatively strong growth in retail sales, which may be indicative of worsening in business condition in household services. Retail sales increased by 6.9% y/y in 2011 Q4 and 7.1% in 2011 Q3, and in January 2012 remained at high level. In terms of product categories, retail

Figure 2.10

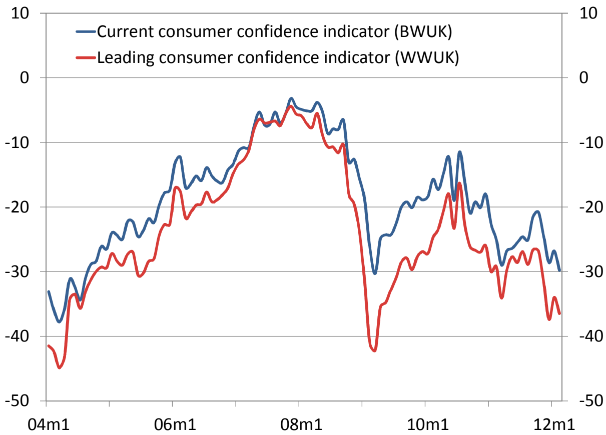
Growth of private consumption, gross disposable income and retail sales (y/y, constant prices).



Source: GUS data, NBP calculations.

Figure 2.11

Consumer confidence indicators.



Source: GUS and NBP data.

[18] Disposable income growth and contributions to growth have been adjusted for the impact of seasonal variations.

[19] Income from hired employment includes - apart from remuneration for the services rendered – sickness, compensation and care benefits as well as in-kind income, transfers from the Employee Benefit Fund and severance pay.

sales rose in majority of groups; in recent months only cars and motorcycles saw a sharp drop, which was related to the base effect[20].

2.2.2. Investment demand

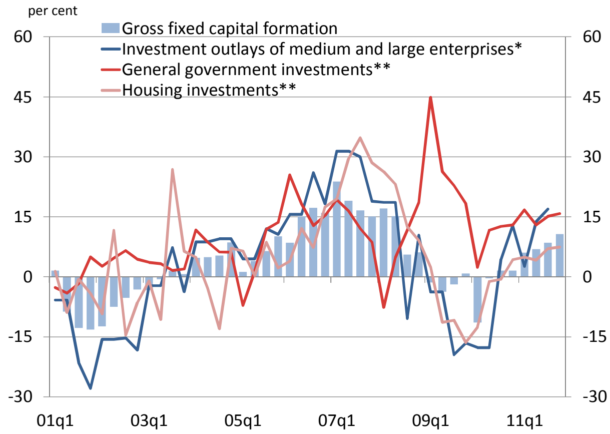
The annual growth of gross fixed capital formation amounted to 10.3% y/y in 2011 Q4 (as against 8.5% y/y in 2011 Q3), and in quarter terms 3.2% q/q according to NBP estimates (as against 2.4% q/q in 2011 Q3).[21]

The increase in investments was largely driven by sustained strong growth in public investment, which reached 15.1% y/y and 15.8% y/y in 2011 Q3 and Q4, respectively. At the same time, housing investment accelerated - up to 7.5% y/y in 2011 Q4 (as against 7.1% y/y in 2011 Q3). The sound financial standing of enterprises (see Chapter 2.3 *Financial situation in the enterprise sector*) and the previously observed increase in capacity utilisation were conducive to intensified investment in the second half of 2011 (Figure 2.12). The available 2011 Q3 data also point to accelerated investment of large and medium-sized enterprises (to 16.9% y/y from 13.8% y/y in 2011 Q2).

The 2011 Q3 data indicate that enterprises significantly increased their outlays on plant, machinery and equipment (by 18.3% y/y) and this category was the largest contributor to investment growth in large and medium-sized enterprises. At the same time investment in means of transport rose considerably (by 58.5% y/y), which resulted from a significant rise in purchases made by public transport companies.

Figure 2.12

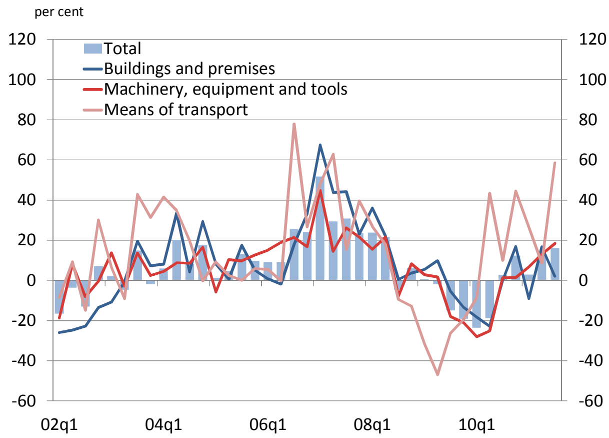
Investment spending in the economy (y/y).



Source: GUS and Ministry of Finance data, NBP estimates.
* Due to lack of data on corporate investment in in Q1 and Q2 up to and including 2010, the graph shows growth rates relating to the first half of the year.
** NBP estimates for the benefit of the NECMOD model; data seasonally adjusted.

Figure 2.13

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



Source: GUS data, NBP calculations.

[20] The base effect was related to intensified purchases made at the end of 2010, in anticipation of VAT increases as of the beginning of 2011., as well as the abolishment of VAT discounts on the purchase of cars with goods vehicle approval certificates. The base effect was noticeable also in sharp increase in this category of sales in January 2012.

[21] Estimates for 2011 Q4 are based on preliminary GUS data on the 2011 GDP.

The smallest increase was recorded in corporate investment outlays on buildings and business premises (increase of 2.0% y/y; Figure 2.13).

However, the NBP business climate surveys indicate a possibly weaker investment growth at the beginning of 2012.[22] The percentage of enterprises planning new investment projects in 2012 Q1 has dropped to 20.6% (from 22% in the previous quarter, in terms of seasonally adjusted data), remaining below its long-term average (Figure 2.14). Weaker investment activity may result from companies' concerns about future business conditions. These concerns are reflected in the NBP business climate surveys pointing to the expected weaker growth in demand, output and orders, amid a certain decrease in capacity utilisation (Figure 2.15).

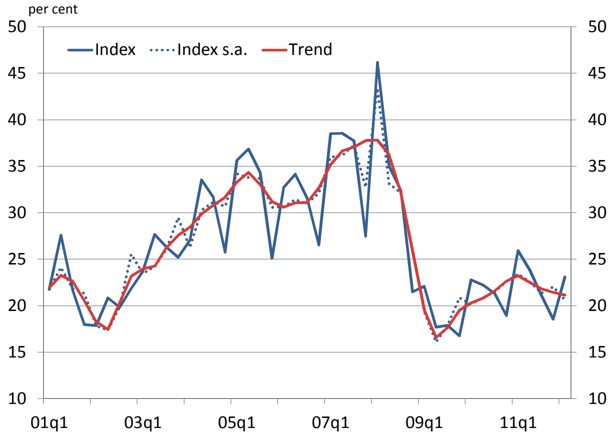
However, slowdown in investment spending in the nearest future may appear to be limited, as the decline in the planned investment index concerns mainly small and medium-sized enterprises, with only slight decrease in case of large enterprises, in which investment outlays are concentrated. Moreover, the NBP business climate surveys indicate, that in the large enterprise group, the percentage of investment in production capacity expansion (i.e. investment requiring larger funds) planned for 2012 rose as compared to the 2011 figure.

2.2.3. Government demand

In 2011, deficit of the public finance sector diminished substantially. The general government deficit decreased from 7.8% of GDP in 2010 to probably less than 5.6% of GDP as assumed in autumn fiscal notification. The background to this improvement includes a range of measures aimed at curbing the deficit, listed in the *2011 Budget Act,* a relatively high

Figure 2.14

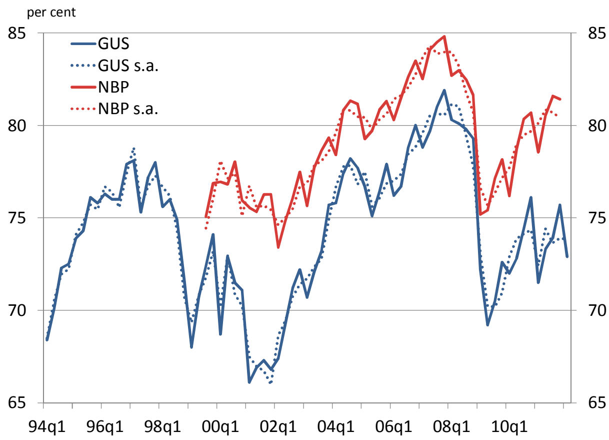
Index of new investments (percentage of enterprises planning to embark on new investments within the coming quarter).



Source: NBP business conditions survey.

Figure 2.15

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



Source: GUS data, NBP business condition survey.

The degree of capacity utilisation based on GUS business tendency survey is significantly lower than the one quoted by NBP surveys. However, trends in both indicators are similar in both surveys. The difference in the values results from the difference in the enterprise sample each survey is based on. The difference may also result from large enterprises being overrepresented in the NBP sample, while the GUS sample is representative in terms of enterprise size.

[22] *Information on the condition of the enterprise sector with a particular focus on business conditions in 2011 Q4 and the forecast for business conditions in 2012 Q1. 201 2*, NBP.

growth in GDP and wage bill and a reduction of social security contribution transferred to Open Pension Funds (OFE) as enacted in March 2011. Public debt in relation to GDP (according to the national methodology) rose slightly to 53.8% of the GDP[23] at the end of 2011.

The central budget deficit in 2011 amounted to approx. PLN 25 billion, well within the limit of PLN 40.2 billion adopted in the Budget Act. Lower than assumed deficit was mainly attributable to lower-than-planned government spending supported by non-tax revenue slightly in excess of the planned amount.[24] In turn, government tax revenues remained close to the budget assumptions, in spite of inflation rising above the envisaged levels and the real GDP expanding slightly faster than expected, .

According to the preliminary data reported by Ministry of Finance[25], local government entities recorded a deficit of PLN 10.2 billion in 2011, as against 15.0 PLN 2.3 billion in 2010. Low growth in their expenditure, which amounted to only 2.4%, was the main factor conducive to the deficit reduction.

The year 2011 saw an improvement also in the financial standing of some special purpose funds.[26] The Labour Fund recorded a financial surplus as opposed to a deficit of approx. PLN 1.3 billion in 2010. The improvement was primarily due to cuts in spending on active labour market programmes. The improvement in financial position is also likely in case of the National Health Fund, which had posted a deficit of PLN 1.3 billion in 2010. In turn, the deficit of the Social Insurance Fund (FUS) persisted at a level close to that observed in 2010. FUS continued to draw on the funds of the Demographic Reserve

[23] According to the information of Ministry of Finance presented in report *Public finance in Poland in times of crises* from 22.02.2012

[24] Revenue from the distribution of the NBP profit was PLN 4.5 billion higher than assumed while dividend revenue from state-owned companies, by PLN 2.4 billion. Thus, it was possible to exceed the revenue level provided for in the Act despite the absence of the expected proceeds from the sale by the BGK Bank of its shareholding in the PKO BP Bank (approx. PLN 4.9 billion).

[25] Data reported on the Ministry of Finance web page on 15 February 2012.

[26] Information on the financial position of key special purpose funds will be released in May. This Report has relied on preliminary data

Fund (PLN 4.0 billion) and again increased its debt owed to the government and the banking sector.

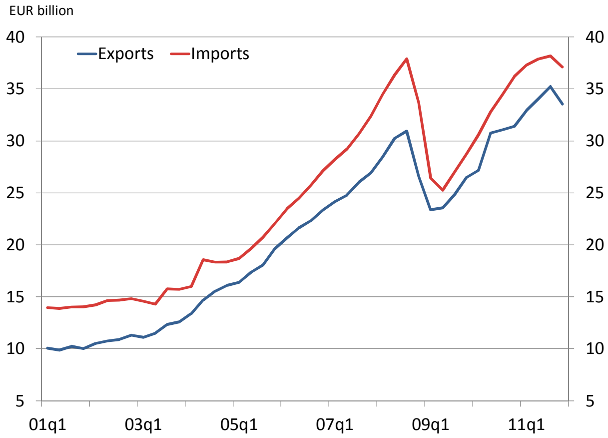
In 2012, the deficit of the general government sector may be expected to decrease further. Higher revenue will derive, among others, from higher disability pension contribution and rising excise and other taxes, as well as the imposition of a new mineral resource rent tax. Public spending, on the other hand, will be curbed by the temporary expenditure rule applied to the central government budget and the fiscal rules at the local government level. Moreover, the impact of the reduction in social security contribution transferred to Open Pension Funds (OFE), effective as of May 2011, will fully materialise in 2012. According to the declaration of the Ministry of Finance, these and other steps should enable a reduction in the general government deficit down to 2.97% of the GDP in 2012[27]. More information on the position of the Monetary Policy Council on the *Draft 2012 Budget Act* is presented in the *Opinion on the Draft 2012 Budget Act*.

2.2.4. Exports and imports

In the second half of 2011, Polish external trade slowed down as compared to the first half of the year[28]. Exports of goods (Figure 2.16) rose by 10.1% y/y versus 15.6% y/y recorded in the first half of 2011. Imports decelerated at a considerably faster pace, growing by 6.5% y/y compared to 18.6% y/y. The slowdown was particularly marked in 2011 Q4 when exports and imports grew by solely 6.8% and 2.5% y/y, respectively.

Figure 2.16

Value of Polish exports and imports.



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

[27] According to the letter of the Minister of Finance addressed to the European Commissioner for economic and monetary matters dated 21 December 2011.

[28] Information on Polish exports and imports is not based on national accounts, but refers to the seasonally adjusted GUS data (in EUR).

Deceleration in both exports and imports in the second half of 2011 was largely due to lower turnover in intermediate goods as a result of falling import demand in the euro area and its surrounding (Figure 2.17). In the second half 2011 intermediate goods exports increased by 7.9% y/y while imports grew only by 2.7% y/y as compared to 20.7% y/y and 18.3% y/y in the first half of the year.

Weaker import demand for Polish products in the euro area was also reflected in marked slowdown in exports of consumer goods, particularly durable consumer goods. In the second half of 2011 export of consumer goods grew nearly twice slower than in the first half of the year.

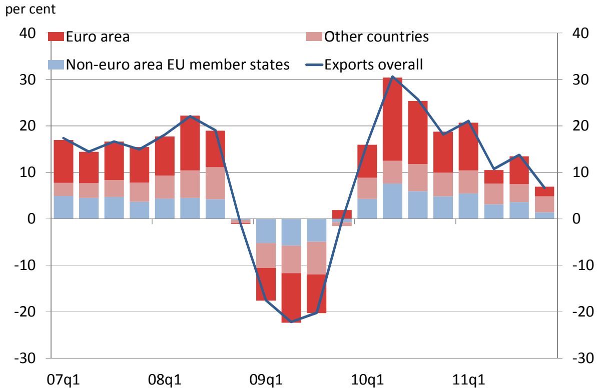
Apart from sharp slowdown in imports of intermediate goods, imports could have been affected with weakening domestic private consumption and acceleration in import prices at the end of 2011 Q3 and in 2011 Q4 triggered by depreciation of the zloty. In the second half of 2011 consumption goods imports decreased by 0.9% y/y compared to growth of 11.1% y/y in the first half of the year.

In 2011 Q3 and Q4, the real and nominal effective exchange rate of the zloty depreciated considerably (Figure 2.18), which supported price competitiveness of Polish output. In January 2012 effective exchange rate of the zloty appreciated, but remained significantly weaker compared to the first half of 2011, i.e. prior to its sharp depreciation.

The NBP business climate surveys also indicate that the recent exchange rate developments have translated into increase in the export profitability. In 2011 Q3 and Q4, the zloty exchange rate was significantly weaker than the rate companies declared as export profitability threshold rate (Figure 2.19).

Figure 2.17

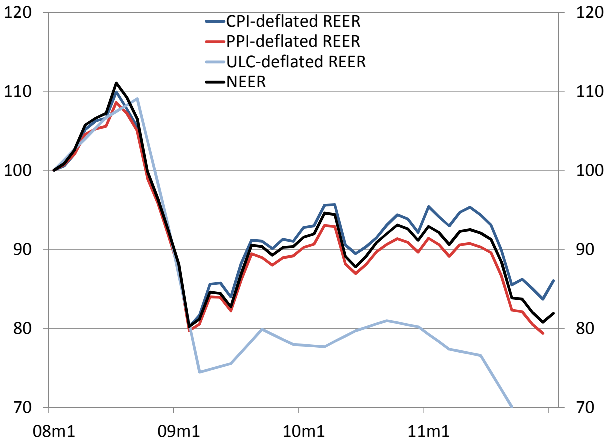
Geographic composition of Polish export growth (in EUR billion).



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

Figure 2.18

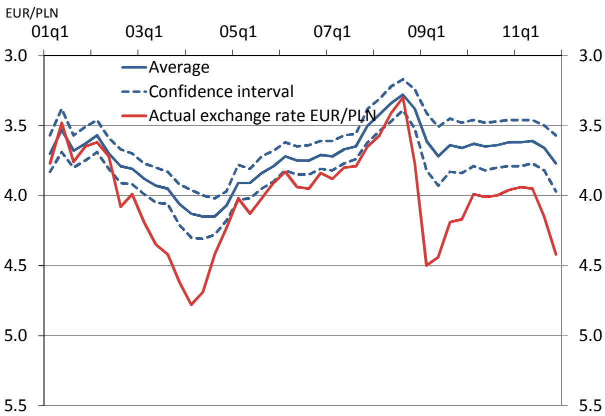
Zloty real and nominal effective exchange rate (increase denotes appreciation; January 2008=100).



Source: NBP calculations based on Eurostat, OECD and Reuters data

Figure 2.19

Average threshold exchange rate (EUR/PLN) of exports profitability declared by enterprises (increase denotes appreciation of the zloty).



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 PLN)?"

2.2.5. Output

In the second half of 2011, all key production sectors contributed positively to the growth in gross value added (Figure 2.19), which was driven by a sustained robust expansion in manufacturing and construction, and a stable but decreasing growth of value added in services[29].

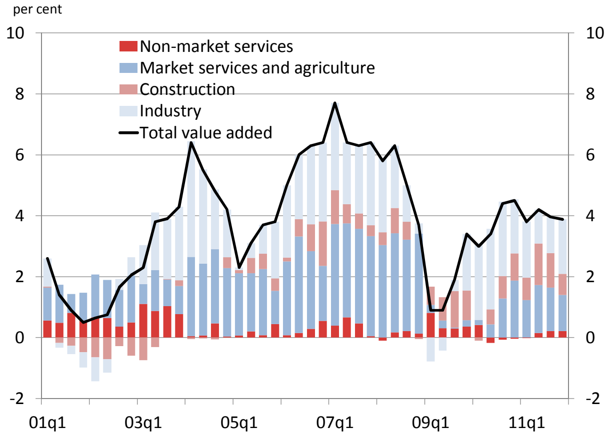
At the same time, despite a further substantial acceleration in industrial output growth, data on orders in this sector have deteriorated again in the recent months and signal potential flattening of upward trends in the future (Figure 2.21). In the analysed period, PMI was continuously relatively low, though it rose in January 2012.

Similarly, construction sector data, while indicative of good current economic conditions, point to weakening outlook. Annual construction and assembly output growth picked up substantially in January 2012, while new orders growth has been falling steadily since July 2011 (Figure 2.22). The consistently robust expansion in construction and assembly output is related to considerable investment spending in the public sector.

Since the publication of the previous *Report*, upward trends have also continued in the market services sector. The annual wholesale growth (in nominal terms) reached an average of 12.8% y/y in October 2011-January 2012, as against 11.9% y/y in July-September 2011. There was also a slight acceleration in sales of services in transport entities, which rose by 14.5% y/y in January 2012, as compared with 8.0% in December 2011, 9.8% in November 2011 and 8.9% in July-September 2011. At the same time

Figure 2.20

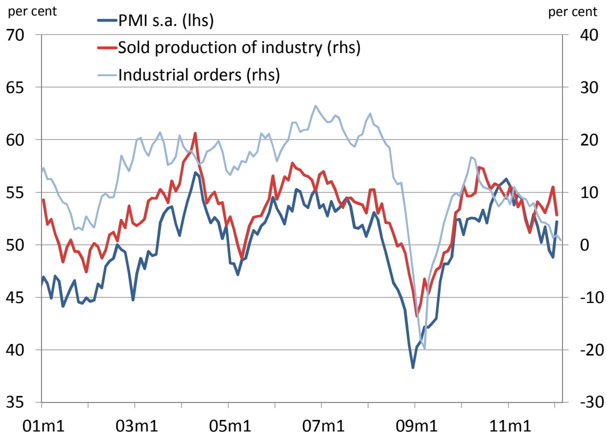
Sector contribution to annual growth of gross value added.



Source: GUS data, NBP calculations

Figure 2.21

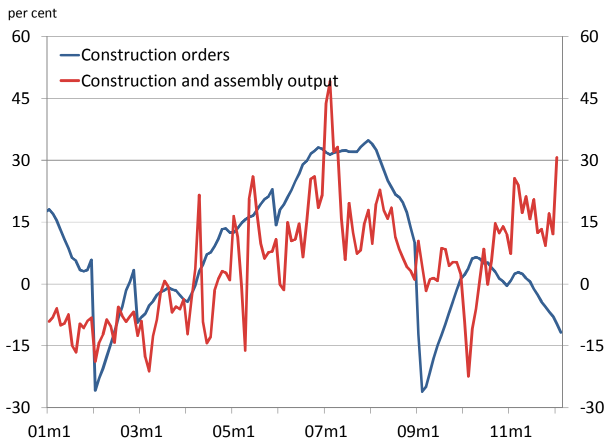
PMI and annual growth of sold production of industry and of industrial orders.



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.

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[29] Information on sold production of industry, industrail orders, PMI indicator, construction and assembly output as well as construction orders refers to seasonally adjusted data.

a relatively strong trend in retail sales continued (see Chapter 2.2.2 *Consumption demand*).

Trends in the leading GUS business climate indicators show that enterprises continue to negatively assess the economic outlook (Figure 2.23). Most indicators of future economic conditions in the respective sections are running below their long-term averages. One exception is the rise in the indicator for the retail sector, which may be attributable to sustained strong retail sales growth (see Chapter 2.2.2 *Consumption demand*).

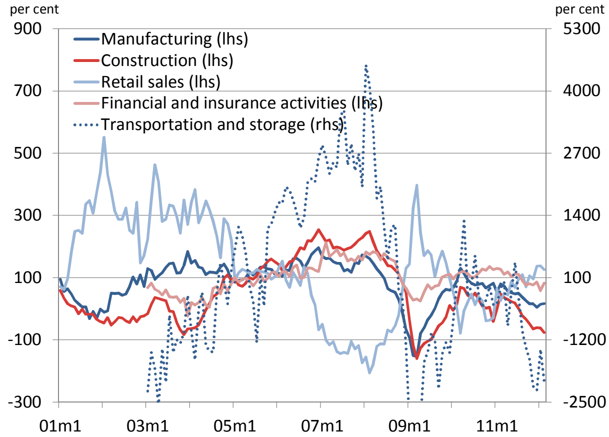
2.3. Financial situation in the enterprise sector

In 2011 Q3, the financial situation of enterprises remained sound, in spite of a decline in the financial result against its 2011 Q2 value (Figure 2.24). Profitability and liquidity ratios remained relatively strong, with large enterprises and exporters enjoying particulary comfortable liquidity position (Table 2.3). Sound financial standing of enterprises was conducive to expanding corporate investment (see Chapter 2.2.3 *Investment demand*).

According to GUS data (Questionnaire F-01), in 2011 Q3 companies' gross operating profit decreased, which was due to a negative result on financial operations related mainly to zloty depreciation. Growth of revenues stood at relatively high level, while growth of costs markedly accelerated in Q3 2011 (Figure 2.24). As indicated by NBP business climate surveys, the nominal decline in profits was the most pronounced in companies whose imports exceed exports considerably and enterprises with a currency-denominated debt.[30]

Figure 2.23

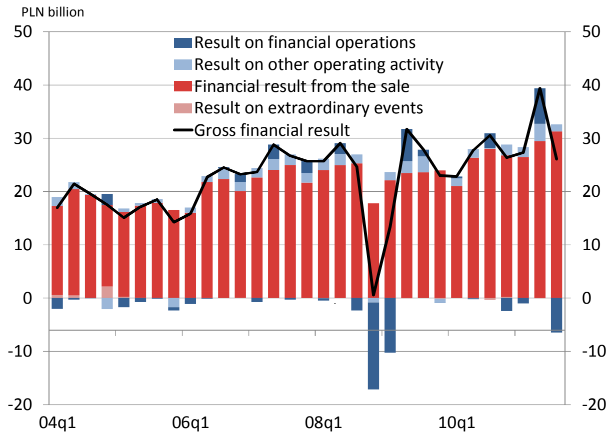
Forecast of economic situation in relation to the long-term average (long-term average=100).



Source: GUS business tendency survey, NBP calculations.

Figure 2.24

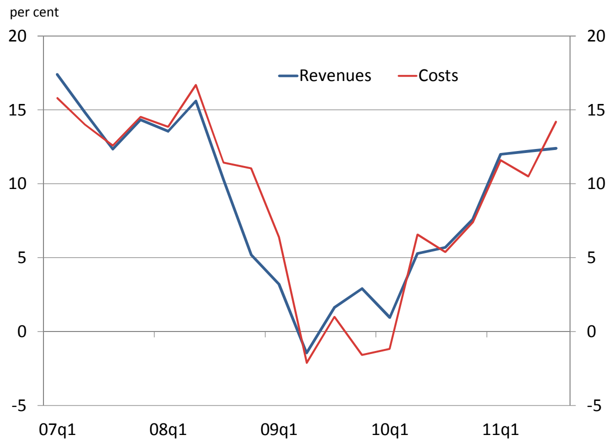
Enterprises' financial result and its components.



Source: F-01/I-01 form GUS data. NBP calculations.

Figure 2.25

Rates of growth of revenues and costs.



Source: F-01/I-01 form GUS data. NBP calculations.

[30] *Information on the condition of the enterprise sector with a particular focus on business conditions in 2011 Q4 and the forecast for business conditions in 2012 Q1. 201 2*, NBP.

In 2011 Q3, liquidity ratio of the first degree declined, although remained relatively high (Table 2.3). According to the NBP business climate surveys, in 2011 Q3 and Q4 an improvement was observed in the liquidity position of enterprises along with slightly more timely servicing of bank and non-bank debt. Business tendency surveys also show that large companies report a timely settlement of trade liabilities more frequently than the SME sector.

Table 2.3

Selected financial efficiency ratios in the enterprise sector.

percent	2007	2008	2009	2010	2011 q1	2011 q2	2011 q3
Return on sales ratio	5.6	5.0	5.0	5.2	5.3	5.5	5.6
Net profitability ratio	5.0	3.3	4.1	4.4	4.3	6.1	3.7
Cost level index	93.9	95.8	95.0	94.7	94.7	93.0	95.5
	end of period						
Liquidity ratio of the first degree	33.7	33.6	38.5	39.7	38.9	37.7	36.7

Source: GUS data.

2.4. Labour market

2.4.1. Employment and unemployment

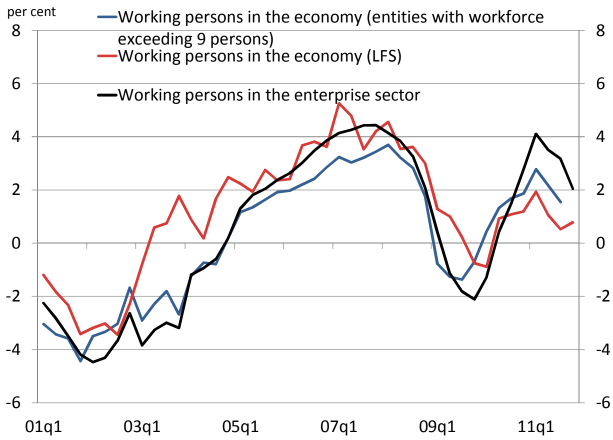
In the second half of 2011 employment growth in the economy remained slow, while employment growth in the enterprise sector decelerated (Figure 2.26). At the same time, the increase in the number of the economically active persons was accompanied by an increase in the unemployment rate according to the Labour Force Survey.

In accordance with the LFS data, the number of working persons increased by 0.3% q/q in 2011 Q4, following a drop of 0.1% q/q in 2011 Q3 (in seasonally adjusted terms; Figure 2.27). This rise was mainly driven by the higher number of persons working in the private sector (by 0.4% q/q in 2011 Q4 against -0.1% q/q in 2011 Q3), amidst a less pronounced drop in the number of persons working in the public sector (by -0.4% q/q in 2011 Q4 against -0.9% q/q in 2011 Q3).

In 2011 Q4 the number of persons employed in industry increased by 1.1% q/q (against a drop of 0.6% q/q in the previous quarter, seasonally adjusted data).[31] Similarly, the service sector

Figure 2.26

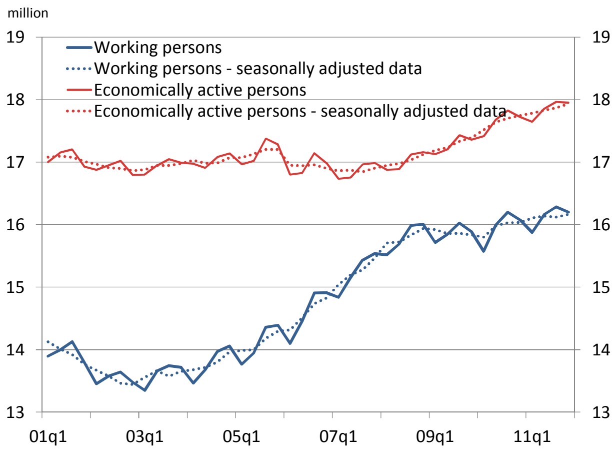
The rise (y/y) in the number of persons working in the economy according to the Labour Force Survey and reports by entities whose workforce exceeds 9 persons and in the number of persons employed in the enterprise sector.



Source: GUS data, NBP calculations.

Figure 2.27

Number of working persons and the economically active in the economy according to the Labour Force Survey.



Source: GUS data, NBP calculations.

[31] The industrial sector according to the Labour Force Survey classification includes manufacturing; mining and quarrying; electricity, gas, steam, hot water and air conditioning supply; water supply, sewerage, waste management and remediation activities; as well as construction – see Labour Force Survey, 2011 Q3, GUS.

posted a rise in employment, amounting to 0.4% q/q (against an increase of 0.2 q/q in 2011 Q3). In contrast, employment in agriculture fell again (by -0.7% q/q in 2011 Q4 against -0.8% q/q in 2011 Q3).

In turn, data concerning the enterprise sector indicate the slowdown of the annual employment growth in 2011 Q4. At the same time, NBP survey economic climate indicators[32] concerning employment deteriorated, which may suggest a weakening demand for labour in 2012 Q1.

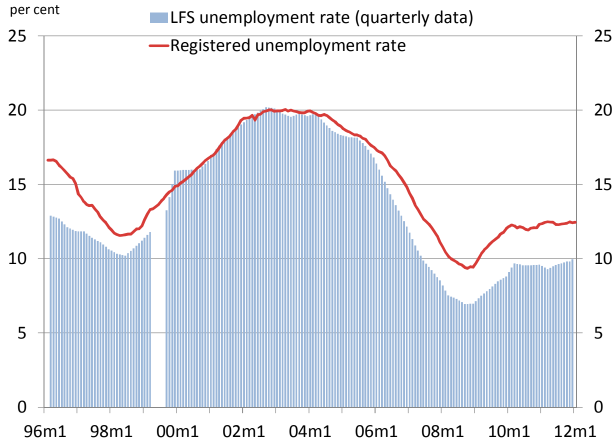
2011 Q4 saw the continued upward trend, observed since 2007, of the number of the economically active persons in the economy. Its growth was higher than in 2011 Q3 (Figure 2.27). Economic activity rates increased both among prime-aged persons (25-44) and pre-retirement-aged persons, the latter in connection with early retirement restrictions introduced in 2009.

In 2011 Q4, the LFS unemployment rate rose both in quarterly (by 0.2 percentage point) and annual terms (by 0.4 percentage point) and amounted to 10.0% (seasonally adjusted data; Figure 2.28). Increase in unemployment rate in annual terms was mainly due to rising labour supply, which was driven, apart from the increase in the economic activity index, by the upward revision by the GUS of population estimates in the LFS in 2011 Q2[33](Figure 2.29). The rise in unemployment was constrained by growing employment.

At the same time, data from employment offices indicate that the registered unemployment rate in 2011 Q4 and in January 2012 remained close to the level observed in the first three quarters

Figure 2.28

Registered unemployment rate and unemployment rate according to Labour Force Survey.

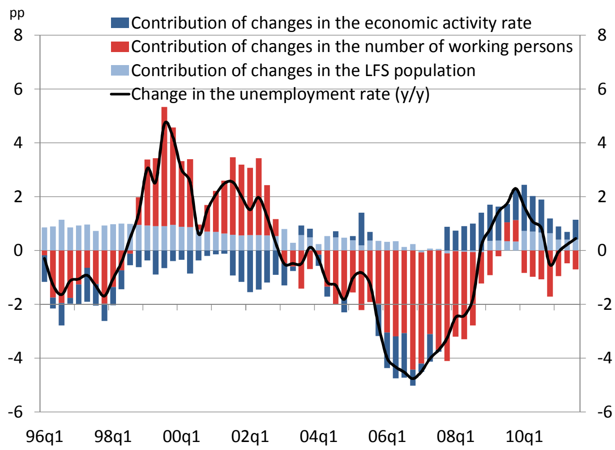


Source: GUS data (seasonally adjusted).

Data till 2002 adjusted for the results of the 2002 National Census. No Labour Force Survey was conducted in 1999 Q2 or Q3. There are two reasons for the differences between the unemployment rate according to the Labour Force Survey and the registered unemployment rate: (1) a different definition of an unemployed person, (2) a different definition of the population to which the number of the unemployed is referred.

Figure 2.29

Decomposition of changes in unemployment rate in y/y terms according to Labour Force Survey



Source: GUS data, NBP calculations.

Change in the unemployment rate can be broken down into changes resulting from 1) change in the size of working age population (on the graph: change in the population in Labour Force Survey terms), 2) change in economic activity of working-age persons (change in the economic activity rate), 3) change in labour demand (change in the number of working persons in Labour Force Survey terms). Changes in the Labour Force Survey population may stem from demographic trends or migration.

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[32] *Information on the condition of the enterprise sector with a particular focus on business conditions in 2011 Q4 and forecast for 2012 Q1, NBP* (in polish only).

[33] On the basis of data presented in the GUS publication entitled *The economic activity of Polish population in 2011 Q3*, it can be inferred that the increase in the Labour Force Survey population by approx. 100 thousand persons was due mainly to the inclusion of return migration data.

of 2011 (12.4-12.5%; Figure 2.29; seasonally adjusted data).

NBP estimates indicate that since the publication of the previous *Report*, weaker demand for new employees has been accompanied by limited layoffs. Probability of job finding as well as separation probability for employed workers have decreased.

2.4.2. Wages and productivity

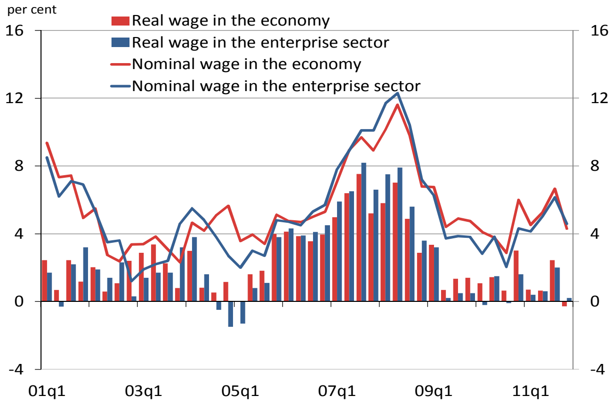
The incoming data indicate that nominal-terms growth in both wages and unit labour costs have remained moderate in the recent period. At the same time real wage growth has been low amidst heightened inflation.

In 2011 Q3, the growth of nominal wages in the economy and in the enterprise sector was higher than in the previous quarter (and stood at 6.6% y/y and 6.1% y/y, respectively). Higher growth, however, was mainly due to the statistical effect, which, according to the NBP estimates, accounted for approx. 1.0 percentage point[34] of the wage growth (Figure 2.30).

In 2011 Q4 nominal wage growth in the economy and in the enterprise sector went down to 4.3% y/y and 4.6% y/y respectively.[35] In real terms the growth rate of wages in the enterprise sector plummeted almost to zero (0.2% y/y), while in the economy it was negative (-0.3% y/y). The NBP economic climate surveys indicate that despite elevated inflation, in 2011 Q4 almost half of the surveyed enterprises declared absence of wage pressure on the part of employees At the same time 43% of enterprises reported that the pressure was not stronger than usual. These means that despite a certain increase, as

Figure 2.30

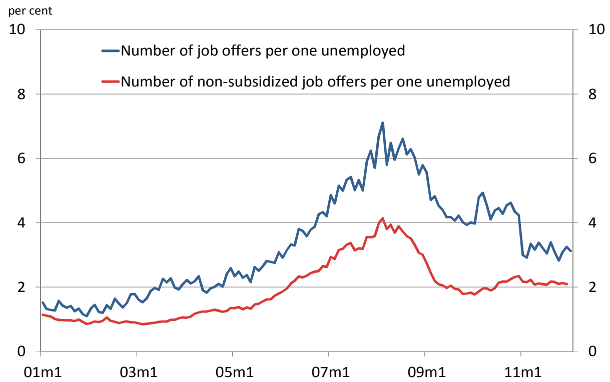
Annual wage growth in the economy and in the enterprise sector (nominal and real).



Source: GUS data, NBP calculations.

Figure 2.31

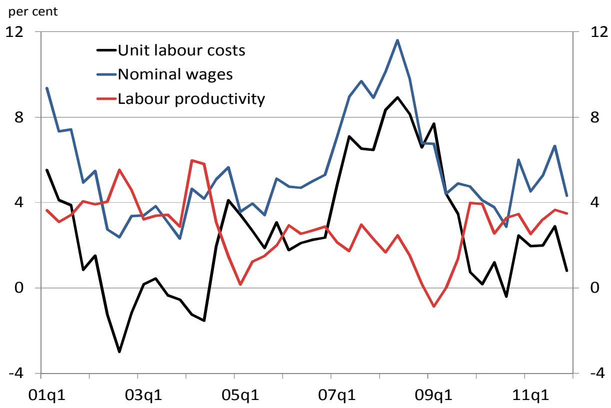
Market tensions index (the number of job offers per one unemployed person)



Source: GUS data, NBP calculations.

Figure 2.32

Annual growth in labour productivity, wages and unit labour costs in the economy.



Source: GUS data, NBP calculations.

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[34] This effect consists in the inclusion by the GUS of wage adjustments implemented in 2010 Q2 only in the 2010 Q3 data (rather than in the 2010 Q2 data). The adjustments led to a merely statistical decline in wages in 2010 Q3. As a result, the annual growth of wages in 2011 Q3 was overstated.

[35] In January 2012 the growth rate of nominal wages in the enterprise sector increased significantly (to 8.1%), which was probably related to the shift of bonus payments from December 2011 to January 2012. High increase in wages in January 2012 could have also resulted from the shift in the payment of wages from February 2012 to January due to the increase in the disability pension contribution since February 2012.

compared to the previous quarter, wage pressure in the NBP survey remains low.[36]

Since the publication of the previous *Report* the labour market tensions index (the number of job offers per one unemployed person) has been stable and does not indicate the risk of intensifying wage pressure (Figure 2.31).

In 2011 Q4 labour productivity growth in the economy – despite some decrease – remained close to that recorded in the first three quarters of 2011 (Figure 2.32). In turn, the growth of unit labour costs in 2011 Q4 eased down, primarily due to a subdued annual growth of wages.

Starting from July 2011, the annual growth in unit labour costs in industry was on the decline, to turn negative at the end of 2011, triggered by decelerating growth in wages coupled with accelerating growth in labour productivity in this sector (Figure 2.33). In January 2012 the growth in unit labour costs picked up due to a very high, and probably one-off, rise in wages in industry (see footnote 35).

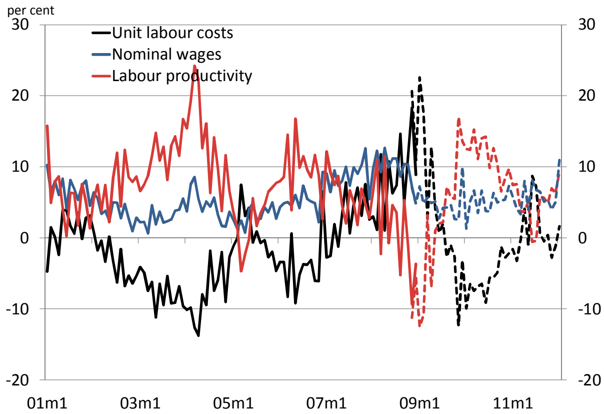
2.5. Financial markets and asset prices

2.5.1. Financial asset prices and interest rates

Since the publication of the previous *Report* the Monetary Policy Council has left the NBP interest rates unchanged with the reference rate at 4.50% (Figure 2.34). Since the beginning of November 2011, both the money market rates and the 3-month WIBOR-OIS spread, which reflects the credit risk premium in the interbank market have slightly increased.

Figure 2.33

Annual growth in labour productivity, wages and unit labour costs in industry.

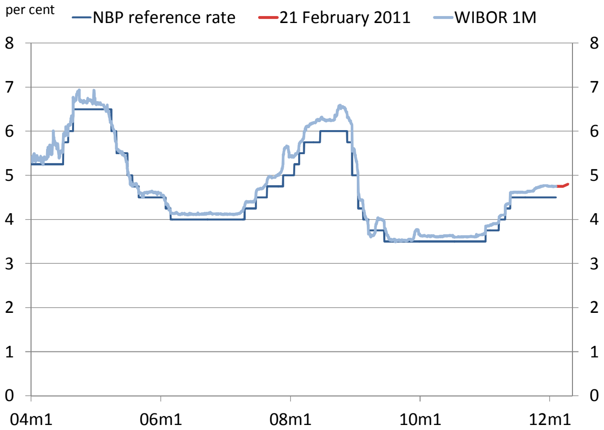


Source: GUS data, NBP calculations.

Since January 2009, new PKD classification (PKD 2007) has been used, due to which the growth rates of wages and employment in industry since November 2008 (dotted line in the figure) are not fully comparable with previously recorded rates.

Figure 2.34

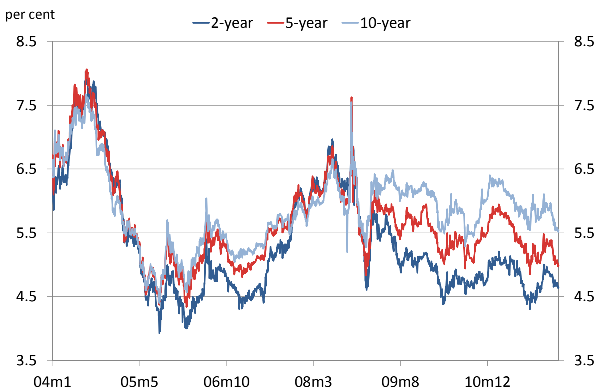
NBP reference rate, 1-month WIBOR and 1-month interest rate implied by FRAs.



Source: Reuters data, NBP calculations.

Figure 2.35

Yields of Polish benchmark bonds.



Source: Reuters data.

[36] *Information on the condition of the enterprise sector with a particular focus on business conditions in 2011 Q4 and forecast for 2012 Q1, NBP* (in polish only).

According to the Reuters survey of 2 February 2012, bank analysts expected the NBP reference rate to remain stable until mid-2012 and to be reduced in a one-year horizon. FRA contracts do not discount a reference rate cut in a one-year horizon and reflect expectations that WIBOR 3M will remain elevated also in the first half of 2012.[37]

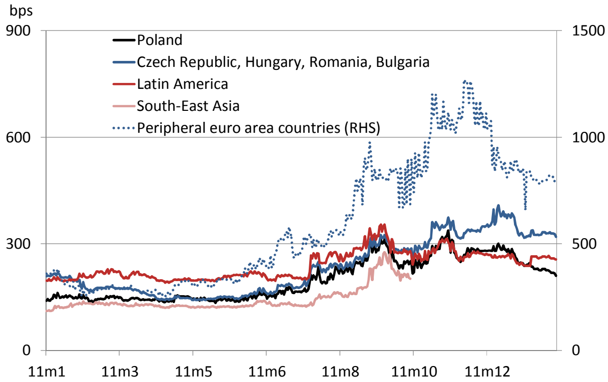
Since the publication of the previous *Report* the yield curve has flattened, with yields increasing somewhat at the short end of the curve. This reflects the disappearance of market expectations of NBP rate cuts in a six-month horizon. In turn, the yields on 10-year bonds have dropped due to some improvement in global market sentiment, additionally propped up by a positive market assessment of the planned fiscal tightening (Figure 2.35). At the same time, the CDS rates for Poland remain lower than the average in emerging market level (Figure 2.36). Yet, due to the persisting uncertainty in financial markets, they remain elevated compared to the period prior to the global financial crisis.

In spite of some moderation, the risk aversion continues to be high, which brought about a slight reduction in the exposure of non-residents to the domestic debt market. It stays, however, at a relatively high level (Figure 2.37). In line with global investment strategies, investors still preferred bonds with shorter maturities, thereby reducing the interest rate risk.

Since the publication of the previous *Report* stock prices on the Warsaw Stock Exchange have increased in the wake of improvement in global sentiment (Figure 2.38).

Figure 2.36

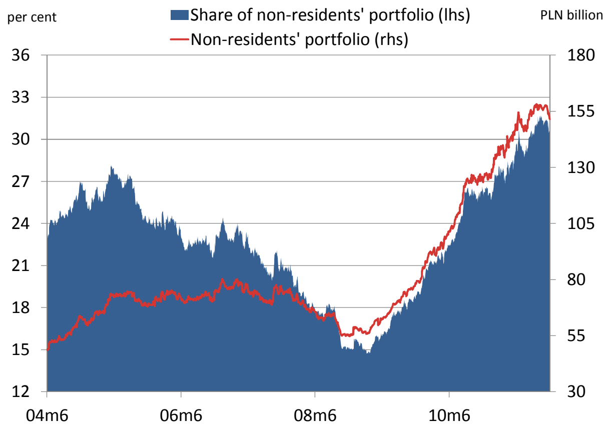
CDS rates of Poland vs emerging and peripheral euro area economies.



Source: Reuters data.

Figure 2.37

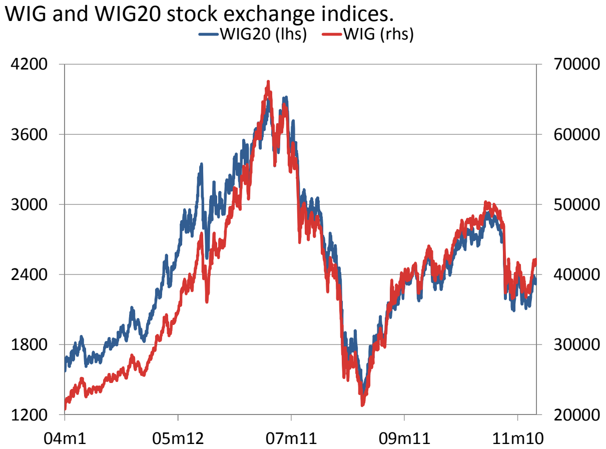
Non-residents' involvement in the Polish Treasury bond market.



Source: National Depository for Securities (KDPW) data.

Figure 2.38

WIG and WIG20 stock exchange indices.



Source: Reuters data.

[37] This discrepancy is due to a significant rise in WIBOR rates at the end of 2011, i.a. under the influence of the increase in counterparty credit risk premium and the creation of liquidity buffers by banks.

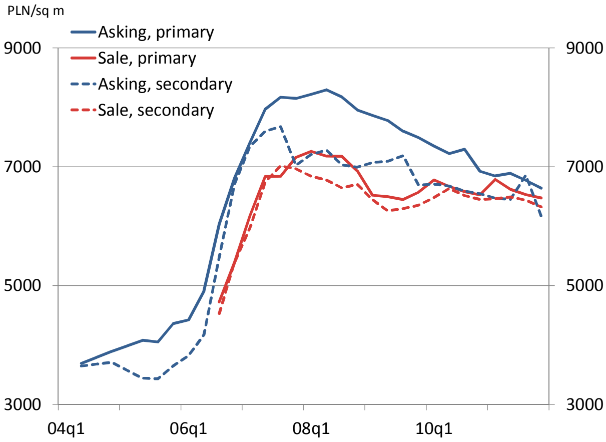
2.5.2. Housing prices

2011 Q3 and Q4 saw no significant changes in the housing market in major Polish cities in comparison with the first half of 2011.[38] Asking and sale prices in the primary and secondary markets remained in a slightly decreasing trend (Figure 2.39). Despite a steady increase in sales, the number of flats introduced in the market exceeded that of sold.

However, profit margins in the residential construction sector remained high, which encouraged property developers to start new investment projects. In the last two quarters, the number of completed flats rose 7.0% over the corresponding period of 2011. Yet, in the entire 2011, the number of completed flats fell by 3.0% as compared with 2010. In the last two quarters of 2011 the number of newly commenced construction projects and building permits was also higher than in the second half of 2010. Residential construction in 2011 Q4 could have been boosted by relatively favourable weather conditions at the end of the year.

Figure 2.39

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.

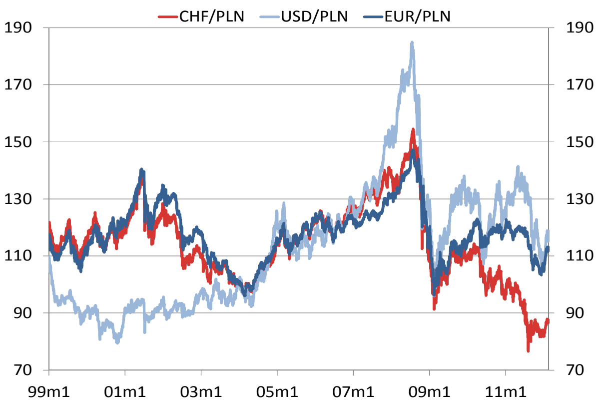
2.5.3. Exchange rate

Since the publication of the previous *Report* the nominal exchange rate of the zloty has appreciated by 4.5% against the euro and by 3.1% in relation to the Swiss franc, having remained broadly unchanged against the US dollar (Figure 2.40).

Following the depreciation in November and at the beginning of December 2011, which was related to the persistence of uncertainty in global financial markets due to the sovereign debt crisis in the euro area, at the end of 2011 the zloty started to strengthen, along with other

Figure 2.40

Nominal exchange rate of the Polish zloty against the euro, the Swiss franc and the US dollar (January 2004=100; increase denotes appreciation).



Source: Ecowin data.

[38] More information on the conditions in the Polish housing market can be found in NBP publications entitled *Report on the prices of flats and the situation on the residential market in Poland in 2011 Q4,* and *Report on the situation in the Polish residential and commercial real estate market in 2010,* available at the NBP website (www.nbp.pl, in Polish only).

currencies in the region. This was related to the alleviated tensions in financial markets following the releases of better than expected data from developed countries and some abatement of uncertainty in the euro area. In November and December 2011, the NBP sold some amounts of foreign currencies in exchange for the zloty, which contained volatility of the zloty.

2.6. Credit and money

2.6.1. Loans

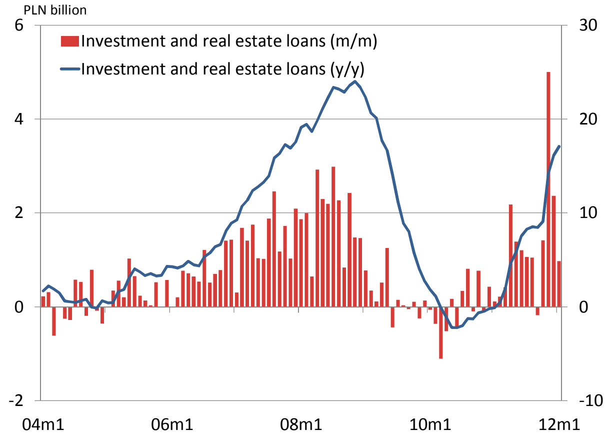
Since the publication of the previous *Report* corporate lending has continued to increase.[39] In October 2011-January 2012, the average monthly increase in corporate debt with domestic banks was close to the average recorded since the beginning of 2011 and amounted to PLN 2.4 billion, while the annual growth of these loans in January 2012 stood at 14.4% y/y as against 9.9% y/y in October 2011 (Figure 2.41, Figure 2.42). In the reported period increases in investment and current loans were characterised by high volatility, related to the occurrence of one-off and seasonal effects.[40]

At the same time data continue to point to a higher rise in debt of small and medium-sized enterprises than that of large enterprises, which are less dependent on external sources of financing.

Lending to enterprises rebounded in spite of a further tightening of lending criteria (particularly in the SME sector) and lending conditions announced by banks as declared in the Senior Loan Officer Opinion Survey conducted in 2011 Q4.[41] However, banks' declarations on tightening

Figure 2.41

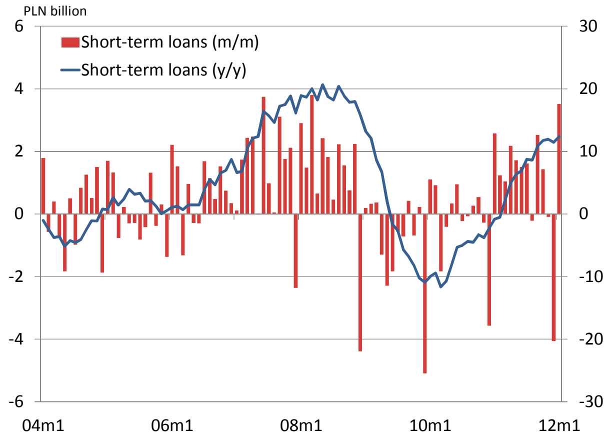
Investment and real estate loans to enterprises.



Source: NBP data.

Figure 2.42

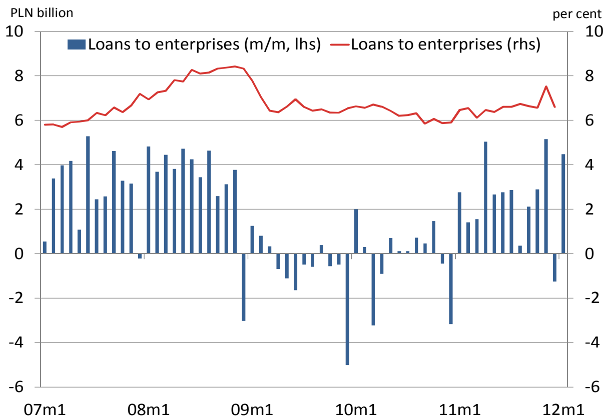
Short-term loans to enterprises.



Source: NBP data.

Figure 2.43

Monthly increases and average interest charged on newly granted loans to enterprises.



Source: NBP data.

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

[40] Increase in investment loans in November 2011 was boosted by the occurrence of a one-off event, while a strong reduction in the corporate debt in December and its rise in January are typical developments due to changes in current loans observed in these months.

[41] *Senior Loan Officer Opinion Surveys on Bank Lending Practices and Credit Conditions, 2012 Q1,* NBP.

of credit policy were not reflected in the increase of interests rates which did not change significantly in September-December 2011.[42]

Survey results also show that the tightening of lending policy by banks is mainly driven not by the current situation of enterprises but by the risk related to the prospective economic situation and banks' capital position. A small impact of the assessment of the credit standing of enterprises on the tightening of loan policy is also confirmed by the NBP's Economic Climate Survey, pointing to a continuously high share of approved loan applications in 2011 Q4 (Figure 2.44)[43].

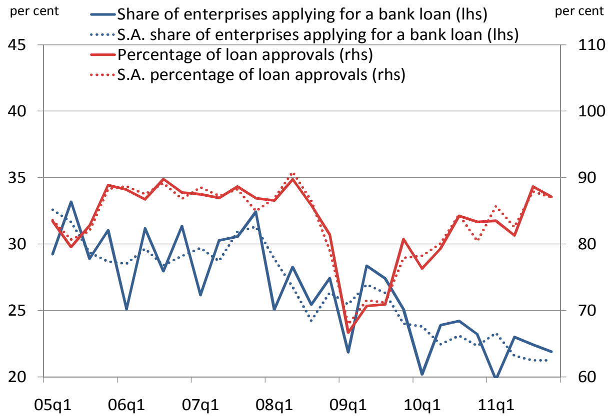
At the same time Senior Loan Officer Opinion Survey indicates that the demand of enterprises for loans is declining (Figure 2.44), whereas NBP's Economic Climate Survey suggests that the number of enterprises applying for a loan decreased. Yet, these declarations has not been so far reflected in a decrease in the growth of corporate loans, particularly in the case of investment loans, whose expansion was relatively sizeable in recent months.

In 2011 Q3 the foreign debt of enterprises fell (by EUR 2.7 billion), while its growth rate went down to 4.8% y/y (against 10.3% y/y in 2011 Q2).[44]

Since the previous *Report* the monthly increases in housing loans have subsided slightly and their monthly average amounted to PLN 1.8 billion (against the monthly average for January-September 2011 amounting to PLN 2.2 billion; Figure 2.45). Slower monthly increases translated into a further decline in the annual growth of this category of loans to 9.4% in January 2012 as

Figure 2.44

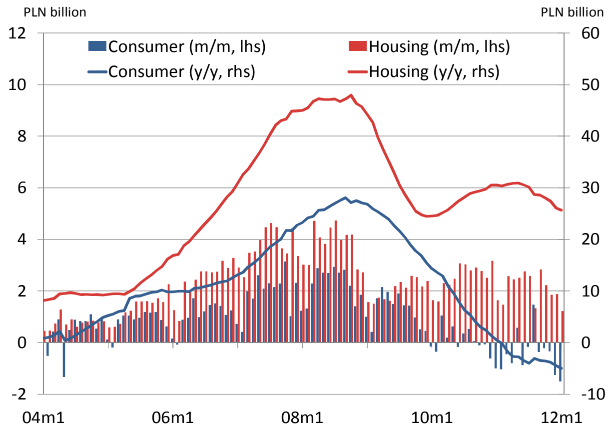
Share of enterprises applying for loans and percentage of approved loan applications.



Source: NBP data.

Figure 2.45

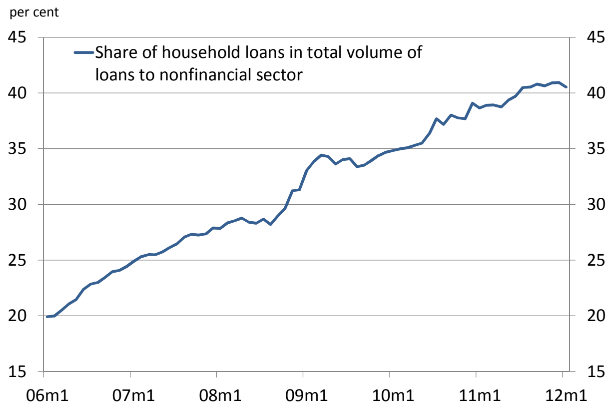
Loans to households.



Source: NBP data.

Figure 2.46

Share of housing loans in the total of loans to nonfinancial sector.



Source: NBP data.

[42] One-off increase in interest rates on new lending to enterprises in November 2011 is associated with large, individual transactions, for which negotiated interests rates were higher than market average.

[43] *Economic climate in the enterprise sector in 2011, Q4 and expectations for 2012 Q1*, NBP.

[44] The total foreign debt of enterprises in 2011 Q3 amounted to EUR 99.5 billion, while the total debt of Polish corporate in domestic banks in June 2011 amounted to PLN 225 billion.

against 10.8% y/y in October 2011[45]. Some slowdown in housing loans reduces demand in the housing market, which is conducive to decrease in prices in this market (see Chapter 2.4.2 *Housing prices*).

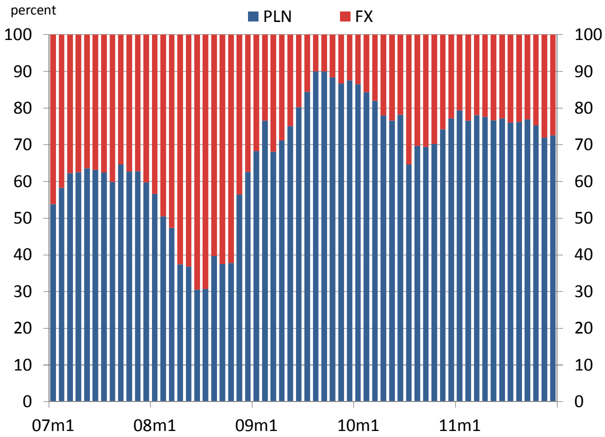
In the recent period, the majority of newly granted housing loans were PLN loans (72.5% in December 2011; Figure 2.47), which translated into a consistent rise of the share of PLN loans in total housing loans and was conducive towards increased effectiveness of the monetary policy transmission mechanism. Nevertheless, the housing loan debt granted in foreign currencies exceeds the PLN housing loan debt (the share of loans in foreign currencies in total housing loans amounts currently to approx. 61%). Since the last *Report,* the interest rate on newly granted housing loans increased from 6.7% in September to 7.0% in December 2011, so the increase was similar to the rise in the 3M WIBOR (0.2 percentage point).

As shown by survey studies of banks, the slowdown in the increase in housing loans in the last months of 2011 may be attributed to the weakening demand for this type of loan, due to the deterioration of the economic condition of households, as well as a more severe, compared to previous quarters, tightening of credit criteria and deterioration of lending conditions.

In the recent period, the indebtedness of households resulting from consumer loans continued to decline – in October 2011-January 2012 by PLN 0.8 billion per month on average as against decrease by PLN 0.3 billion in January-September 2011, while its growth rate in January 2012 amounted to -3.6% y/y as against -2,6% y/y in October 2011 (Figure 2.48). A further fall in consumer loans took place despite the moderation of credit criteria and the majority of

Figure 2.47

Currency structure of newly granted housing loans to households.

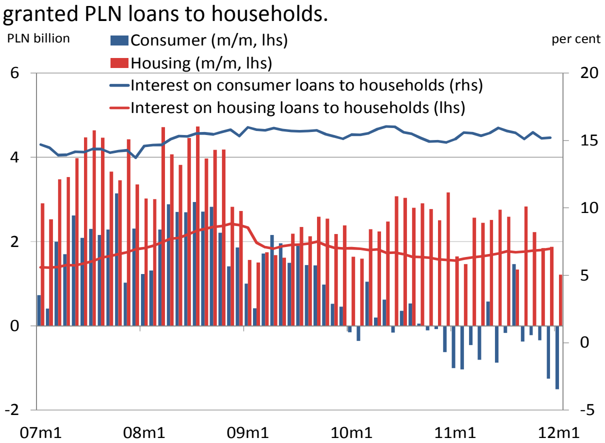


Source: NBP data.

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 2.48

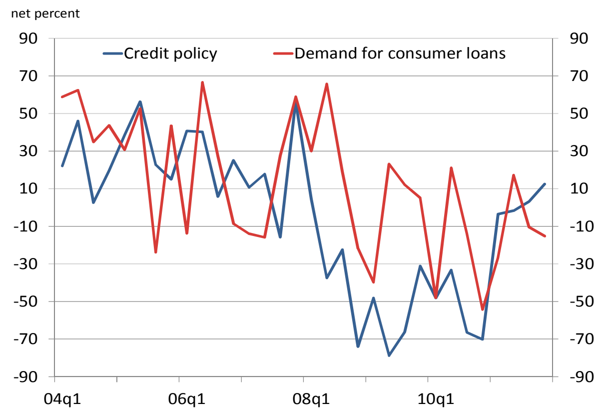
Monthly growth and average interest charged on newly granted PLN loans to households.



Source: NBP data.

Figure 2.49

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.

[45] Falling pace of growth affected both housing loans denominated in PLN and in foreign currencies. In January 2012 it amounted to 22.1% y/y and 2.2% y/y respectively.

lending conditions as declared by banks in 2011 Q4 (Figure 2.49).

2.6.2. Deposits and monetary aggregates

In October 2011-January 2012 the growth rate of broad money accelerated again and stood at 13.0% in January, significantly exceeding that of nominal GDP (Figure 2.50).

In October 2011-January 2012 the more liquid components of M3 classified as the M1 aggregate continued to rise at a slower pace than the broad money, and their growth rate dropped from 14.7% y/y in January 2011 to 5.1% y/y in January 2012.

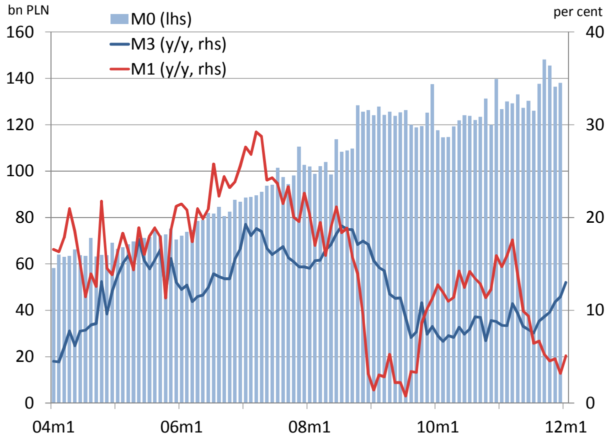
In the reported period, the annual growth rate of corporate deposits was higher than in January-September 2011 (amounting to 11.3% y/y in January 2012 as against 7.4% y/y in September 2011; Figure 2.52, Figure 2.52). The further rapid growth of deposits is related to a sound liquidity situation of enterprises (see Chapter 2.3. *Financial situation in the enterprise sector*.

In October 2011-January 2012 the growth rate of household deposits accelerated once again. Their volume increased in this period by an average of PLN 8.7 billion a month, as compared to their average increase of PLN 3.1 billion recorded in January-September (Figure 2.52, Figure 2.52)[46]. The acceleration of household deposits growth to 14.0% was favoured by further increase in the interest rate on new deposits in PLN, which stood at 4.7% in January as compared to 4.4% in September 2011.

In September-December 2011, the total value of households' financial assets increased by PLN 23.6 billion (an increase of 3.2% between September and December[47]). The falling share of more risky assets in the total financial assets of

Figure 2.50

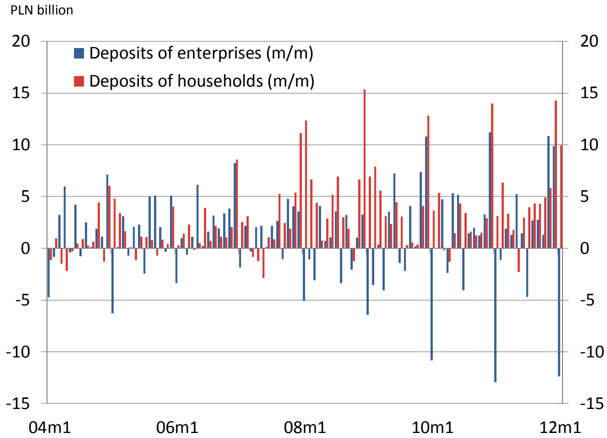
Currency in circulation and annual growth rate of M1 and M3.



Source: NBP data.

Figure 2.51

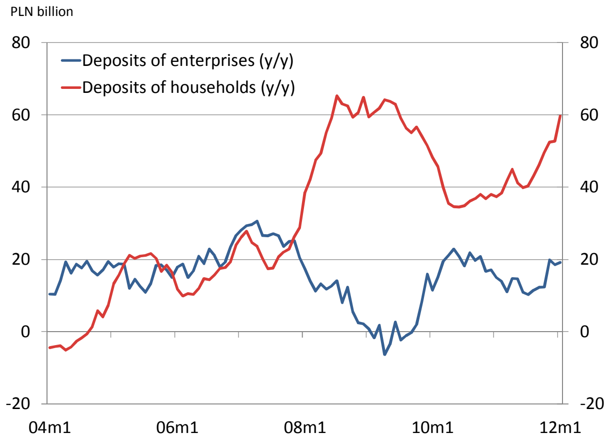
Monthly growth of deposits of households and enterprises.



Source: NBP Data.

Figure 2.52

Annual growth of bank deposits of households and enterprises.



Source: NBP Data.

[46] A strong increase in the volume of household deposits in December is a seasonal phenomenon.

[47] The given sum of financial assets takes into account both deposits for up to 2 years and deposits over 2 years, not included as M3 money.

households is still visible – in the analysed period the negative net contributions of new funds in these categories amounted to PLN 2.7 billion.

2.7. Balance of payments

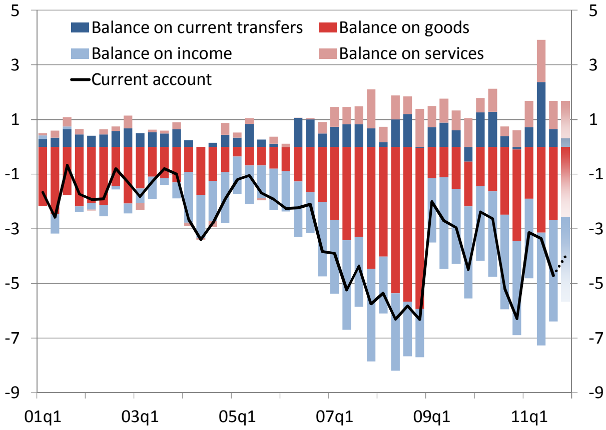
In the second half of 2011 the current account deficit narrowed as compared with the second half of 2010 (Figure 2.53). In 2011 Q3 it reached EUR 4.7 billion (as compared to EUR 5.2 billion in 2010 Q3 and EUR 3.4 billion in 2011 Q2), and in 2011 Q4 – according to the monthly data – it stood at EUR 4.0 billion (as against EUR 6.3 billion a year before)[48]. Improvement in the current account in the second half of 2011 was largely driven by narrowing deficit on goods as well as increasing surplus on services and on current transfers.

The deficit on goods did not change significantly in 2011 Q3, and in 2011 Q4 it decreased as compared to the corresponding period of the previous year. The slowdown in exports driven by a decline in demand in Poland's main trading partners, was coupled with stronger drop in the growth of imports. The latter might have been triggered, to some extent, by deteriorating price competitiveness of foreign goods related to zloty depreciation, which led to a surge in import prices observed since September 2011 (see Chapter 2.1.4 *Import prices*).

Improved absorption of EU funds for investment projects was reflected in stronger inflow of funds to the capital account. In 2011 Q3 the surplus in this account amounted to EUR 1.4 billion and in 2011 Q4 it stood at EUR 3.5 billion (compared to EUR 1.3 and 2.8 billion in respective quarters of 2010).

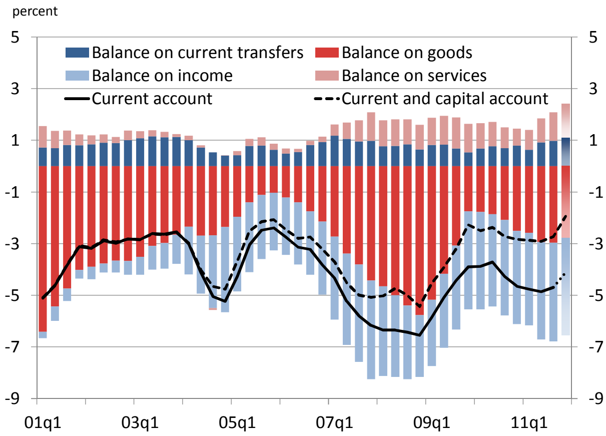
The capital inflows in 2011 Q3 partly offset and in 2011 Q4 more than offset the combined current and capital account deficit. The financial

Figure 2.53
Current account balance (in EUR bn).



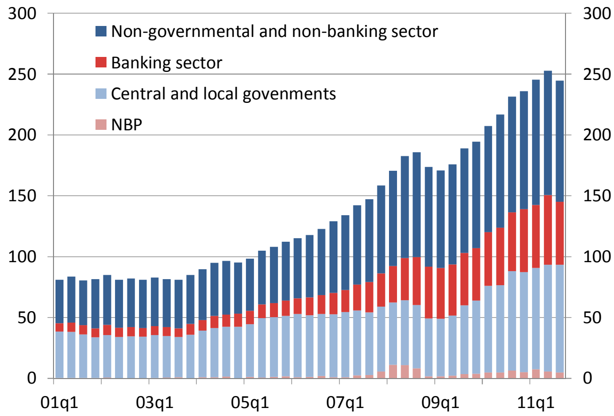
Source: NBP data and estimates.
Data for 2011 Q4 are initial monthly estimates for the period October-December 2011.

Figure 2.54
Current and capital account to GDP (4-quarter rolling window).



Source: NBP data.
Data for 2011 Q4 are initial monthly estimates for the period October-December 2011.

Figure 2.55
External debt of Poland (in EUR bn).



Source: NBP data.

[48] Data for 2011 Q4 are initial monthly estimates for the period October-December 2011.

account surplus amounted to EUR 0.4 billion in 2011 Q3[49] and EUR 1.9 billion in 2011 Q4. This indicates a decrease in net capital inflows as compared to the second half of 2010.

In 2011 Q3 most indicators measuring Poland's external imbalance improved (Table 2.4). In particular, this refers to Poland's foreign debt which decreased by EUR 8.2 billion to EUR 244.7 billion (as compared to the average growth of EUR 7.9 billion over the past eight quarters; Figure 2.55). Poland's net international investment position at the end of 2011 Q3 improved significantly as compared to 2011 Q2. This was mostly driven by exchange differences and valuation errors (Figure 2.56)[50].

Table 2.4

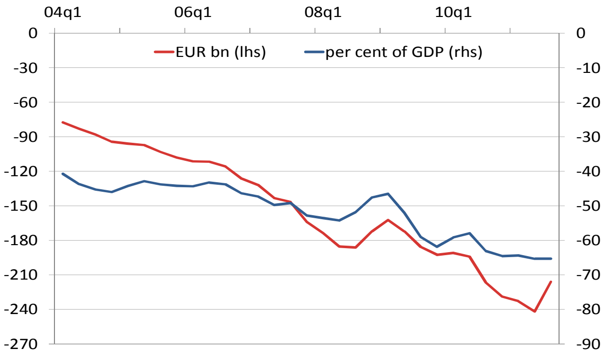
Selected indicators of external imbalances.

	2008	2009	2010	2010 q1	2010 q2	2010 q3	2010 q4	2011 q1	2011 q2	2011 q3
Current account balance/GDP (in %)	-6.6	-3.9	-4.7	-3.9	-3.7	-4.3	-4.7	-4.8	-4.9	-4.7
Current and capital account balance/ GDP (in %)	-5.4	-2.3	-2.8	-2.5	-2.4	-2.7	-2.8	-2.9	-2.9	-2.7
Trade balance / GDP (in %)	-5.8	-1.7	-2.5	-1.8	-1.9	-2.1	-2.5	-2.6	-2.9	-3.0
Gross foreign direct investment/ current account deficit (in %)	43	77	41	86	78	47	41	39	40	58
Gross foreign direct investment/ current and capital account deficit (in %)	51	132	67	134	122	74	67	64	68	99
Official reserve assets in terms of monthly imports of goods and services	3.3	5.3	5.4	5.8	6.0	5.9	5.4	5.6	5.4	5.2
Foreign debt/ GDP (in %)	48	63	67	64	65	67	67	68	69	66
Short-term foreign debt/ official reserve assets (in %)	106	88	82	79	77	79	82	88	87	77
Net international investment position/GDP (in%)	-48	-62	-65	-59	-58	-63	-65	-64	-66	-58

Source: NBP data.

Figure 2.56

Net international investment position of Poland.



Source: NBP data.

Since 2010 Q1 the methodology of computing international investment position of Poland was adjusted to new international standards of the International Monetary Fund, which translated into an increase of Polish direct investments abroad and a decrease of valuation of equity stocks of the foreign direct investment in Poland.

[49] Relatively small financial account surplus in 2011 Q3 resulted mainly from withdrawal from accounts held by non-residents in Polish banks.

[50] For more information on Poland's balance of payments see NBP's *Balance of payments of the Republic of Poland in 2011 Q3* (available only in Polish).

Chapter 3

MONETARY POLICY IN NOVEMBER 2011-MARCH 2012

At the meetings in November, December 2011, as well as in January, February and March 2012 the Monetary Policy Council decided to keep the NBP interest rates unchanged: the reference rate at 4.50% on an annual basis; the lombard rate at 6.00% on an annual basis; the deposit rate at 3.00% on an annual basis; the rediscount rate at 4.75% on an annual basis.

What follows in the next part of the chapter are the previously published *Minutes of the Monetary Policy Council decision-making meetings* held in November, December 2011 and in January, February 2012 as well as the *Information from the meeting of the Monetary Policy Council* in March 2012. *Minutes of the MPC decision-making meeting* in March will be published on 22 March, and after that included in the next *Report*.

Minutes of the Monetary Policy Council decision-making meeting held on 9 November 2011

At its meeting, the Monetary Policy Council discussed the external environment of the Polish economy and the outlook for economic growth and inflation in Poland. In this context, the Council discussed the current and future monetary policy decisions.

While discussing the external environment of the Polish economy, the Council pointed to weak GDP growth in the euro area in 2011 Q3 and high probability of recession affecting the euro area economy in the subsequent quarters, which might be driven by the problems connected with the sovereign debt crisis. In the United States, in turn, GDP growth in 2011 Q3 accelerated slightly. In the opinion of some members of the Council, the US economy could be gradually returning to equilibrium, albeit at higher unemployment rate and weaker potential output growth. At the same time it was emphasized that despite relatively sound economic conditions, the probable recession in the euro area could also translate into a slowdown in economic activity in the United States.

With regard to the euro area sovereign debt crisis, members of the Council pointed out that mere announcements of economic reforms including, in particular, the tightening and coordination of fiscal discipline in the euro area, if not supported with rapid adjustments, might be insufficient to improve financial market sentiment.

It was highlighted that worsening sentiment in the global economy, largely triggered by the euro area crisis and the accompanying tensions in the financial markets, had been translating into the zloty depreciation observed in recent months. Some members of the Council assessed that the resulting higher price competitiveness of domestic output would contain the deceleration in the growth of Polish exports stemming from the anticipated global economic slowdown, particularly in the euro area. The weaker zloty coupled with worsening price competitiveness of imports would be conducive to higher growth of domestic output and improvement in Poland's current account balance.

At the same time, members of the Council indicated that, since a large share of Polish corporate debt was foreign held, depreciation of the zloty would deteriorate the financial account of the balance of payments. Depreciation of the zloty would also result in higher value of domestic debt denominated in foreign currencies which, especially in the case of households, might exacerbate difficulties with debt repayment. This would, in consequence, lead to deteriorating banking sector conditions and curb credit supply. Some members of the Council also highlighted the risk of Poland facing elevated capital outflows, driven by the euro area crisis and unfavourable capital position of European banks, and, as a result, limited credit supply to Polish entities. Other members of the Council argued, however, that weaker economic growth would lead to lower credit demand.

Some members of the Council pointed out that in the case of improving sentiment in the global financial markets gradual appreciation of the zloty was possible, given "undervaluation" of the zloty and the expected reduction of both external imbalance (i.e. improving current account balance) and domestic imbalance (i.e. narrowing public finance deficit) of the Polish economy. It was noted, however, that amid shocks abroad and growing risk aversion that would increase risk premium, volatility of the zloty might remain elevated.

While analysing current situation in Poland, it was pointed out that the GDP data for 2011 Q1 confirmed that relatively high growth had been sustained in that period. Some members of the Council also assessed that the anticipated deceleration in economic growth in Poland would be largely due to growing uncertainty triggered by external factors. In their opinion, it was supported by business condition surveys that pointed to a relatively high capacity utilization. Against this background, some members of the Council noted that concerns about the impact of the current crisis on domestic economic developments in the coming quarters affected considerably stronger business activity than consumers' behaviour, as could be concluded from persistent high growth of retail sales.

As regards the outlook for economic growth in Poland, the members of the Council assessed that despite slight slowdown in GDP growth anticipated for 2012, the growth rate would remain relatively high, especially against significant slowdown in the global economy. Some members of the Council also indicated that GDP growth in 2012 might exceed 3% in year-on-year terms, with private consumption being an important factor supporting it. In the opinion of some members of the Council, the key risk to GDP growth would be private investment growth, with the scope of public investment co-financed with the EU funds likely to diminish.

While discussing inflation developments in Poland, it was pointed out that the currently observed heightened inflation was mainly driven by factors beyond the direct impact of domestic monetary policy decisions, i.e. high commodity prices in the global markets, depreciation of the zloty stemming from growing risk aversion in the global financial markets and a rise in administered prices. The first two of these factors were reflected in high PPI growth. Some members of the Council also indicated that inflation remaining markedly above the target for a longer time was not conductive to anchoring inflation expectations. This, in turn, was reflected in both the worsening perception of inflation and response structure of individuals to the surveys questions on inflation expectations. Factors behind increasing inflation, albeit to a lesser extent, also included demand pressure, stemming mostly from continued relatively high growth of private consumption, translating into rising core inflation. At the same time, some members of the Council pointed to the labour market conditions, in particular to persistently high unemployment rate, declining employment in the corporate sector and moderate wage growth, which contained cost pressure, and, consequently, inflationary pressure. Some members of the Council were of the opinion that inflation was likely to return to the target in the second half of 2012. Among other factors contributing to lower inflation some members of the Council indicated a rise in saving rate in the enterprise sector.

In the opinion of the Council, the key factor containing inflationary pressure in the coming quarters would be a weaker GDP growth, stemming from slower global economic growth. The members of the Council were also of the opinion that lower domestic activity would additionally result from further fiscal tightening. Yet, as regards the impact of fiscal tightening on inflation, some members of the Council assessed that its structure might boost inflation in the short term, as it would largely consist of rises in tax burdens.

At the same time, further pass-through of the zloty depreciation observed over the past few months into domestic prices, coupled with inflationary expectations unanchored at the target level, posed, in the opinion of some members of the Council, the risk of inflation persisting at a heightened level. The Council also pointed to the expected rise in administered prices, excise tax and charges imposed by local governments in 2012, as factors prolonging the return of inflation to the target.

While discussing the NBP interest rates, the Council agreed they should remain unchanged. When justifying the decision, the Council pointed to the currently high uncertainty regarding economic activity and inflation developments both in global and domestic markets. This made it difficult to explicitly assess the probability of inflation remaining above or below the target over the period of the strongest impact of monetary policy on the economy. Moreover, some members of the Council argued that stabilization of monetary policy parameters is conducive, particularly given increased uncertainty, to maintaining macroeconomic stability.

In the opinion of some members of the Council, current inflation persisting at a heightened level and a relatively long period of its expected return to the target might be supportive of an increase in the NBP interest rates. On the other hand, however, the likely global and domestic economic slowdown, should be easing inflationary pressure in the medium term. In these circumstances, in the opinion of some members of the Council, the tightening of monetary policy might additionally weaken domestic economic growth and increase the risk of inflation remaining below the target in the long run.

While discussing future monetary policy, some members of the Council upheld their assessment that the persisting relatively balanced risks to the future inflation justify stabilization of interest rates at present level in the following quarters. The macroeconomic scenario they expected assumed smooth slowdown in economic growth along with a gradual decline in inflation. Yet, according to some members of the Council, it might be justified to tighten monetary policy in the future. In their opinion, this would be due to a high probability of inflation remaining at a heightened level in the coming quarters despite the expected slowdown in economic growth, as supported by lower responsiveness of inflation to the negative output gap, stronger exchange rate pass-through on inflation amidst large and one-directional exchange rate fluctuations and a relatively strong rise in money supply.

Some members of the Council, however, highlighted macroeconomic scenarios justifying future reduction in the interest rates. In their opinion, this would be advisable amidst strong slowdown in economic growth combined with inflation declining to the target.

The Council kept the NBP interest rates unchanged at the following levels: reference rate at 4.50%, lombard rate at 6.00%, deposit rate at 3.00%, rediscount rate at 4.75%.

Minutes of the Monetary Policy Council decision-making meeting held on 7 December 2011

At its meeting, the Monetary Policy Council discussed the external environment of the Polish economy and the outlook for economic growth and inflation in Poland. In this context, the Council discussed the current and future monetary policy decisions.

While discussing the external environment of the Polish economy, the Council pointed to weak GDP growth in the euro area in 2011 Q3 and high probability of recession affecting the euro area economy in the subsequent quarters, which might be driven by the problems connected with the sovereign debt crisis. In the United States, in turn, GDP growth in 2011 Q3 accelerated slightly. In the opinion of some members of the Council, the US economy could be gradually returning to equilibrium, albeit at higher unemployment rate and weaker potential output growth. At the same time it was emphasized that despite relatively sound economic conditions, the probable recession in the euro area could also translate into a slowdown in economic activity in the United States.

With regard to the euro area sovereign debt crisis, members of the Council pointed out that mere announcements of economic reforms including, in particular, the tightening and coordination of fiscal discipline in the euro area, if not supported with rapid adjustments, might be insufficient to improve financial market sentiment.

It was highlighted that worsening sentiment in the global economy, largely triggered by the euro area crisis and the accompanying tensions in the financial markets, had been translating into the zloty depreciation observed in recent months. Some members of the Council assessed that the resulting higher price competitiveness of domestic output would contain the deceleration in the growth of Polish exports stemming from the anticipated global economic slowdown, particularly in the euro area. The weaker zloty coupled with worsening price competitiveness of imports would be conducive to higher growth of domestic output and improvement in Poland's current account balance.

At the same time, members of the Council indicated that, since a large share of Polish corporate debt was foreign held, depreciation of the zloty would deteriorate the financial account of the balance of payments. Depreciation of the zloty would also result in higher value of domestic debt denominated in foreign currencies which, especially in the case of households, might exacerbate difficulties with debt repayment. This would, in consequence, lead to deteriorating banking sector conditions and curb credit supply. Some members of the Council also highlighted the risk of Poland facing elevated capital outflows, driven by the euro area crisis and unfavourable capital position of European banks, and, as a result, limited credit supply to Polish entities. Other members of the Council argued, however, that weaker economic growth would lead to lower credit demand.

Some members of the Council pointed out that in the case of improving sentiment in the global financial markets gradual appreciation of the zloty was possible, given "undervaluation" of the zloty and the expected reduction of both external imbalance (i.e. improving current account balance) and domestic imbalance (i.e. narrowing public finance deficit) of the Polish economy. It was noted, however, that amid shocks abroad and growing risk aversion that would increase risk premium, volatility of the zloty might remain elevated.

While analysing current situation in Poland, it was pointed out that the GDP data for 2011 Q1 confirmed that relatively high growth had been sustained in that period. Some members of the Council also assessed that the anticipated deceleration in economic growth in Poland would be largely due to growing uncertainty triggered by external factors. In their opinion, it was supported by business condition surveys that pointed to a relatively high capacity utilization. Against this background, some members of the Council noted that concerns about the impact of the current crisis on domestic economic developments in the coming quarters affected considerably stronger business activity than consumers' behaviour, as could be concluded from persistent high growth of retail sales.

As regards the outlook for economic growth in Poland, the members of the Council assessed that despite slight slowdown in GDP growth anticipated for 2012, the growth rate would remain relatively high, especially against significant slowdown in the global economy. Some members of the Council also indicated that GDP growth in 2012 might exceed 3% in year-on-year terms, with private consumption being an important factor supporting it. In the opinion of some members of the Council, the key risk to GDP growth would be private investment growth, with the scope of public investment co-financed with the EU funds likely to diminish.

While discussing inflation developments in Poland, it was pointed out that the currently observed heightened inflation was mainly driven by factors beyond the direct impact of domestic monetary policy decisions, i.e. high commodity prices in the global markets, depreciation of the zloty stemming from growing risk aversion in the global financial markets and a rise in administered prices. The first two of these factors were reflected in high PPI growth. Some members of the Council also indicated that inflation remaining markedly above the target for a longer time was not conductive to anchoring inflation expectations. This, in turn, was reflected in both the worsening perception of inflation and response structure of individuals to the surveys questions on inflation expectations. Factors behind increasing inflation, albeit to a lesser extent, also included demand pressure, stemming mostly from continued relatively high growth of private consumption, translating into rising core inflation. At the same time, some members of the Council pointed to the labour market conditions, in particular to persistently high unemployment rate, declining employment in the corporate sector and moderate wage growth, which contained cost pressure, and, consequently, inflationary pressure. Some members of the Council were of the opinion that inflation was likely to return to the target in the second half of 2012. Among other factors contributing to lower inflation some members of the Council indicated a rise in saving rate in the enterprise sector.

In the opinion of the Council, the key factor containing inflationary pressure in the coming quarters would be a weaker GDP growth, stemming from slower global economic growth. The members of the Council were also of the opinion that lower domestic activity would additionally result from further fiscal tightening. Yet, as regards the impact of fiscal tightening on inflation, some members of the

Council assessed that its structure might boost inflation in the short term, as it would largely consist of rises in tax burdens.

At the same time, further pass-through of the zloty depreciation observed over the past few months into domestic prices, coupled with inflationary expectations unanchored at the target level, posed, in the opinion of some members of the Council, the risk of inflation persisting at a heightened level. The Council also pointed to the expected rise in administered prices, excise tax and charges imposed by local governments in 2012, as factors prolonging the return of inflation to the target.

While discussing the NBP interest rates, the Council agreed they should remain unchanged. When justifying the decision, the Council pointed to the currently high uncertainty regarding economic activity and inflation developments both in global and domestic markets. This made it difficult to explicitly assess the probability of inflation remaining above or below the target over the period of the strongest impact of monetary policy on the economy. Moreover, some members of the Council argued that stabilization of monetary policy parameters is conducive, particularly given increased uncertainty, to maintaining macroeconomic stability.

In the opinion of some members of the Council, current inflation persisting at a heightened level and a relatively long period of its expected return to the target might be supportive of an increase in the NBP interest rates. On the other hand, however, the likely global and domestic economic slowdown, should be easing inflationary pressure in the medium term. In these circumstances, in the opinion of some members of the Council, the tightening of monetary policy might additionally weaken domestic economic growth and increase the risk of inflation remaining below the target in the long run.

While discussing future monetary policy, some members of the Council upheld their assessment that the persisting relatively balanced risks to the future inflation justify stabilization of interest rates at present level in the following quarters. The macroeconomic scenario they expected assumed smooth slowdown in economic growth along with a gradual decline in inflation. Yet, according to some members of the Council, it might be justified to tighten monetary policy in the future. In their opinion, this would be due to a high probability of inflation remaining at a heightened level in the coming quarters despite the expected slowdown in economic growth, as supported by lower responsiveness of inflation to the negative output gap, stronger exchange rate pass-through on inflation amidst large and one-directional exchange rate fluctuations and a relatively strong rise in money supply.

Some members of the Council, however, highlighted macroeconomic scenarios justifying future reduction in the interest rates. In their opinion, this would be advisable amidst strong slowdown in economic growth combined with inflation declining to the target.

The Council kept the NBP interest rates unchanged at the following levels: reference rate at 4.50%, lombard rate at 6.00%, deposit rate at 3.00%, rediscount rate at 4.75%.

Minutes of the Monetary Policy Council decision-making meeting held on 11 January 2012

At its meeting, the Monetary Policy Council discussed current and future monetary policy decisions against the background of expected growth and inflation trends in Poland, which will be strongly affected by both external conditions (growth outlook abroad, situation in the financial markets, commodity prices) and domestic factors, as well as the exchange rate developments.

While analysing the situation in the Polish economy, the members of the Council pointed out that current data on industrial output, construction and assembly output and retail sales indicate that growth continues to be relatively strong. Few members of the Council also highlighted a stable rise in loans - despite prior interest rate increases - as a sign of relatively good business conditions still prevailing. At the same time, it was emphasised that in the coming quarters, a slowdown in economic activity at home can be expected. It was pointed out that uncertainty related to the external environment of the Polish economy, including the scale of the slowdown abroad and potential impact of the turmoil in the global financial markets on the Polish economy, combined with the uncertain pace and structure of further fiscal tightening at home, make it difficult to assess how strong the deceleration in the growth of demand in Poland would be.

While discussing the external conditions of the domestic economic climate, members of the Council indicated that tensions in the financial markets resulting from the sovereign debt crisis in the euro area persist, and growth forecasts for the region continue to be revised downwards. Few members of the Council emphasised the risk of heavy lending constrains in the euro area countries, which would further deteriorate growth outlook for the region. Other members of the Council, however, assessed the risk of further marked weakening in growth forecasts for the euro area as limited, in particular for countries being Poland's main trading partners.

In the opinion of few members of the Council, tensions in the European banking system may translate into constraints on lending in Poland. However, with reference to the risk that foreign banks might curb the funding for lending purposes in Poland, other members of the Council assessed it to be small, and given the significant number of enterprises financing themselves from their own funds or directly from abroad, possible constraints on lending imposed by domestic banks should not significantly undermine enterprises' activity in Poland.

Referring to the outlook for foreign trade, some members of the Council argued that a weaker zloty would alleviate the effects of the decreasing foreign demand for Polish goods by improving their price competitiveness. Other members of the Council pointed out that due to a large share of intra-corporate trade in Polish exports, the volume of foreign trade is hardly sensitive to exchange rate fluctuations. Most members of the Council assessed, however, that in the subsequent quarters Poland's trade balance should improve and net exports should contribute positively to GDP growth.

In the opinion of some members of the Council, a slowdown in economic activity in Poland may be weaker than previously expected, as output growth remains relatively stable in spite of a decline in the leading business climate indicators. Moreover a continued rise in investment loans to enterprises and a steep growth in mortgage loans to households additionally support this opinion. Those members of the Council also pointed out that activity in the euro area will be the weakest in the countries most severely affected by the debt crisis, whose links with the Polish economy are not particularly close. They also emphasised that in the previous years, the Polish economy developed at a relatively fast rate even in the face of sluggish growth in the euro area.

Few members of the Council indicated, instead, that the economic slowdown in Poland may be more severe than previously anticipated. In the opinion of those members of the Council, this scenario is supported by worsening investment outlook of enterprises combined with the expected weakening in the public sector investment activity. At the same time, other element of fiscal tightening - the freeze on wages in the government sector - will curtail the growth of consumption. A similar effect will be brought about by unemployment rate persisting at an elevated level, which may dampen wage growth throughout the economy.

When discussing inflationary developments, attention was drawn to a higher than expected rise in inflation in November 2011 and an upward revision of inflation forecasts for the coming year, both resulting to a large degree from the hitherto depreciation of the zloty. It was pointed out that the persisting elevated inflation was accompanied by a considerable rise in inflation expectations of individuals and enterprises.

Some members of the Council emphasised that while inflation should gradually decrease over the coming months, it would probably remain above the NBP target for a longer time than hitherto envisaged. Increases in the rates of indirect taxes and in administered prices were indicated as the factors continuously contributing to rising inflation.

Moreover, few members of the Council additionally pointed out that unit labour costs might limit inflationary pressure to a lesser extent than in the previous years. In their opinion, a significant increase in minimum wages, a rise in disability pension contribution and the rising percentage of long-term unemployed - who are less competitive as compared with employees and those actively seeking jobs - combined with decreasing labour productivity resulting from the expected deterioration in business climate, will trigger a higher growth in unit labour costs.

Referring to the external conditions for inflationary processes, few members of the Council emphasised that in the medium term a significant curbing of inflation in Poland would be made difficult by the persistently elevated inflation abroad and continuously high commodity prices in the global markets, related - in their opinion – to strongly expansionary monetary policy pursued by major central banks, including considerable excess liquidity in the global financial markets. Apart from expansionary monetary policy, high commodity prices will be also supported by: continued growth in demand from the developing countries and a possible mounting of political tensions in the commodity-exporting countries. According to those members of the Council, a lowering of inflation at home will be additionally made difficult by weaker anti-inflationary impact of imports from low-cost countries, where rate of growth of labour costs exceeds that of labour productivity and a relative appreciation of their currencies follows.

As regards the monetary policy decisions implemented so far, the members of the Council assessed that the NBP interest rate increases in the first half of 2011 and the following stabilisation of monetary policy parameters in the second half of 2011 have been conducive to maintaining macroeconomic stability. In the last months of 2011, earlier signs of significant economic slowdown in Poland were not confirmed, while inflation increased, thus adding to the risk of inflation persisting above the target. Few members of the Council additionally pointed out that although the NBP interest rates remained unchanged, the depreciating exchange rate and rising inflation have resulted in easier monetary conditions in the recent months.

While discussing the decision on the NBP interest rates, the members of the Council agreed they should remain unchanged at the current meeting. As a main argument in favour of this decision a high uncertainty of economic activity in the coming quarters was mentioned. With reference to future monetary policy decisions, on the other hand, most members of the Council were of the opinion that should the relatively fast domestic growth, elevated inflation and high inflation expectations continue, the increase in NBP interest rates cannot be ruled out. It was pointed out that in assessing the outlook for medium-term growth and inflation, the incoming data on economic activity and inflationary processes in Poland in the coming months as well as the NBP March projection would be helpful.

Most members of the Council emphasised that a possible future decision to raise the NBP interest rates would be justified if the economic activity were to decelerate only slightly and inflation were not be in a clear downward trend. An important argument in favour of such a decision would also be the end of downward revisions of the euro area growth forecasts. Moreover, those members of the Council pointed out that future decisions on monetary policy would be greatly affected by the assessment of the implementation of further fiscal tightening.

At the same time, few members of the Council argued that in case of a considerable economic slowdown or a significant appreciation of the zloty, a cut in the NBP interest rates may prove justified.

The Council decided to keep the NBP interest rates unchanged at the following levels: reference rate at 4.50%, lombard rate at 6.00%, deposit rate at 3.00%, rediscount rate at 4.75%.

Minutes of the Monetary Policy Council decision-making meeting held on 8 February 2012

At its meeting, the Monetary Policy Council discussed the current and future monetary policy decisions against the background of external and domestic macroeconomic developments, including inflationary processes in the Polish economy.

While discussing the external conditions of the Polish economy, attention was drawn to the further downward revisions of GDP growth forecasts for the euro area, suggesting stagnation in the euro area economy in 2012. Some Council members pointed out that banks' efforts to increase their equity capital posed risk of further reduction in lending in the euro area countries, what would additionally worsen the outlook for the euro area growth. At the same time, it was noted that the business climate in the United States had improved, although some members of the Council argued that the acceleration in consumption in 2011 Q4, may turn out to be temporary and it should be expected that subsequent quarters will bring weaker growth in the US economy.

While analysing the external environment of the Polish economy, members of the Council drew attention to the fact that despite persisting uncertainty connected with the fiscal crisis in some euro area countries, the sentiment in the global financial markets improved. This was reflected in the appreciation of currencies of developing economies, including the zloty. At the same time, the Council members emphasised that it was difficult to assess whether zloty strengthening would be sustained. This was due to the fact that although the equilibrium exchange rate most probably remained stronger than the market rate, the zloty exchange rate is currently primarily driven by global factors, including, in particular, changes in risk aversion in the financial markets.

While discussing the outlook for the growth in domestic economy, members of the Council pointed to signs of weakening in economic activity, in particular, to slowdown in the growth of Polish exports to the euro area, persistently heightened unemployment rate and weaker growth in household lending. Yet, in the opinion of some Council members, the slowdown in the domestic economic activity may be less pronounced than previously anticipated, which is suggested by an improvement in some economic climate indicators pointing to a relative resilience of the Polish economy to the worsening of business activity abroad.

Some members of the Council assessed, however, that GDP growth in Poland was likely to decline substantially, what, in their opinion, would be driven, on the one hand, by further fiscal tightening, and, on the other hand, by weaker private consumption growth, being the result of the rebuild of household savings, following a considerable fall in the savings rate observed in the recent period. At the same time, according to those Council members, slight decline in production capacity utilization, considerable uncertainty and a large share of replacement investment in total corporate investments, which can easily be discontinued, make further investment acceleration rather unlikely. Additionally, the appreciation of the zloty, amidst worsening business climate abroad, is likely to lower net exports contribution to domestic GDP growth.

While discussing inflationary developments, members of the Council emphasized that the anticipated weakening of the domestic economic activity, connected with both slowdown in the global economic growth, as well as, tightening of the domestic fiscal policy, would support gradual decline in inflation. Also, the appreciation of the zloty at the beginning of 2012 would be a factor lowering inflation. It was pointed out that inflationary pressure in the subsequent quarters would also be curbed by elevated unemployment and low wage pressure.

At the same time, some members of the Council pointed out that inflation in Poland had been running above the upper limit for deviations from the target, i.e. 3.5%, for a year now. Members of the Council also emphasized that despite some decline in inflation, the NBP short-term forecasts pointed to a risk of inflation remaining above the target of 2.5% throughout 2012. In turn, in the opinion of few Council members, inflation persisting above the target for an extended period of time creates a risk of wider indexation of contracts, including wage contracts, which would be a factor strengthening inflation persistence and preventing it from returning to the target. Those Council members pointed out that a similar effect may be brought about by inflation expectations of both households and corporates running at an elevated level.

Members of the Council emphasized that growth in energy prices would continue to push up domestic inflation. Against this background, it was noted that the persistently growing demand for oil in the global economy, amidst limited growth of oil supply (especially, taking into account geopolitical tensions in the oil mining regions), may contribute to higher crude oil prices also in the long-term, limiting inflation decline in Poland. Some members of the Council pointed out that the NBP surveys showed an increase in the number of companies intending to raise prices of their products in response to the expected further surge in prices of commodities and materials. In the opinion of few Council members, domestic inflation may also be increased by higher inflation abroad, should the expansionary policy pursued by major central banks, including continued quantitative easing, translate into global inflationary pressure.

Few Council members additionally pointed out that amidst the expected decline in domestic economic activity, budget revenues growth may be lower than assumed what, considering the planned scale of fiscal tightening, posed a risk of indirect tax increases. This would, in turn, translate into further price increase in the Polish economy, extending the period of heightened inflation.

Moreover, few Council members noted that despite keeping the NBP interest rates unchanged in the recent period, interest rate increase in the interbank market in 2011 Q4 meant that monetary policy conditions in Poland became more restrictive, in particular, taking into account the appreciation of the zloty at the beginning of 2012.

However, some members of the Council argued that the real interest rates were not high, considering the structural factors and the current macroeconomic situation in Poland. Those Council members also pointed out that the total increase in interest on loans to the private sector in 2011 was, despite interest rate rise in the interbank market at the end of 2011, somewhat lower than the increases in the NBP reference rate implemented by the Council in the first half of 2011. Moreover those Council members emphasized that the growth in money supply had been on the rise, reaching now a relatively high level.

While discussing the decision on the NBP interest rates, the members of the Council agreed that they should remain unchanged at the current meeting. As regards future monetary policy decisions, the majority of the Council members maintained their view that should the relatively fast domestic economic growth, elevated inflation and high inflation expectations continue, the increase in the NBP interest rates cannot not be ruled out. The majority of the Council members also pointed out that the decrease in inflation driven by the expected decline in demand might prove slower than previously anticipated. In this context, it was still emphasized that the incoming data on economic activity and inflationary processes in Poland in the coming months, as well as the NBP March projection, would be helpful in assessing the outlook for medium-term growth and inflation.

The Council decided to keep the NBP interest rates unchanged at the following levels: reference rate at 4.5%, lombard rate at 6.0%, deposit rate at 3.0% and rediscount rate at 4.75%.

Information from the meeting of the Monetary Policy Council held on 6-7 March 2012

The Council decided to keep the NBP interest rates unchanged, i.e.: reference rate at 4.50% on an annual basis; lombard rate at 6.00% on an annual basis; deposit rate at 3.00% on an annual basis; rediscount rate at 4.75% on an annual basis.

Global economic growth remains low. Acceleration in GDP growth in the United States is accompanied by a recession in the euro area and a slowdown in most major emerging economies. At the same time, since the previous meeting of the Council selected leading indicators have improved, what points to possible stabilization of economic activity in some countries. Yet, global economic growth is being hampered by the ongoing process of adjustments in the balance sheets of enterprises and households in some developed countries.

Inflation abroad remains heightened, although is gradually declining. High commodity prices, including crude oil prices, which have been recently on the rise again, are one of the main factors behind elevated inflation. Uncertainty related to the sovereign debt crisis in some euro area countries has persisted.

The Council got acquainted with the projection of inflation and GDP prepared by the Economic Institute of the NBP, being one of the inputs to the Council’s decisions on the NBP interest rates.

The March inflation and GDP projection implies that GDP growth will decelerate in the coming quarters and – following global economic recovery – will start to rise again in mid-2013. At the same time, inflation will be gradually declining, coming close to the inflation target in late 2013.

In line with the March projection based on data available up to 24 January 2012 (cut-off date for the projection) – under the assumption of constant NBP interest rates – there is a 50-percent probability of inflation running in the range of 3.6-4.5% in 2012 (compared to 2.5-3.9% in the November projection), 2.2-3.6% in 2013 (as against 2.2-3.7%) and 1.2-3.0% in 2014. In turn, with a 50-percent probability the March projection sees the annual GDP growth in the range of 2.2-3.8% in 2012 (compared to 2.0-4.1% in the November projection), 1.1-3.5% in 2013 (as against 1.5-4.0%) and 1.9-4.4% in 2014. Information incoming after 24 January 2012, including in particular lower than expected inflation in January and significant zloty appreciation, allow for the assessment that CPI inflation in 2012 and 2013 will be lower than indicated in the March projection of Economic Institute by respectively 0.3-0.4 and 0.2-0.3 percentage points.

Data on 2011 Q4 GDP in Poland as well as data on output and retail sales in the early 2012 indicate that economic growth has remained robust. However, relatively low level of most leading business indicators suggests that economic activity may weaken in the coming quarters.

In 2011 Q4, the number of the employed in the economy increased. At the same time, however, a rise in the number of the economically active contributed to a higher unemployment rate, which continues to curb wage growth in the economy. The substantial acceleration of wage growth in enterprises observed in January 2012 was probably due to temporary factors. Lending to corporates continued to increase. Yet, there was a decrease in lending to households in January, which was the result of further decline in consumer loans and slower growth in mortgage lending.

According to preliminary GUS data, in January 2012 the annual CPI decreased to 4.1%, though remaining markedly above the NBP's inflation target of 2.5%. NBP estimates also point to a substantial decline in core inflation. In turn, inflation expectations of households and financial sector analysts – despite some improvement – remained elevated. Also growth of producer prices remained elevated.

In the opinion of the Council, in the short term inflation – despite some expected decline – will probably remain above the NBP's inflation target. Heightened inflation will be supported by the previously observed zloty depreciation and persistently high commodity prices, which may lead to further rise in energy prices.

In turn, in the medium term, inflation will be curbed by the expected deceleration of economic growth amid moderate wage growth as well as continued fiscal tightening. The zloty appreciation at the beginning of 2012 will also be conducive to lower inflation.

The Council decided to keep the NBP interest rates unchanged. The Council does not rule out the possibility of further monetary policy adjustments in the future, should the positive signs of economic activity in Poland continue and the outlook for inflation returning to the target fail to improve.

The Council has adopted the *Inflation Report - March 2012.*

Chapter 4

PROJECTION OF INFLATION AND GDP

This inflation and GDP projection was prepared by the Economic Institute of the National Bank of Poland and presents a forecast of economic developments under the assumption of constant NBP interest rates. In terms of contents, work relating to the creation of this projection was supervised by Andrzej Sławiński, Director of the Economic Institute. The process was coordinated by the Bureau of Macroeconomic Forecasts of the Economic Institute. Using the macroeconomic model NECMOD[51], the projection was prepared as the 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 is one of the inputs to the Monetary Policy Council's decision making process concerning NBP interest rates.

The March projection based on the NECMOD model covers the period from 2012 Q1 to 2014 Q4. The starting point for the projection is 2011 Q4. The cut-off date for data used in the projection is 24 January 2012.

[51] A current version of the documentation of the model is available at the NBP website.

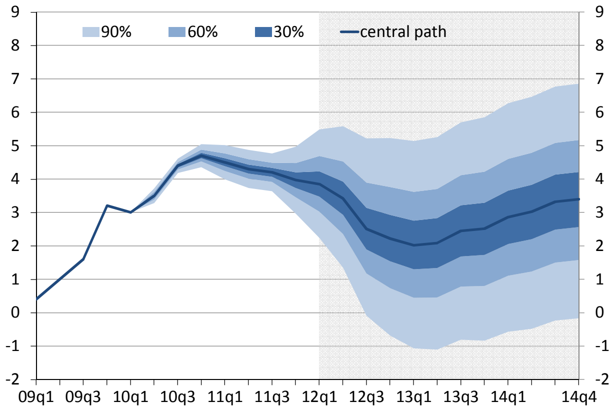
4.1. Summary

In line with the March inflation projection assumptions, following two years of growth the euro area entered a recession stage again in 2011 Q4. At the same time, energy commodity prices (crude oil, gas, and coal) expressed in zloty terms are higher than those observed before the global financial crisis, supported by surging demand from emerging markets, the limited capacity to expand commodities supply within a short period of time, political risk persisting in some oil-producing countries and a weaker zloty exchange rate against major currencies. In spite of unfavourable external conditions, the Polish economy continues to grow at a robust pace – a preliminary CSO estimate released on 27 January shows the country's GDP to have expanded by 4.3% in 2011. Economic growth in this period was supported by high absorption of EU funds (estimated at above PLN 60 billion) and the related rise in public investment, combined with relatively strong economic conditions in Germany, the main recipient of Polish exports. Another driver of 2011 Q4 GDP growth was the weakening zloty which enhanced the price competitiveness of Polish exports. Amid only a moderate impact of the global financial crisis on the situation of households in Poland (both employment and real wages increased as compared to their pre-crisis levels) as well as enterprises (the sector continues to show sound financial performance), consumption and investment both made a substantial contribution to GDP growth in 2011.

Over the projection horizon, the positive impact of the factors above will gradually wear off. In 2012, GDP in the euro area as a whole is forecasted to decline, while growth in the German economy will subside to levels slightly above zero. As the zloty depreciation observed at the end of 2011 resulted mainly from higher risk

Figure 4.1

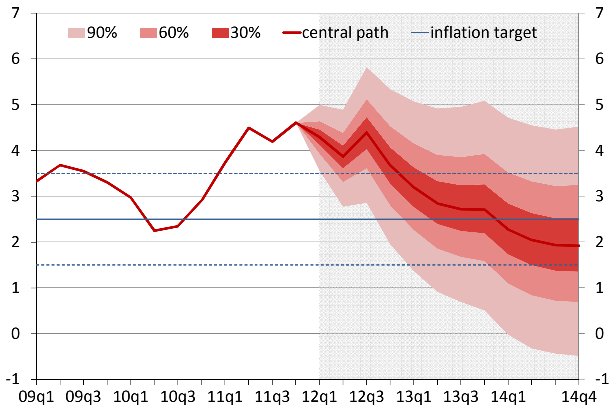
GDP (y/y, %).



Source: NBP (if not otherwise stated, this concerns all the figures and tables in this Chapter).

Figure 4.2

CPI inflation (y/y, %).



aversion in the global financial markets and its deviation from the equilibrium exchange rate increased, a certain appreciation of the zloty rate is expected within the projection horizon against its 2011 Q4 levels. Therefore, in the middle of the forecast horizon, the zloty exchange rate will cease to support domestic economic growth. In 2012-2013 a fiscal policy tightening aimed at reducing the deficit of the general government sector to a level allowing Poland to exit the excessive deficit procedure is anticipated. In the years 2013-2014, the absorption of EU funds is expected to fall off, along with public expenditure on co-financing of EU projects. As labour market conditions deteriorate, financing consumption by decreasing the savings ratio will be gradually constrained over the projection horizon. Thus, it can be expected that economic growth in Poland will slow down considerably over the projection horizon (to 2.3% in 2013), even though the downturn in the domestic economy will lag (by approx. two quarters) behind the slowdown observed in the euro area. In the longer projection horizon, GDP growth will accelerate to above 3% y/y, as the situation abroad improves, the fiscal tightening process loses momentum, and the downward trend in the inflow of EU fund levels off.

In the short projection horizon, CPI inflation will remain high, close to 4% y/y (Figure 4.2), due to the zloty depreciation at the end of 2011, unfavourable supply conditions driving up domestic food and energy prices as well as regulatory changes (increase in the excise tax on diesel oil and in the disability pension contribution, the policy of the Energy Regulatory Office). In the medium-term projection horizon, inflation will decrease, as the inflationary impulse of last year's zloty depreciation gradually wanes, domestic economic growth slows down, and global prices of energy and agricultural commodities come down in the wake of the global economic slowdown. The downward trend of inflation will be partially curbed in 2013 by the effects of the introduction of carbon emission fees resulting from Poland's adoption of the climate and energy package. In 2014, inflation will also be stemmed by the strengthening exchange rate and a further decline in global prices of agricultural commodities. Other factors conducive to lower inflation include the reduction in the basic VAT rate back to its 2010 level and the anticipated decrease of the impact of the introduction of carbon emission fees on year-on-year CPI in 2013. Dampened by the factors above and given a moderate scale of economic recovery, inflation will subside below the inflation target (Figure 4.21).

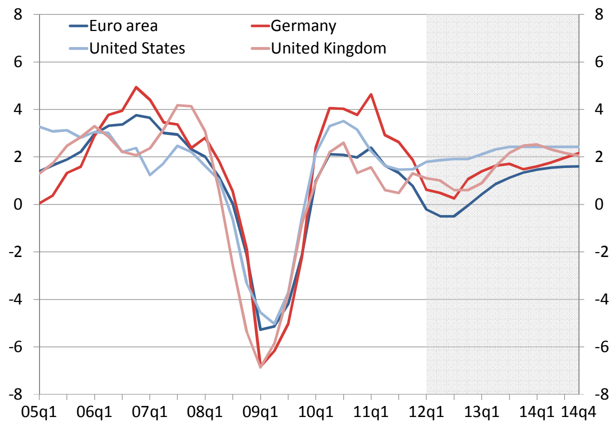
Uncertainty surrounding the inflation and GDP forecast stems mainly from possible developments in the euro area and the related trends in the zloty exchange rate. In our assessment, the likelihood that the deterioration in the growth prospects abroad will prove more extensive than assumed in the central projection (which might be the case should the sovereign debt crisis in the euro area aggravate) is currently on a par with the probability that the situation in the external environment of Poland will prove better (in terms of stronger GDP growth) than the central projection assumes. This means that the uncertainty distributions reflected in the fan charts of inflation and GDP forecasts are symmetrical (Figures 4.1 and 4.2).

4.2. External environment

The data released over the last quarter of 2011 suggest that the euro area economy (as well as Great Britain) will most probably expand much more slowly in 2012 than anticipated in the previous forecast round (Figure 4.3). Factors in support of a downward revision of the forecast for euro area economic growth include mounting concerns about a new exacerbation of the sovereign debt crisis and the anticipated further fiscal policy tightening in some euro area

Figure 4.3

GDP abroad (y/y, %).



countries. That such a scenario is highly likely is among other things evidenced by current business condition indicators (in particular, the €-coin index running at a level indicating a moderate recession as early as in 2011 Q4) and by a marked deterioration in the sentiment of corporates and households, coupled with tightening of credit conditions in this group of countries. In the United States, in turn, economic growth is expected to accelerate moderately, which should be supported by a gradual recovery in the labour market and a rebound of consumption and investment demand. In the longer-term projection horizon, the situation in the euro area is expected to normalise and GDP growth in countries being Poland's main trading partners will gradually recover.

Some of the consequences of flagging economic activity in the euro area and Great Britain in 2012 include downward revisions of inflation forecasts in these economies (Figure 4.4) and a lower anticipated interest rate path (Figure 4.5) in comparison with the November projection. In the current projection, it is assumed that interest rate increases in the euro area – following possible cuts earlier in the projection horizon – will not take place before the second half of 2013. On the other hand, assumptions concerning monetary policy developments in the United States have not changed – interest rate increases are not expected until the first half of 2014. In the face of a deceleration of the potential output growth rate in the European economies, narrowing interest rate disparity and the mounting uncertainty relating to the sovereign debt crisis in the euro area, the current projection assumes the USD/EUR exchange rate to run at a level close to 1.30, i.e. lower than envisaged in the previous projection.

Trends in energy commodity prices within the projection horizon (Figure 4.6) are affected by less favourable prospects of global economic growth as compared with the previous forecast

Figure 4.4

Inflation abroad (y/y, %).

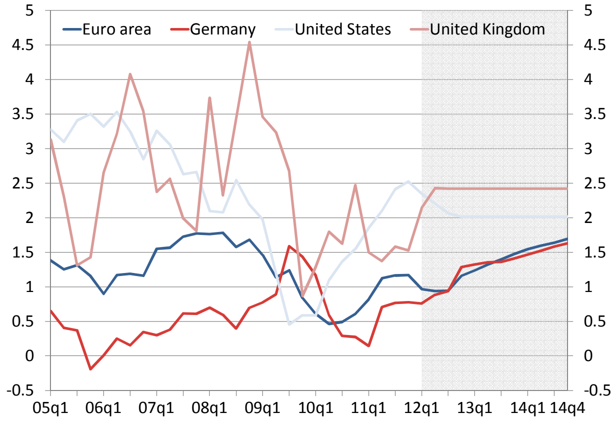


Figure 4.5

Interest rate abroad (%).

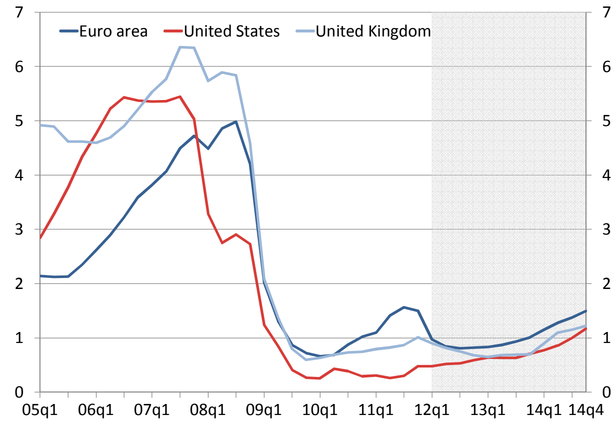
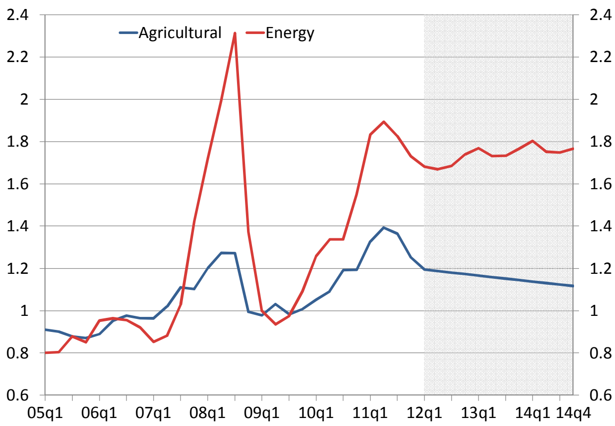


Figure 4.6

Index of commodity prices in the global markets (USD, 2009=1).



round and the heightened geopolitical risk. The global economic slowdown translates into lower prices of coal and natural gas in 2012. The decline of crude oil prices in 2012 will be only marginal, as there is a risk of oil supplies being restricted as a result of continued political tensions in the Middle East. We assume that global demand will gradually recover in the long-term projection horizon, triggering a mild increase in coal and natural gas prices (albeit to levels lower than assumed in the previous forecast round) and a moderate decline in crude oil prices due to the expected waning impact of geopolitical risks upon the prices of this commodity.

Weaker global conditions, particularly in 2012, will translate into moderation of global demand for agricultural commodities used for both consumption and industrial purposes. A further reduction in agricultural commodity prices in the forecast horizon (Figure 4.6) will be driven by the expected improvement in agrometeorological conditions back to the long-term average, as opposed to the unfavourable conditions over the last few years. In the long-term projection horizon, this trend should be supported by decreasing crude oil prices, which determine the costs of agricultural production and prices of bio-fuels.

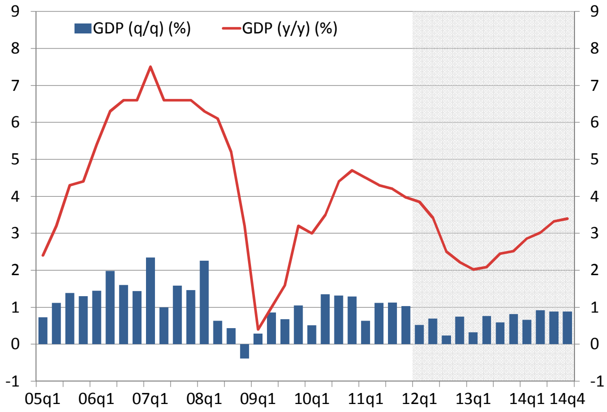
4.3. Polish economy in 2012-2014

Aggregate demand

The robust domestic demand recovery, at over 4% y/y, which contributed the bulk of economic growth between 2010 Q2 and 2011 Q2, lost its momentum in the second half of 2011. In the last two quarters of 2011, net exports, fuelled by the weak zloty exchange rate, kept GDP growth up at a level close to 4% y/y. Economic growth will continue to decelerate until early 2013, reaching approx. 2% y/y (Figures 4.7 and 4.8). Slow output growth in 2012-2013 will be the effect of

Figure 4.7

Economic growth.



unfavourable business conditions abroad, measures aimed at curbing the public finance sector deficit, shrinking absorption of EU transfers, limited consumption growth and the completion of the inventory rebuilding process.

In 2014, domestic demand will gradually recover, supported by consumption growth, a deceleration in the fiscal tightening process, faster expansion in corporate investment, tempering of the downward trend in EU fund utilisation and an improvement in the conditions abroad. GDP growth will increase to above 3% y/y, with falling net exports contribution to growth.

In 2012-2013, private consumption growth will decline in comparison to its 2010-2011 levels, when it contributed substantially to GDP growth (Figure 4.9). This will be related to a deterioration of labour market conditions (entailing slower growth of income from hired work), slower rise in income from own-account activities (due to the economic slow-down), lower social transfers and inflation staying at a relatively high level. These factors will bring real disposable income growth to a level only slightly above zero in 2012-2013. A one-off factor supporting consumption in 2010-2011 was the decline in households' savings rate. However, given the historically low savings rate, the decline in lending, and households' rising concerns relating to future business conditions, the contribution of this factor will gradually wear off. Public consumption, following a decline in 2011, will rise only at moderate pace in 2012-2013 due to fiscal consolidation measures in the public finance sector (including a wage freeze in the government sector in 2012 and the implementation of fiscal rules). In 2014, a slight rise of the private consumption growth rate may be expected, related to improving labour market conditions and stronger disposable income growth (as a result of falling inflation rate, among other factors). As the impact of fiscal rules will probably prove weaker than in the preceding

Figure 4.8

GDP growth (y/y, %) – breakdown.

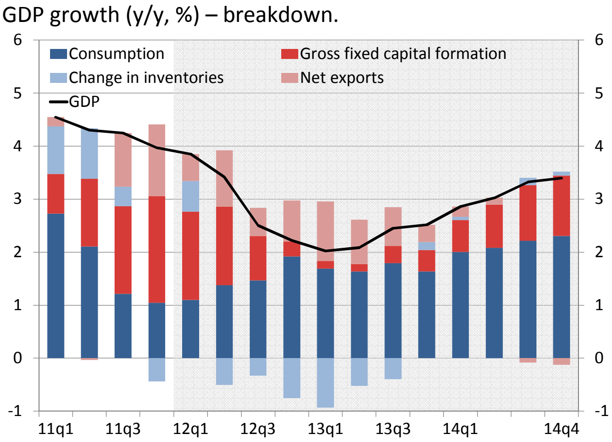
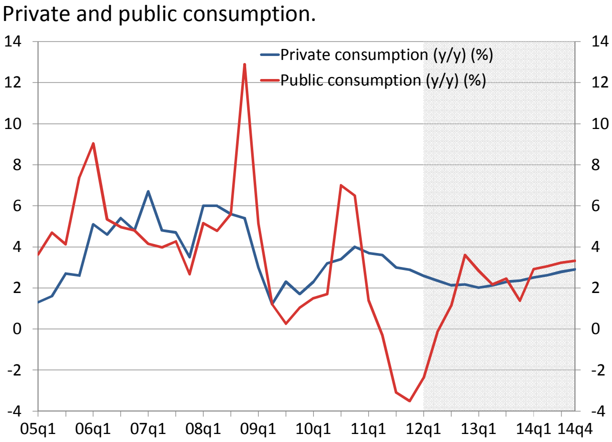


Figure 4.9

Private and public consumption.



years, an increase in the growth rate of public consumption is likely in 2014.

Gross fixed capital formation in 2013 will slow down to 1.2% (as compared to the high value of 8.7% registered in 2011), to subsequently rebound to 4.3% in 2014. In this period, changes in total investment will be primarily driven by changes in public sector investment expenditures (Figure 4.10), substantially financed by the inflow of EU structural funds (Figure 4.11). In 2012, the absorption of EU funds and the related general government sector co-financing expenditure will run at levels similar to those observed in 2011, while in 2013 and 2014 they will fall off (Figure 4.11). This trend is reflected in the government plans announced in the *Draft 2012 Budget Act* and the *National Road Construction Programme for 2011-2015*. The public investment dynamics will be probably dampened also by the likely reduction in investment outlays of local government entities due to their rising debt and the fiscal rules in force. Corporate gross fixed capital formation growth will remain relatively stable in 2012-2013. The sizeable drop in corporate investment during the recent slow-down (i.e. the postponement of new project launches) increases the magnitude of the required replacement investment, which is mirrored in the rising production capacity utilisation. Therefore, in spite of the deteriorating situation in the euro area in the coming quarters in addition to flagging domestic activity, the drop in corporate investment growth will be mild. Corporate investment will be supported by the sound situation of the enterprise sector and low cost of capital utilisation (resulting from the projection's assumption of a constant NBP reference rate and relatively high inflation rate). In 2014, an increase in dynamics of gross fixed capital formation will result from a rise in EU capital transfer dynamics (fund inflow will level off after a substantial drop in 2013) and the accelerating growth of corporate investment (related to improving business conditions at

Figure 4.10

Gross fixed capital formation (y/y, %) – breakdown.

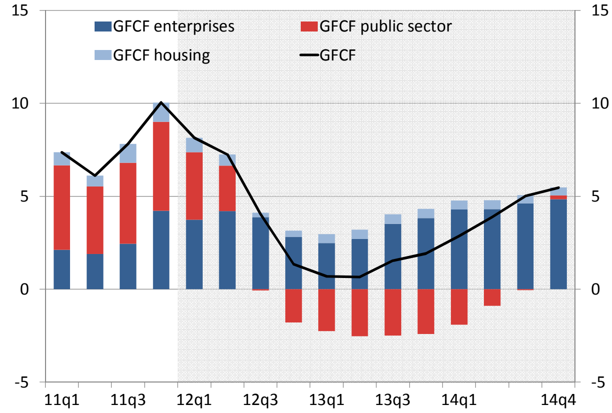
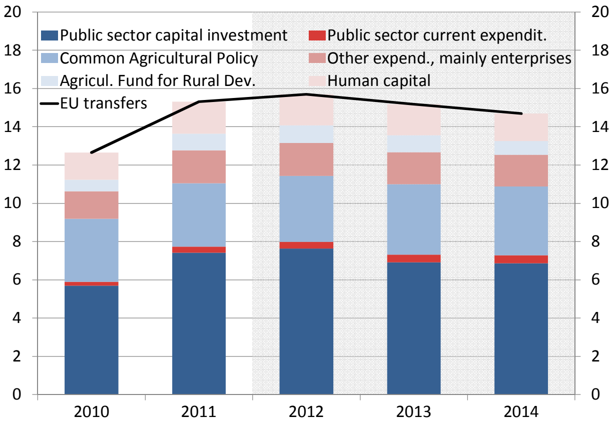


Figure 4.11

EU transfers (in bn. EUR) – breakdown.

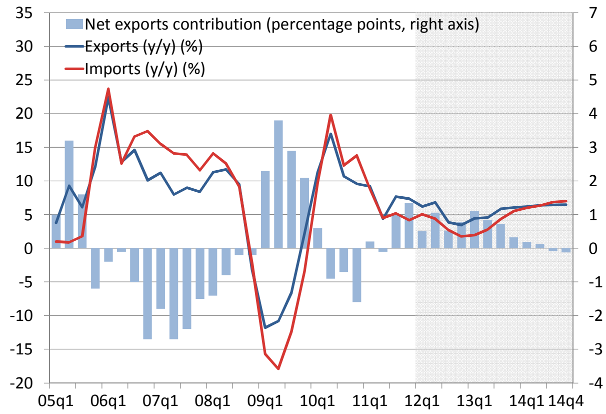


home and abroad). Within the projection horizon, residential investment growth will decrease to a level close to consumption growth partially due to the expected tightening of banks' lending policy (see *Senior loan officer opinion survey on bank lending practices and credit conditions in 2012 Q1, NBP).* In the projection horizon, the process of this category's growth deceleration will be hampered by, apart from relatively low real interest rates, relatively high rates of return on property development projects under the current relation between apartment prices and the cost of their construction (see *Information on home prices and the situation in the residential and commercial real estate market in Poland in 2011 Q3, NBP*).

Following a sharp rise in exports and imports in 2010 and the first half of 2011, resulting from restoration of trade relations after the prior breakdown of global trade, the dynamics of the volume of external trade is expected to decrease in 2012-2014 due to weaker growth abroad and lower domestic demand in Poland (Figure 4.12). At the same time, import growth will decelerate more substantially than exports, given higher sensitivity of the former to changes in business conditions at home and abroad as well as, in the short projection horizon, the zloty depreciation in 2011, which boosted the price competitiveness of domestic products. In consequence, the contribution of net exports to GDP growth will remain positive until mid-2014. Subsequently, as the situation in the domestic economy improves and the zloty strengthens, external trade balance will start to deduct from economic growth.

Figure 4.12

Foreign trade.



Macroeconomic equilibrium

Relatively fast growth of GDP in 2011 coupled with slower potential output growth as a result of the global financial crisis translated into a widening output gap of 1.3% at the end of 2011. In the medium projection horizon, the positive output gap will decrease following the economic downturn and open again slightly as economic activity expands in 2014 (potential output growth remains close to 3% throughout the entire projection horizon, Figure 4.13).

Dampening influences on potential output growth in the short projection horizon (Figure 4.14) will include weaker growth of the labour force participation rate (due to the rising proportion of post-working age population and the economic slow-down) and weaker population growth (related to a reversal of the 2009-2010 trends, i.e. dwindling return migration and rising emigration, among others to Germany and Austria). Potential output growth is expected to accelerate slightly in the long term projection horizon, as total factor productivity (TFP) growth returns gradually to its pre-crisis path and accumulation of private capital accelerates (reflecting rising corporate investment), besides a negative impact of declining public capital growth.

Developments in the labour market over the projection horizon will be related to changes in economic activity (Figure 4.15, 4.17). As the anticipated slow-down materialises, the increase in the number of people working will gradually lose momentum, turning negative as of the end of 2012. However, given the concurrent decrease of the economically active population, the rise in the unemployment rate will be constrained. The unemployment gap thus remains negative (albeit close to nought), which will mitigate the impact of the economic slow-down on wage growth. Therefore, unit labour costs will increase more slowly, just above 2% y/y. In the short projection horizon, the rise in unit labour cost will be additionally supported by the increase of disability pension contributions as of February 2012.

Over the projection horizon, factor income and trade balance will continue to shape the current account negatively, but the deficit will be largely offset by the inflow of EU funds. The external

Figure 4.13

Output gap.

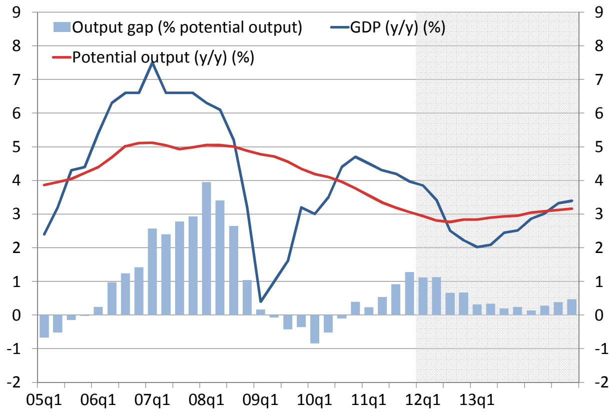


Figure 4.14

Potential output (y/y, %) – breakdown.

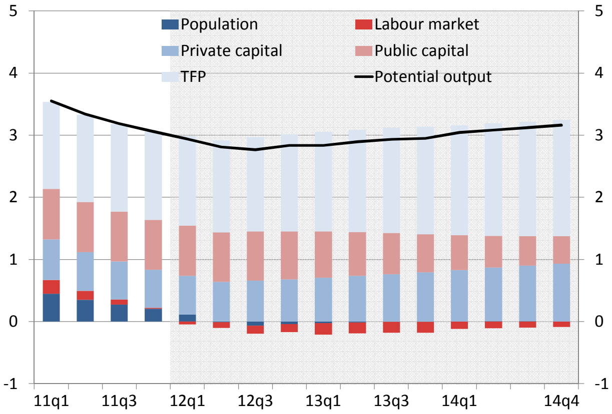
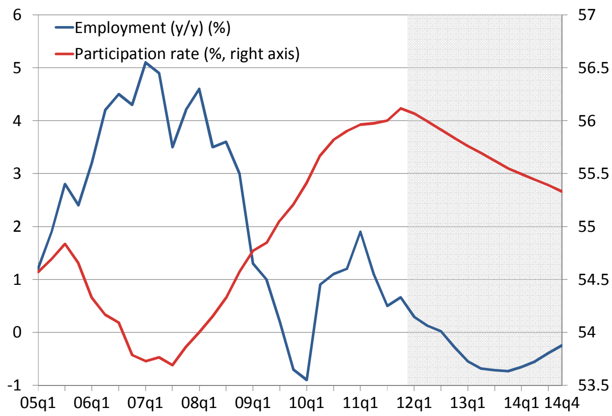


Figure 4.15

Employment and activity in the labour market.



imbalance, as measured by the ratio of current and capital account deficits to GDP, recovers somewhat as compared to previous years and stabilises at 2.2-2.5% in 2012-2014. The effect of the improved trade balance will be offset by shrinking inflow of EU funds beyond the current budgetary perspective and by a deterioration of net factor income.

Exchange rate and inflation

In 2011 Q4, further depreciation of the zloty has been observed in connection with rising concerns about the mounting debt of some euro area countries and the liquidity problems experienced by some European banks. The currently undervalued zloty can be expected to gradually strengthen over the projection horizon, thereby returning to its equilibrium level. The zloty appreciation will, however, be mitigated by slow growth, both domestic and abroad, which dampens the inflow of direct and portfolio investment to Poland. A narrowing interest rate disparity, resulting from the projection's assumption of a constant NBP reference rate, will work in the same direction.

Zloty appreciation and moderate economic growth will cause core inflation to decrease over the projection horizon to about 2.0% in 2014 (Figure 4.19). In the short projection horizon, this decrease will be limited by rapidly rising import prices (Figure 4.18), growing unit labour cost (as a result of the increase of disability pension contributions), and by the impact of the climate and energy package implementation in 2013. The basic VAT rate is expected to return to 22% in 2014, which will curb the impact of the economic recovery on core inflation in this period.

Domestic food price growth will decelerate over the projection horizon, hitting 0.6% in 2014 (although the food price path in this period is distorted by the base effect related to high food prices in 2011 Q2, Figure 4.20). This sharp slow-

Figure 4.16

Unemployment.

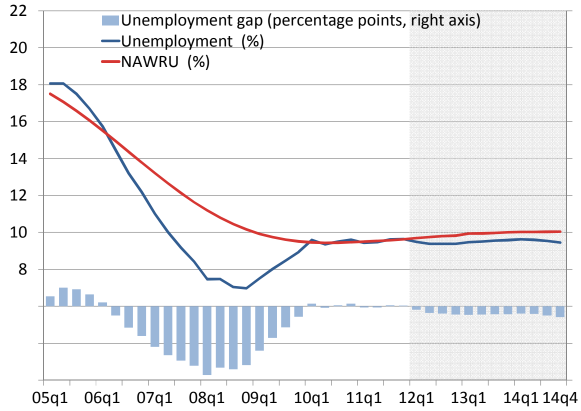


Figure 4.17

Unit labour cost.

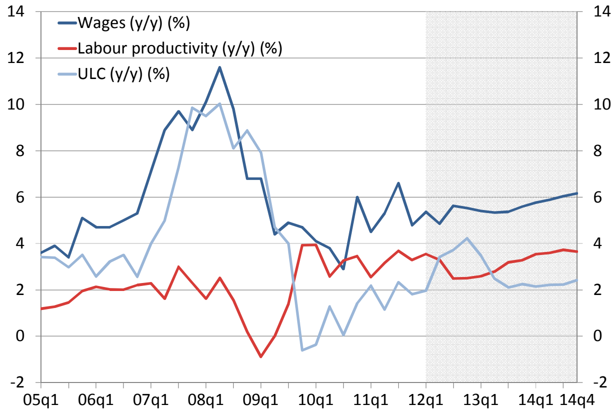
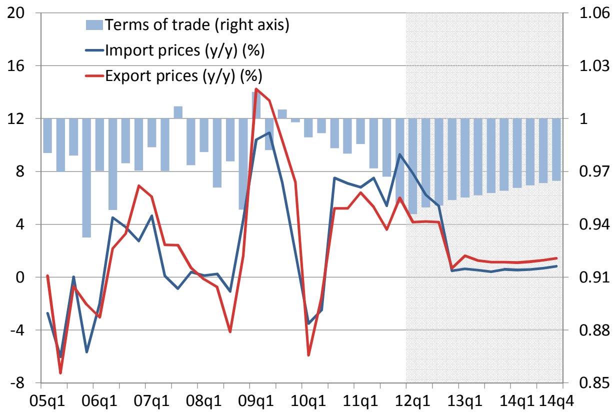


Figure 4.18

Terms-of-trade.



down of food price growth will be driven, apart from the appreciating exchange rate and slower economic growth (i.e. factors also limiting growth rates of the remaining consumer price categories), by the decreasing prices of agricultural commodities in the global markets over the projection horizon. In the short projection horizon improvement in supply conditions is expected (in comparison with 2011) as the agrometeorological conditions return to the long-term average level, owing to which the demand-supply relations in the domestic market for agricultural commodities will stabilise.

Energy price inflation will remain high (9.1% in 2012) in the short projection horizon, due to rising prices of energy commodities on the global markets (expressed in zloty), the increase in the excise tax on diesel oil as of 2012, and the endorsement by the Energy Regulatory Office of higher administered prices of energy carriers. In the medium- and long-term projection horizon, the prices of energy commodities in the global markets will stabilise. This, amid the concurrent zloty appreciation, reduces energy price growth, which will nevertheless continue to exceed the CPI. In 2013, energy price inflation might be fuelled by a possible pass-through of increased costs in the energy sector related to the purchase of carbon emission allowances to power prices. In 2014, the impact of the climate and energy package implementation on energy price growth, while less pronounced, will continue to add to inflation. In the last year of the projection period, the reduction in the basic VAT rate should be conducive to curbing energy price growth as well.

As a result of the before-mentioned conditions, CPI growth in 2012 will remain at a pace close to that observed in 2011 (4.1%). This relatively high level of CPI inflation will be a result of the marked zloty weakening in the last quarter of 2011, factors of regulatory nature (increases in the excise tax on diesel oil and the disability pension contribution, policies of the Energy Regulatory

Figure 4.19
CPI and core inflation (y/y, %).

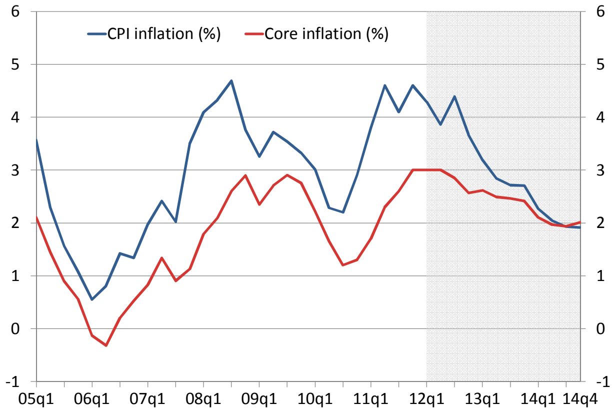
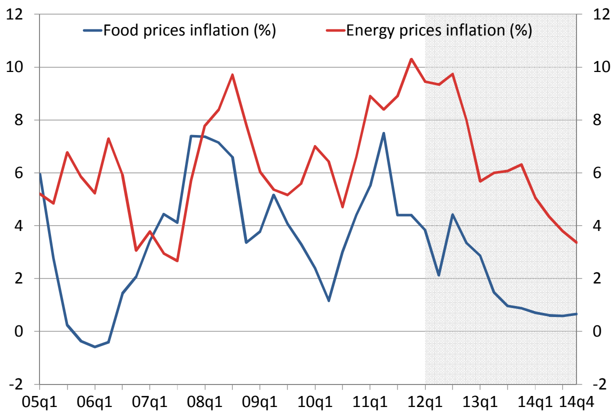


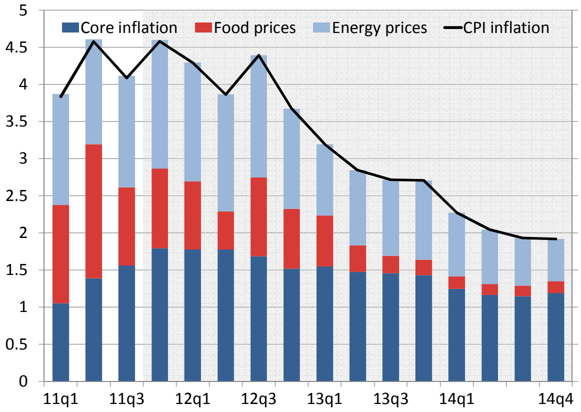
Figure 4.20
Inflation of food and energy carrier prices.



Office) as well as the situation on the global markets for energy commodities amid moderate demand pressure. In the medium term projection horizon, as economic growth weakens and labour market conditions worsen, inflation will come down to a level close to NBP's inflation target, even though the speed of return to target inflation will be limited by the implementation of the climate and energy package (Figure 4.21). In 2014, this downward trend will continue (CPI inflation will subside to 2%), due to conducive trends in the global commodity markets (falling prices of agricultural commodities combined with a deceleration of energy commodity price growth), the appreciation of the zloty, and the reduction in the basic VAT rate. The drop in the inflation rate will be restricted by the limited economic recovery, reflected in the mildly increasing output gap. Assuming an unchanged NBP reference rate throughout the projection period, the likelihood of average annual inflation running between 1.5% and 3.5% has risen from 3% in 2012 Q1 to an average of 51% in 2013-14.

Figure 4.21

CPI inflation (y/y, %) – breakdown.



4.4. Current versus previous projection

The main factors responsible for the changed paths of inflation and GDP between the November and March projection rounds are: zloty depreciation, weaker outlook for economic growth abroad as well as data on external trade and public and private consumption coming in between the two rounds. As a result of these changes, the annual consumer price growth forecast for 2012 is higher by 1.0 percentage point, while in 2013 it will run slightly (by 0.1 percentage point) above the CPI inflation path from the previous forecast round. The economic growth projection in 2012-2013 will run below (by 0.1-0.5 percentage point) the projection path indicated in the November round (Table 4.1). The

Table 4.1

March projection versus November projection

	2011	2012	2013
CPI inflation (y/y, %).			
March 2012	4.3	4.1	2.9
November 2011	4.0	3.1	2.8
GDP (y/y, %).			
March 2012	4.3	3.0	2.3
November 2011	4.1	3.1	2.8

reasons for the discrepancies in the paths of GDP and inflation in the March and November projections will be discussed in detail below.

GDP

In 2011, the slight upward revision of GDP growth forecast[52] (by 0.2 percentage point) resulted largely from higher contribution of net exports, with total consumption decreasing. The change between the projections is mainly the effect of inclusion of data received after the November projection had been completed. CSO estimates for 2012 Q3 GDP point to a weaker individual consumption growth due to a decline in disposable income and a slower wage bill growth. Similarly, lower than expected intermediate consumption of the public finance sector is translating into weaker public consumption growth. The higher than its November predictions contribution of net exports to 2011 growth is to a substantial extent the result of lower total consumption, which is dragging on imports, coupled with the zloty depreciation observed at the end of 2011.

A slight, by 0.1 percentage point, downward revision of the 2012 GDP forecast is related to the adverse effect on the Polish economy of the weakening, as compared to the previous projection round, prospects for economic growth of Poland's main trading partners, in particular, euro area countries, combined with high crude oil prices expressed in zloty. The effect will be offset, to a substantial degree, by the weaker zloty exchange rate as compared to the November projection, a higher projection starting point and a decrease in the real interest rate (due to higher inflation under the assumption of a constant NBP rate). In 2013, the GDP growth forecast is expected to drop more substantially, i.e. by 0.5 percentage points, as compared to the November

Figure 4.22

March projection versus November projection: GDP growth (y/y, %)

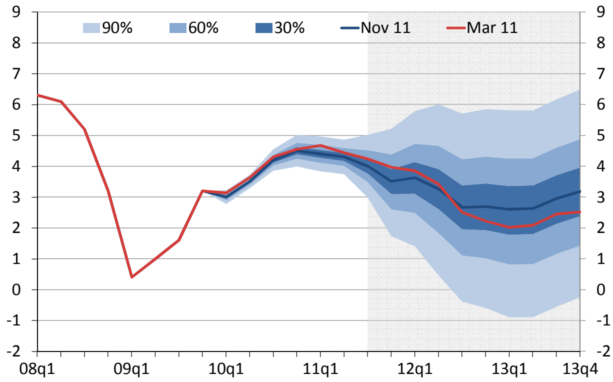
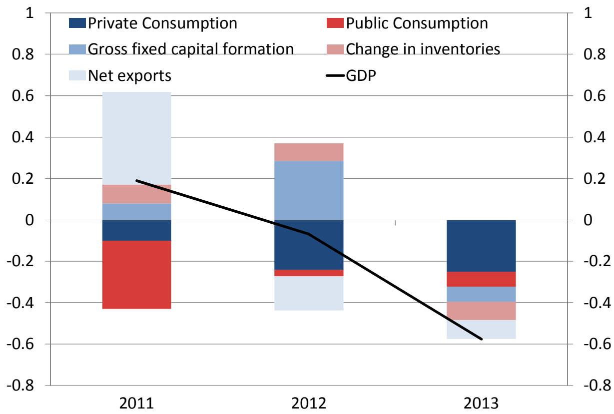


Figure 4.23

Decomposition of deviations between March and November projection: GDP growth (percentage points).



[52] At the point of formulating the assumptions for the March projections, no data were available for the entire 2011 - hence 2011 GDP estimates are also a forecast.

projection round. This slower GDP growth stems from deteriorating prospects of economic growth abroad amid a concurrent waning of the positive effect of the zloty depreciation and projection starting point.

Inflation

In 2011, consumer prices growth was 0.2 percentage point higher than assumed in the November projection. The higher than expected inflation was mainly due to the weakening zloty, which translated into higher quotations for agricultural and energy commodity prices as expressed in zloty terms (having an impact on domestic food and energy prices).

In 2012, the forecast consumer price growth is 1.0 percentage higher than in the November projection. In spite of falling energy and agricultural commodity prices (as expressed in US dollar terms), the weaker zloty is translating into a sharper rise in domestic energy and food prices. Rising inflation is also driven by the rise in the disability pension contribution, which pushes up unit labour costs. Slow economic activity will, on the other hand, have a curbing effect on inflation.

In the March projection 2013 consumer price growth is only 0.1 percentage points higher than in the November projection. The narrowing gap between the inflation rates cited in the November and March projections with respect to 2012 results from stronger pass-through effect of the slump in Poland and in the world to domestic prices, coupled with the waning inflationary impact of zloty depreciation. The increase in the disability pension contribution exerts a similar influence on inflation in 2012 and 2013.

Figure 4.24

March projection versus November projection: CPI inflation (y/y, %)

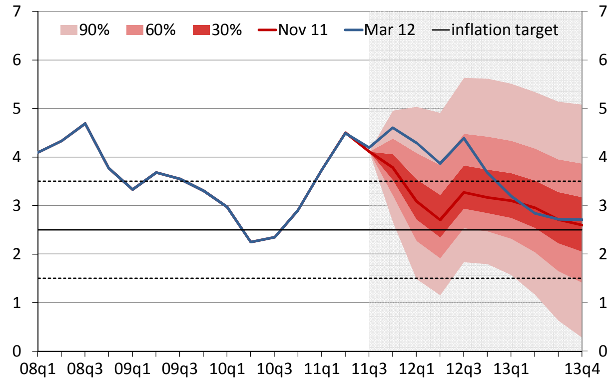
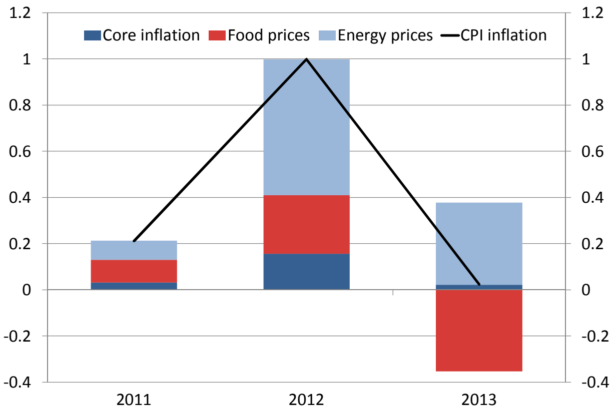


Figure 4.25

Decomposition of deviations between March and November projection: CPI inflation (percentage points).



4.5. Forecast uncertainty sources

It is assessed that in the projection horizon, the balance of risk factors for both GDP and inflation growth is nearly symmetrical (Table 4.2). The key sources of projection uncertainty are presented below.

External environment and exchange rate

The external environment is still the most important source of uncertainty for the inflation and GDP projection. Forecasts for economic growth in the developed countries have been revised downwards as compared to the November projection, especially with respect to the EU Member States. The manner in which the sovereign debt crisis in the euro area will be handled continues to remain the key risk factor to this region's growth. A further escalation of the crisis, entailing heightened risk aversion, may translate into surging interest rate on debt securities of some of the euro area countries, resulting in, apart from creating difficulties in issuing new and rolling over the existing debt, possible erosion of the liquidity position of some European banks. Should banks endeavour to improve their solvency ratios, the deleveraging process may be accelerated, prompting a further squeeze on lending to the private sector (also through banks operating in Poland and having equity links with euro area banks). The response of governments and central banks in the developed countries to this scenario is also difficult to predict.

Future developments in the zloty exchange rate, which are determined by the uncertain situation in the euro zone to a large extent, continue to be a material source of uncertainty for this inflation and GDP projection.

It is assessed that the sources of uncertainty related to the external environment of the Polish

Table 4.2
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)
12q1	0.00	0.00	0.03	0.51	0.03
12q2	0.00	0.02	0.30	0.52	0.30
12q3	0.00	0.02	0.18	0.52	0.18
12q4	0.02	0.13	0.44	0.51	0.42
13q1	0.06	0.26	0.60	0.49	0.54
13q2	0.12	0.37	0.69	0.48	0.57
13q3	0.15	0.41	0.70	0.48	0.55
13q4	0.18	0.42	0.70	0.48	0.52
14q1	0.28	0.55	0.79	0.49	0.51
14q2	0.34	0.61	0.83	0.49	0.48
14q3	0.37	0.63	0.84	0.48	0.47
14q4	0.37	0.63	0.84	0.48	0.46

economy mentioned above raise the risk of the GDP growth path running below the central projection path. In case of inflation, the effects of slower GDP growth and lower commodity prices might be compensated by the impact of the weak zloty exchange rate.

Domestic demand

Major sources of uncertainty for the projection include the response of households and enterprises to the forthcoming fiscal tightening as well as developments in the situation abroad. The expected fiscal tightening is likely to boost the assessment of Poland's credit standing. Moreover, changes in situation in the country and abroad may contribute to improved perception of Poland by foreign investors, resulting in more capital inflow, including FDI. In effect, consumption and corporate investment may rise more than envisaged, additionally supported by the increase in production capacity utilisation in the economy, enterprises' high financial liquidity position and low real interest rates.

Energy and food prices in Poland

One source of uncertainty for the projection is the hard-to-predict impact of regulators' policies and of the situation in the global commodity market upon the level of domestic energy and food prices. In this respect, considerable uncertainty relates to the impact of future EU environmental policies, which is hard to estimate. This concerns in particular the climate and energy package, currently under implementation, aiming at curbing carbon emissions. The price of carbon emission allowances is not known at the moment, and may be dependent on demand for these allowances, and thus on the economic activity of EU countries. Moreover, the number of free-of-charge allowances may change, as the European Commission has not yet made a decision regarding derogation for the Polish energy sector. Uncertainty is further boosted by the lack of precise provisions concerning the appropriation proceeds from the sale of allowances and the magnitude of investment in low-emission technologies and renewable energy sources. Finally, regulatory activities in the food market as well as the future tariff policy by the Energy Regulatory Office add to uncertainty.

4.6. Discussion of data received after 24 January 2012

Data received after 24 January 2012, which is the cut-off date for projection indicate, that as part of risk factors concerning major risk areas (described in point 4.5) materialized, in the short and medium term projection horizon inflation may run below the central path. This data is neutral for economic growth forecast.

The probable lower inflation forecast may be due to both current CPI data as well as zloty appreciation observed in February 2012, which resulted from improved sentiment on the global financial market. Higher crude oil and gas prices on the global market in February exert an opposite pressure on inflation. Taking this data into account, inflation index on yearly basis would be lowered by around 0.3-0.4 percentage points in 2012 and 0.2-0.3 percentage points in 2013. Therefore, including this data in the projection does not change the view presented in this chapter, that in the short run inflation will remain on an elevated level before returning close to the inflation target in 2013, although it might happen faster than presented in the central projection scenario.

The data received after 24th of January 2012 does not substantially change the medium term perspectives for economic growth. On the one hand favourable data concerning real economy for 2011 Q4 and January 2012 may push GDP dynamics above the central projection path in the short run. On the other hand, in the coming quarters the negative impact of the zloty appreciation lowering price competitiveness of Polish products will increase, combined with higher energy commodity prices on the global market, unfavorably changing relative export and import prices (terms of trade). In consequence, GDP growth will probably remain close to the March projection path.

Table 4.3
Central path of inflation and GDP projection

	2010	2011	2012	2013	2014
Consumer Price Index CPI (y/y, %)	2.6	4.3	4.1	2.9	2.0
Food prices (%, y/y)	2.7	5.4	3.4	1.5	0.6
Energy prices (%, y/y)	6.2	9.1	9.1	6.0	4.1
Core inflation net of food and energy prices (%, y/y)	1.6	2.4	2.9	2.5	2.0
GDP (% ,y/y)	3.9	4.3	3.0	2.3	3.2
Domestic demand (%, y/y)	4.6	3.8	2.3	1.5	3.2
Individual consumption (%, y/y)	3.2	3.1	2.3	2.2	2.7
Public consumption (%, y/y)	4.2	-1.3	0.5	2.2	3.1
Gross fixed capital formation (%, y/y)	-0.2	8.7	5.1	1.2	4.3
Contribution of net exports (percentage points, y/y)	-0.7	0.5	0.7	0.8	0.0
Exports (% ,y/y)	12.1	7.0	5.1	5.2	6.4
Imports (% ,y/y)	13.9	5.7	3.5	3.7	6.6
Gross wages (%, y/y)	4.0	5.3	5.3	5.4	6.0
Total employment (%, y/y)	0.6	1.0	0.0	-0.7	-0.5
Unemployment rate (%)	9.5	9.5	9.4	9.5	9.6
NAWRU (%)	9.5	9.6	9.8	10.0	10.0
Labour force participation rate (%)	55.7	56.0	56.0	55.7	55.4
Labour productivity (%, y/y)	3.3	3.3	3.0	3.0	3.6
Unit labour cost(%, y/y)	0.6	1.9	3.3	2.6	2.3
Potential output (%, y/y)	4.0	3.3	2.8	2.9	3.1
Output gap (% potential GDP)	-0.3	0.7	0.9	0.3	0.3
Index of agricultural commodity prices (USD ; 2009=1.00).	1.13	1.33	1.18	1.16	1.13
Index of energy commodity prices (USD ; 2009=1.00).	1.37	1.82	1.69	1.75	1.77
Foreign price level (y/y, %)	0.7	1.2	1.2	1.5	1.7
Foreign GDP (y/y, %)	2.3	1.9	0.1	1.2	1.7
Current and capital account balance (% GDP)	-2.8	-2.7	-2.5	-2.2	-2.5
WIBOR 3M (%)	3.89	4.54	4.74	4.72	4.72

Source: 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 IN OCTOBER 2011-JANUARY 2012

- **Date:** 8 November 2011

Subject matter of motion or resolution:
Resolution No. 12/2011 amending the resolution on the required reserve rates and the renumaration of required reserves.

Voting of the MPC members:

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

Against:

A. Rzońca was absent.

- **Date:** 6 December 2011

Subject matter of motion or resolution:
Resolution No. 13/2011 on approving the Financial Plan of the National Bank of Poland for 2012.

Voting of the MPC members:

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