Inflation Report
November 2011

National Bank of Poland
Monetary Policy Council

Warsaw, November 2011

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 25 October 2011.

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

CONTENTS

SUMMARY

In 2011 Q2 the global economy was growing at a slower pace. This concerned, albeit to a varying degree, most developed and developing countries. In 2011 Q3 business sentiment deteriorated considerably, however incoming data, including the advance estimate of GDP in the United States in Q3 and industrial production in the euro area at the beginning of Q3, have not so far confirmed a further significant weakening in global economic activity. Considerable uncertainty concerning developments in the world business activity persists. Factors exerting an adverse influence on the global economy and increasing the uncertainty concerning its prospects include, primarily: a deep fiscal imbalance in many countries which amplifies the tensions in the financial markets, high – although gradually subsiding – prices of commodities and slowly rising household consumption in developed countries which is constrained by the persistently unfavourable labour market conditions.

Recently there has been a further increase in inflation both in advanced and emerging economies. The increased inflation in the global economy had been driven mainly by an earlier rise in food and energy prices in global markets, and in emerging economies – also by continued high economic activity. In advanced economies inflationary pressure is being curbed by low capacity utilization, including high unemployment.

In the last few months turmoil in the global financial markets has intensified amid mounting concerns about the outlook for global economic growth and the stability of public finances in some developed countries. Share prices in the global stock markets have declined sharply. At the same time bond yields and CDS spreads on debt issued by countries most deeply affected by the sovereign debt crisis rose further, and their bond ratings were downgraded again. International investors purchased assets regarded as safe, which led to a further decrease in US and German government bonds yields, as well as to a strong appreciation of the Swiss franc, ultimately halted by the interventions of the Swiss central bank.

Major central banks have continued expansionary monetary policy. The Fed and the Bank of England have maintained their policy rates at historically low levels. Moreover, the Fed has decided to extend the average maturity of its holdings of Treasury securities while the Bank of England decided to increase the size of its asset purchase programme. The Swiss National Bank, narrowed the target range for the three-month Libor from 0.00-0.75% to 0.00-0.25% and took measures to increase the supply of liquidity in the Swiss money market and to counteract excessive appreciation of the Swiss franc. On the other hand, the European Central Bank increased interest rates by 0.25 percentage points in July 2011 and then – in early November 2011 – cut them by 0.25 percentage points. The ECB also conducted additional liquidity-providing operations in the euro area money market and announced further such operations to be conducted in the future, announced a new programme of covered bond purchases and purchased government bonds of the countries most severely affected by the sovereign debt crisis. Most emerging and small advanced economies completed their monetary policy tightening, but some eased their monetary policy. Some emerging market central banks also conducted interventions against the depreciation of their currencies.

Following an acceleration to 5.0% in May 2011 annual consumer price growth in Poland subsided gradually in subsequent months, reaching 3.9% in September 2011. However, inflation still remains significantly above the NBP's target of 2.5%. The decline in inflation in recent months was mainly driven by a fall in food prices. This has been related to ample – as compared with last year – supply of fruits and vegetables owing to a good crop, coupled with weak demand for food products. At the same time the decrease in inflation in the analysed period was limited by persistently fast growth in energy prices, including fuels. This was driven by mounting prices of energy commodities expressed in zlotys, combined with a rise in the administered prices of energy carriers charged to households. An additional factor restraining the decline in inflation in the analysed period was the change in the GUS method for recording prices of seasonal goods and the rise in VAT rates.

The decline in CPI inflation between June and September 2011 was accompanied by a rise in core inflation (core inflation net of food and energy prices increased to 2.6% in September 2011). This was primarily the effect of a strong increase in the prices of telecommunication services in August 2011. In addition, the rise in core inflation in the analysed period was underpinned by accelerating growth in the prices of other services, a further rise in excise goods prices, and a depreciation of the zloty.

In 2011 Q2 producer prices and import prices in zloty continued to rise fast. This was due to a further rise in global commodity prices, mainly oil prices, coupled with only a slight appreciation of the nominal effective zloty exchange rate. The stabilisation in 2011 Q3 of annual PPI growth at an elevated level was primarily due to a depreciation of the zloty amid a slight fall in commodity prices in the global markets.

Inflation forecasts by financial sector analysts sank to 2.8% in October 2011, following an increase to 3.3% in June and July 2011. On the other hand, the inflation expectations of individuals remained in the period May-October 2011 above 4% (except for September), whereas the inflation expectations of enterprises declined in 2011 Q2 and Q3, to 3.9% and 3.6%, respectively (as compared with 5.2% in 2011 Q1).

In 2011 Q2 relatively buoyant GDP growth was sustained. The growth rate stood at 4.3% y/y in 2011 Q2 against 4.4% y/y in 2011 Q1. Growth continued to be driven primarily by domestic demand, which continued to grow relatively fast, stimulated by a further acceleration of investment growth, steady rising consumption and a positive contribution from changes in inventories. Export and import growth accelerated slightly while the contribution of net exports to GDP growth was close to zero.

Relatively buoyant economic growth supported an improvement in the situation of the public finance sector. In the period January-September 2011 the central budget deficit was significantly lower than in the corresponding period of the previous year. In the first half of 2011 local government units recorded a surplus that was larger than a year earlier. At the same time in the period January-September, the Social Security Fund had received the entire subsidy provided for in the central budget for this year, and the Labour Fund and the National Health Fund recorded small surpluses during the first eight months of 2011 (against deficits recorded in the corresponding period of 2010).

In 2011 Q2 the growth of employment, which in previous quarters was observed both in the economy and in the enterprise sector, slowed. At the same time the number of economically active persons in the economy increased at a slower pace, while the unemployment rate remained elevated. The decline (in m/m terms) in employment in the enterprise sector in August and September and a gradual deterioration of employment climate indicators in NBP surveys may suggest that the growth of employment in economy as a whole may further decline. In the first half of 2011 nominal wage growth and the growth of unit labour costs in the economy remained moderate. In Q3 2011 nominal wage growth in the enterprise sector also continued at a stable, moderate pace. Following a gradual increase since mid-2010 in August and September the annual growth of unit labour costs in industry came to halt.

Since the publication of the previous *Report* the Monetary Policy Council has left interest rate unchanged, leaving the reference rate at the level of 4.50%. The Polish bond yield curve has steepened: yields on 2-year bonds have dropped significantly, mainly due to the disappearance of market expectations of NBP rate hikes, whereas yields on 5- and 10-year bonds remained broadly unchanged, despite a temporary decline, followed by an increase. Despite heightened risk aversion in the recent period, non-residents increased their exposure to the domestic debt market as they continued to purchase bonds with shorter maturities. Stock prices on the Warsaw Stock Exchange have fallen significantly, following the developments in the major global capital markets.

2011 Q2 saw no significant changes in the housing market in major Polish cities as compared to 2011 Q1. Asking and sale prices in the primary market as well as sale prices in the secondary market edged up. By contrast, asking prices in the secondary market continued to decline.

Since the publication of the previous *Report* the nominal exchange rate of the zloty has depreciated vis-à-vis the euro, the US dollar and the Swiss franc, due to increased uncertainty in the global financial markets. The zloty's depreciation was contained by measures undertaken by the National Bank of Poland.

The recent period brought a continued rebound in corporate lending. Housing loans to households kept on rising relatively fast and most of them were loans in zlotys. At the same time a further decline in household debt resulting from consumer loans took place. Following a period of persistently moderate increases in broad money, accompanied by its growth rate being close to the growth rate of nominal GDP, August and September 2011 saw a significant rise in M3 money. In July-September 2011, the more liquid components of M3 money classified as the M1 aggregate had increased at a lower pace than broad money for the first time since October 2009.

The relatively stable growth in economic activity was accompanied by a further gradual increase in the current account deficit (to 4.9% of GDP in terms of four consecutive quarters), mostly driven by a growing deficit in the trade account and in the income account. The observed increase in the foreign trade deficit was caused not only by growing imports amidst increasing economic activity in Poland and a concurrent smaller increase in exports in the face of global economic slowdown, but was also partly caused by a further deterioration of terms-of-trade. In turn, good financial results of enterprises translated into a rise of remittances from Poland to foreign company owners (paid mostly as dividends), which aggravated the deficit in the income account. At the same time, high utilization of EU funds for financing investment projects was reflected in an inflow of funds to the capital account, thanks to which the deficit in the current and capital account remained unchanged compared to the previous quarter at 2.9% of GDP (in terms of four consecutive quarters). A further slight deterioration of basic indicators measuring Poland's external imbalance was accompanied with the still relatively high ratio of reserve assets to imports.

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 July, September and October 2011 together with the *Information from the meeting of the Monetary Policy Council* in November 2011 are presented in Chapter 3. Minutes from the MPC meeting held in November will be published on 17 November 2011 and so will be included in the next *Report*. MPC voting records in the period June-September 2011 can be found in Chapter 5. Moreover, Chapters 1 and 2 of this *Report* include two boxes: "The impact of the macroeconomic situation in the EU on the Maastricht criteria" and “The impact of the depreciation of the Polish zloty against the Swiss franc on households’ expenditures, debt-service costs and consumption".

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 November projection – under the assumption of constant NBP interest rates – there is a 50-percent probability of inflation running in the range of 3.9-4.2% in 2011 (as compared to 3.7-4.4% in the July projection), 2.5-3.9% in 2012 (as compared to 2.1-3.4%) and 2.2-3.7% in 2013 (as compared to 1.8-3.4%). In turn, with a 50-percent probability the November projection sees the annual GDP growth in the range of 3.7-4.3% in 2011 (as compared to 3.0-4.9% in the July projection), 2.0-4.1% in 2012 (as compared to 1.9-4.5%) and 1.5-4.0% in 2013 (as compared to 1.5-4.3%).

Chapter 1

EXTERNAL ENVIRONMENT OF THE POLISH ECONOMY

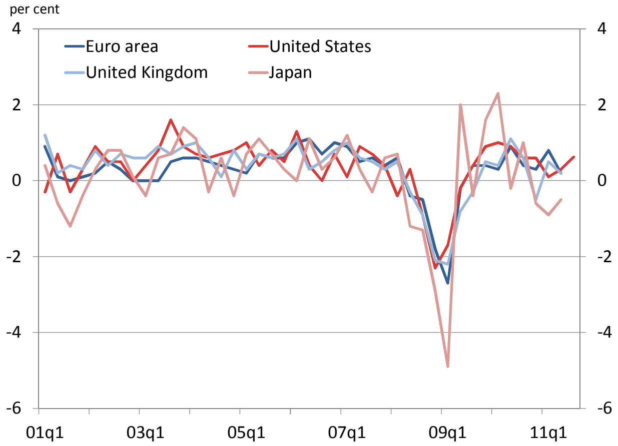
1.1. Global economic activity[1]

In 2011 Q2 the global economy was growing at a slower pace. This concerned, albeit to a varying degree, most developed and developing countries (Figure 1.1, Figure 1.6). In 2011 Q3 business sentiment deteriorated considerably (Figure 1.2), however incoming data, including the advance estimate of GDP in the United States in Q3 and industrial production in the euro area at the beginning of Q3 (Figure 1.4) have not so far confirmed a further significant weakening in global economic activity. Considerable uncertainty concerning developments in the world business activity persists.

Factors exerting an adverse effect on the global economy and increasing the uncertainty concerning its prospects include, primarily: a deep fiscal imbalance in many countries which exacerbates the tensions in the financial markets, high – although gradually subsiding – prices of commodities and slowly growing household consumption in developed countries which is constrained by the persistently unfavourable labour market conditions. The effects of prior fiscal expansion, among them a high level of

Figure 1.1

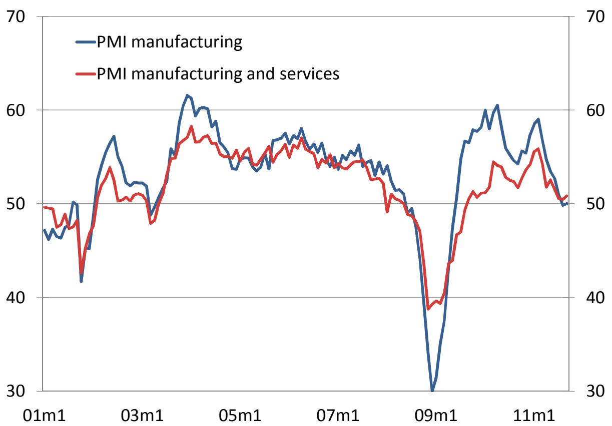
Economic growth in selected developed countries (q/q).



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.

public debt, remain – as well as the effects of monetary expansion – to be a crucial uncertainty factor for the global economic outlook.

According to the advance estimate, in 2011 Q3 GDP growth in the United States accelerated and stood at 2.5% q/q (as against 1.3% q/q in 2011 Q2 in annualised terms, Figure 1.1). This was primarily due to a sharp rise in private consumption (especially consumption of durable goods, due to the restoration of supplies disrupted by the natural disaster in Japan) and investment, while the contribution of net exports to growth was marginal. On the other hand, a decrease in inventories dragged on economic growth, while the level of public consumption did not change as compared to the previous quarter.

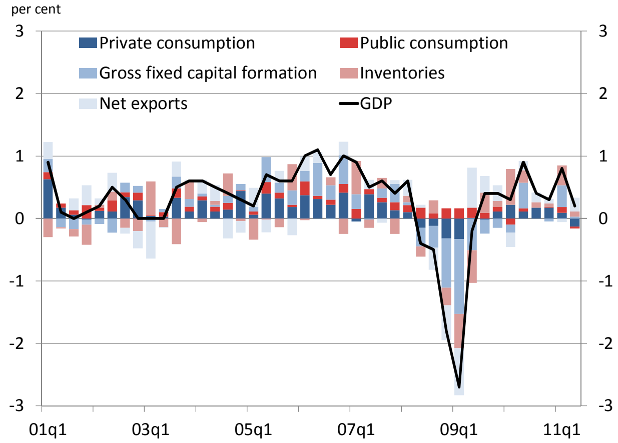
Despite considerably weaker consumer sentiment in the recent period (largely due to unfavourable conditions in the labour market), including primarily expectations about future economic developments, the annual growth of retail trade in the United States in August and September accelerated significantly. At the same time, in recent months industrial production increased further, which was to a large extent related to growing activity in the automotive sector after the restoration of supplies from Japan. Business sentiment in manufacturing, after a considerable fall in the middle of the year, improved in September.

In the first half of 2011, economic activity varied significantly across the countries of the euro area. In Germany, relatively good business conditions prevailed – particularly in Q1 – supported by a favourable situation in the labour market and expanding external demand. Economic activity persists at low levels mainly in those countries of the euro area which have been most severely affected by the sovereign debt crisis (especially Greece and Portugal).

As expected, following a sharp GDP rise in 2011 Q1, the economic growth of the entire euro area

Figure 1.3

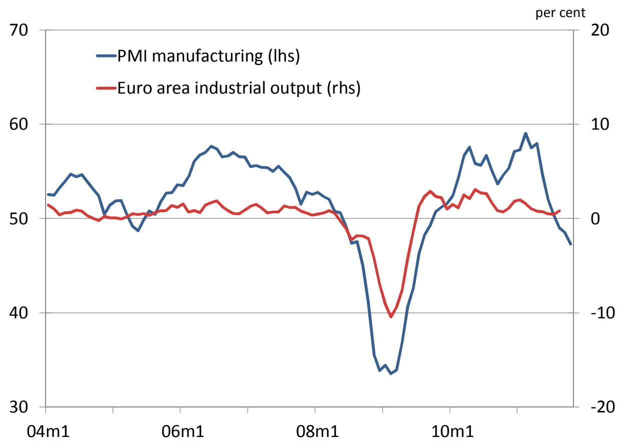
GDP growth in the euro area (q/q).



Source: Eurostat data.

Figure 1.4

Euro area industrial production growth* and PMI for manufacturing.

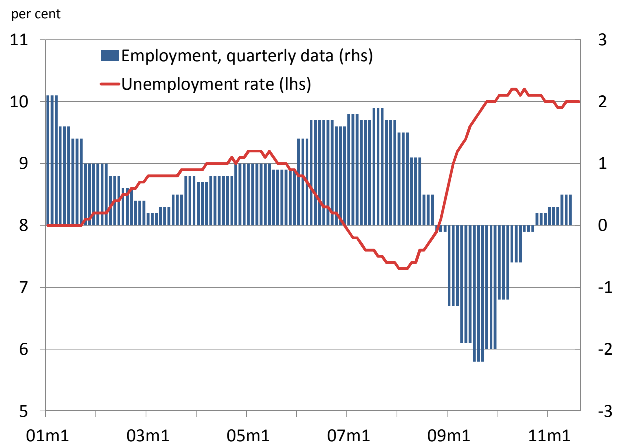


Source: Eurostat data, Markit

*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.

was significantly reduced in 2011 Q2 and amounted to 0.2% q/q (as against 0.8% q/q in the previous quarter, Figure 1.1). In particular, a marked slowdown was observed in those countries that recorded some of the fastest growth rates in 2011 Q1: Germany (0.1% q/q as against 1.3% q/q in Q1) and France (respectively, 0.0% q/q as against 0.9% q/q). The euro area GDP figures indicate weakening domestic demand, especially private consumption (which has fallen in quarterly terms), as well as investment and public consumption. On the other hand, net exports made a substantial positive contribution to economic growth.

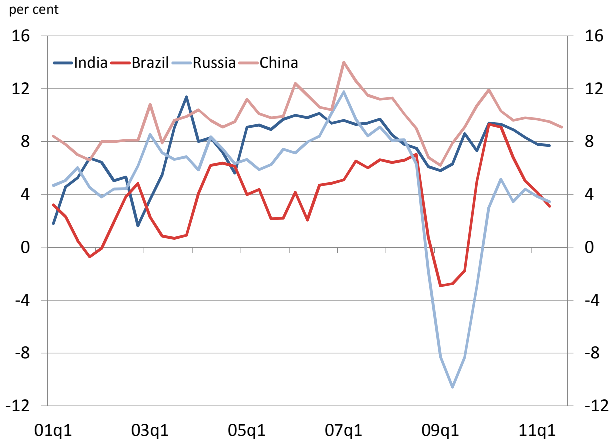
In July and August the monthly growth of industrial production accelerated (Figure 1.4). However the data released in the recent months indicate a substantial weakening in business sentiment, which is reflected in the PMI index falling below 50 (in September, it stood at 48.5, and preliminary October data point to a further fall to 47.3; Figure 1.4). Consumer sentiment also deteriorated, which is mostly related to only a slight improvement in the labour market. Since 2010 Q4, employment has been rising, although at the same time the unemployment rate has persisted at a high level (Figure 1.5).

In common with the euro area, GDP growth in Great Britain decelerated (in part as a result of one-off events), and ran at 0.1% q/q in 2011 Q2 after having risen by 0.4% q/q in the previous quarter (Figure 1.1). Growth was adversely affected by falling private consumption – largely due to the declining real income of households – and net exports. At the same time, it was supported by public consumption and investment.

Recently economic growth in major emerging economies has slowed down, partly in response to the prior tightening of macroeconomic policy in those countries (Figure 1.6). The scale of observed slowdown, however, varies significantly across the economies. In recent quarters, GDP

Figure 1.6

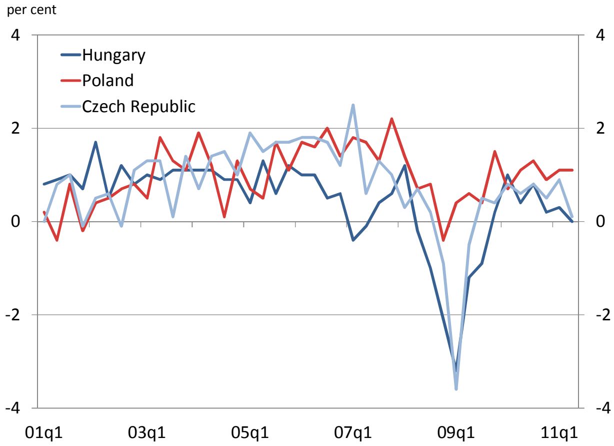
Economic growth in China, India, Brazil and Russia (y/y).



Source: Reuters, OECD and national statistical office data.

Figure 1.7

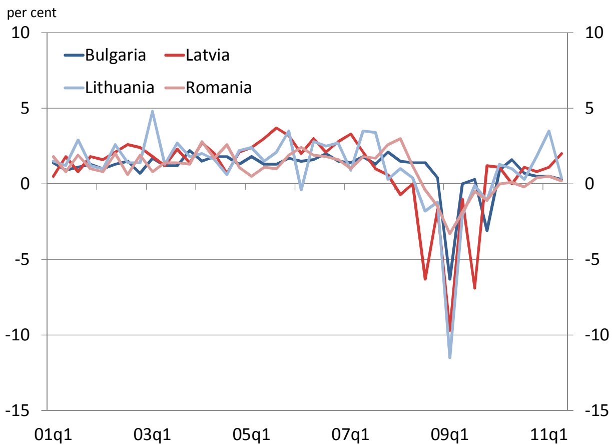
GDP growth in the Czech Republic, Hungary and Poland (q/q).



Source: Eurostat data.

Figure 1.8

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



Source: Eurostat data.

growth in China and India has weakened, although gradually. In turn, in Brazil GDP growth has decelerated markedly after a period of very rapid expansion in 2010, and is now running at a level close to its long-term average.

In most new EU member states outside the euro area, economic growth slackened in 2011 Q2 (Figure 1.7 and Figure 1.8). Its rate fell significantly in Lithuania (to 0.4% q/q from 3.5% q/q in 2011 Q1) and in the Czech Republic (to 0.1% q/q from 0.9% q/q in the previous quarter). Only Latvia saw growth accelerate in 2011 Q2 – to 2.0% q/q (from 1.1% q/q in the previous quarter). In most of these countries, the subdued quarterly growth resulted from a lower growth in domestic demand. Lower demand from the euro area also had a negative impact on GDP growth.

1.2. Inflation developments abroad

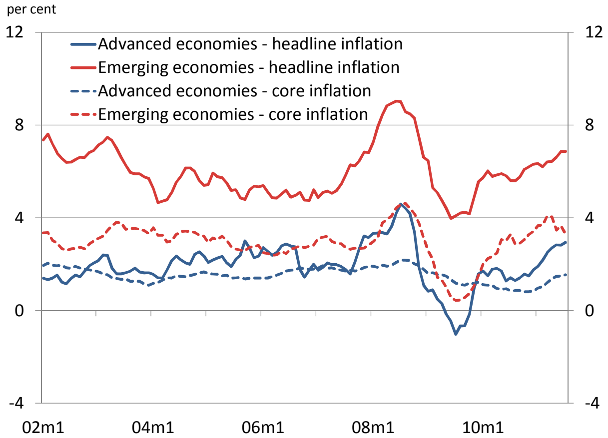
Recently there has been a further increase in inflation both in advanced and emerging economies (Figure 1.9). The increased inflation in the global economy had been driven mainly by an earlier rise in food and energy prices in global markets.

In recent months the increase in inflation in the United States was accompanied by a steady rise in core inflation (Figure 1.10). A different tendency was observed in the euro area, where following the increase in the first half of the year, in July and August core inflation dropped and in September it increased again to a long-term average level. In both economies inflation expectations remain relatively stable. At the same time inflationary pressure is being curbed by low capacity utilization, including high unemployment.

Inflation in developing countries remains elevated, mainly due to still high economic activity and the larger than in developed countries share of food and energy in consumer

Figure 1.9

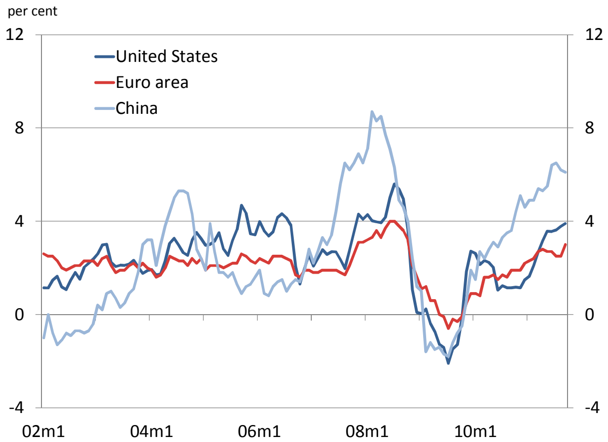
Inflation in andvanced and emerging economies (y/y).



Source: IMF data.

Figure 1.10

CPI inflation in major economies (y/y).



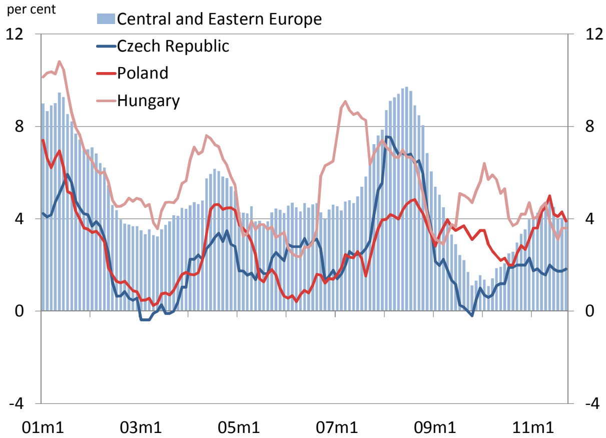
Source: OECD, Eurostat, IMF data.

baskets. Although in recent months core inflation in developing countries dropped, it still remains at a high level.

Since the publication of the previous *Report*, inflation in Central and Eastern European countries has decreased (Figure 1.11) which was supported by a decline in the prices of food, particularly unprocessed. However, inflation remains elevated, mainly due to a further increase in energy prices. In some countries of the region (in Latvia and Slovakia) elevated inflation is also the result of increases in indirect tax rates and administered prices at the beginning of 2011. In Romania, where inflation was very high until mid-2011, following the waning off of the VAT increase effect inflation dropped considerably in July. Core inflation in Central and Eastern European countries remained at a relatively low level despite a slight increase in recent months.

Figure 1.11

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



Source: Statistical offices' data.

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

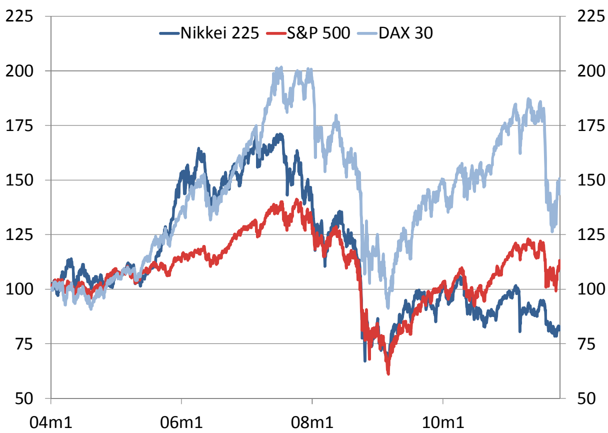
1.3. International financial markets and monetary policy abroad

Since the publication of the previous *Report*, turmoil in the global financial markets has intensified amid mounting concerns about the outlook for global economic growth and the stability of public finances in some developed countries, mainly the peripheral countries of the euro area.

Heightened uncertainty in the global financial markets has been reflected in sharp declines in equity prices on global stock markets (Figure 1.12). These were triggered by the release of weaker than expected macroeconomic data, especially in July and August, in particular those on the United States and the euro area, problems with raising the

Figure 1.12

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



Source: Reuters data, NBP calculations.

US debt ceiling and the downgrade of US long-term Treasury bond rating by S&P.[2]

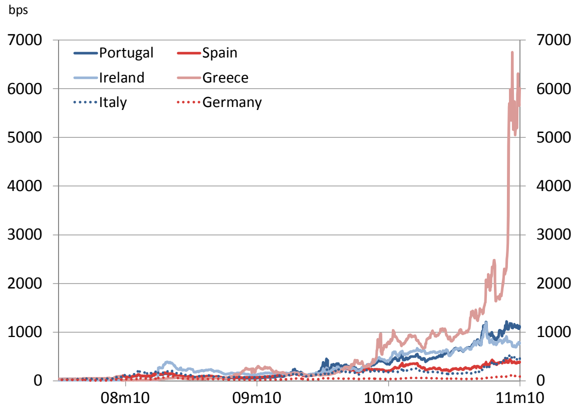
The economic slowdown and difficulties with the implementation of fiscal consolidation programmes in euro area countries hardest hit by the sovereign debt crisis have led to mounting concerns about the sustainability of their debt and the financial condition of the European banking sector. As a result, these countries' bond yields and CDS prices have risen further, particularly steeply in the case of Greece (Figure 1.13). At the same time the lower creditworthiness of these countries was reflected in subsequent downgrades of their bond ratings[3], as well as in falling prices of shares in European banks.

One of the consequences of increased bond-yield volatility in some euro-area countries is the heightened variability of the reference value of the Maastricht long-term nominal interest rate convergence criterion (compare Box 1 *The impact of the macroeconomic situation in the EU on the Maastricht criteria*).

Amid heightened uncertainty in the financial markets, a sharp decline was observed in yields on long-term US and German bonds, considered by investors to be safe-haven assets (Figure 1.14). In addition, investors purchased Swiss assets, also regarded as safe, which resulted in a sharp appreciation of the Swiss franc, eventually stopped by the Swiss central bank's interventions (Figure 1.15). At the same time, the euro weakened against the dollar due to the intensification of the sovereign debt crisis in Europe (Figure 1.15).

Figure 1.13

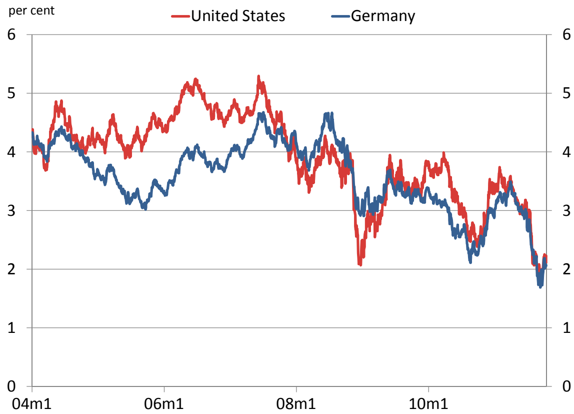
CDS spreads in selected developed countries.



Source: Bloomberg data, NBP calculations.

Figure 1.14

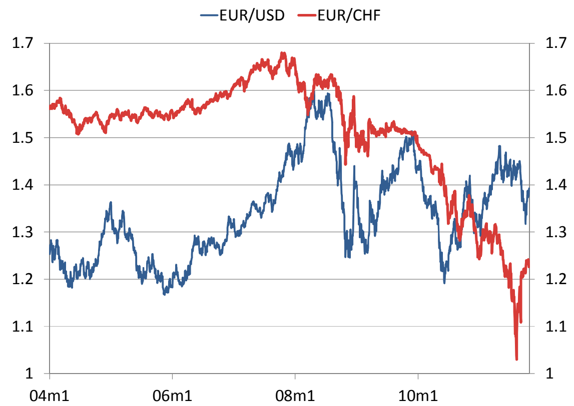
Yields on 10-year US and German bonds.



Source: Bloomberg data.

Figure 1.15

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



Source: Bloomberg data.

[2] The US long-term Treasury bond rating was downgraded on 5 August by one notch, i.e. from AAA (highest possible) to AA+. It was the first ever instance of a US long-term bond rating downgrade.

[3] Greece's rating was downgraded by Fitch from B+ to CCC on 13 July 2011, and by Moody's from Caa1 to Ca on 25 July 2011. Portugal's rating was downgraded by Moody's from Baa1 to Ba2 on 6 July 2011, while Ireland's - by Moody's, from Baa3 to Ba1, on 13 July 2011. Italy's rating was downgraded by S&P from A+ to A on 19 September 2011, by Moody's from Aa2 to A2 on 4 October 2011, and by Fitch from AA- to A+ on 7 October 2011. Spain's rating was downgraded by Fitch from AA+ to AA- on 7 October 2011, by S&P from AA to AA- on 13 October 2011 and by Moody's from Aa2 to A1 on 18 October 2011.

Since the publication of the previous *Report*, the major central banks have continued with expansionary monetary policies (Figure 1.16).

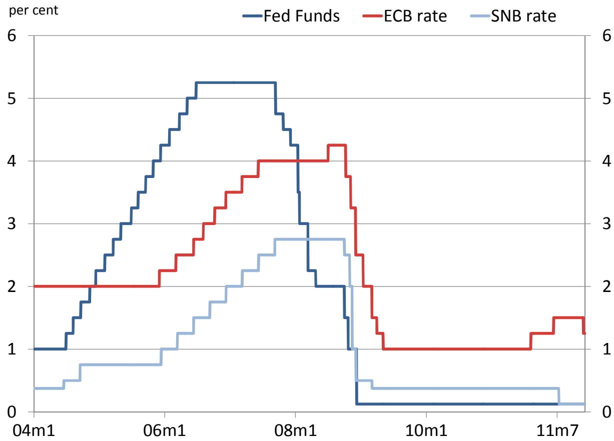
The Fed and the Bank of England have maintained their policy rates at historically low levels, 0.00-0.25% and 0.50%, respectively. Moreover, the Fed has decided to extend, by the end of June 2012, the average maturity of its holdings of Treasury securities in order to put downward pressure on longer-term interest rates and help make broader financial conditions more accommodative. The Bank of England decided to increase the size of its asset purchase programme, financed with the issuance of central bank reserves, by GBP 75 billion to a total of GBP 275 billion.

The Swiss National Bank (SNB), aiming for a three-month Libor as close to zero as possible, narrowed the target range for the three-month Libor from 0.00-0.75% to 0.00-0.25%. Furthermore, the Bank took measures to increase the supply of liquidity in the Swiss money market and to counteract excessive appreciation of the Swiss franc. The SNB declared its preparedness to buy foreign currency in unlimited quantities, should the Swiss franc appreciate to less than 1.20 to the euro, which stemmed further appreciation of the Swiss currency.

On the other hand, the European Central Bank (ECB) increased interest rates by 0.25 percentage points in July 2011 and then – in early November 2011 – cut them by 0.25 percentage points. The ECB also conducted additional liquidity-providing operations in the euro area money market and announced details of further such operations to be conducted in the future. The ECB also announced a new programme of covered bond purchases worth EUR 40 billion scheduled to last from November 2011 till the end of October 2012. Finally, the ECB purchased government bonds of the countries most severely affected by the sovereign debt crisis, among them Spain and

Figure 1.16

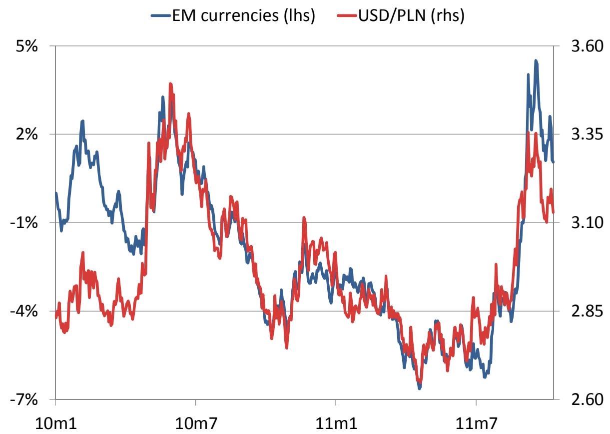
Fed Funds rate, ECB refinancing rate, and SNB rate.



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 depreciation).



Source: NBP calculations based on Bloomberg data.

Notes: 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.

Italy, in order to put downward pressure on their bond yields.

Some differentiation in the monetary policies conducted by emerging and small advanced economies could be observed. While most of these countries completed their monetary policy tightening, some (Brazil, Iceland, Turkey) eased monetary policy. Moreover, in response to a considerable weakening of emerging market currencies (Figure 1.17) due to heightened uncertainty in the financial markets, some central banks from those countries conducted interventions against the depreciation of their currencies.

Box 1. Impact of the macroeconomic situation in the European Union on the Maastricht criteria

Compliance with the economic convergence criteria is a prerequisite for entering the euro area. Originally, the convergence criteria were formulated in the Treaty Establishing the European Community (the so-called Maastricht Treaty, thus Maastricht criteria), and are now reiterated in the Treaty on the Functioning of the European Union (the so-called Treaty of Lisbon). They are specified in detail in the Protocol on the Convergence Criteria, and their interpretation and assessment are carried out, at least every two years, by the European Commission (EC) and the European Central Bank (ECB) in the Convergence Reports. The next Convergence Reports will be published in May 2012.

In the nearest future, Poland will not join the euro area, and so it is not necessary for it to fulfil the economic convergence criteria (the exception being the fiscal criterion, whose fulfilment is required by the Stability and Growth Pact and would per se be conducive to macroeconomic stability[4]). Nevertheless, it will be necessary to satisfy these criteria immediately before the scheduled adoption of the euro[5]. Bearing this in mind, the National Bank of Poland monitors, on an ongoing basis, the degree of Poland’s compliance with those criteria (a similar analysis is also carried out by the Ministry of Finance)[6].

In the case of two economic convergence criteria, i.e. the price stability criterion and the long-term interest rate criterion, the reference value used to assess compliance is relative, i.e. is not constant and depends on the economic situation in the EU countries. This value is defined as follows[7]:

- For the price stability criterion, it is computed by adding 1.5 percentage points to the average inflation rate for three EU countries with the most stable price level (which constitute the so-called reference group). The

[4] Currently, the excessive deficit procedure has been instituted with respect to Poland, which committed itself to reduce its general government deficit to less that 3% of the GDP in the course of 2012.

[5] The adoption of the euro remains a long-term goal of the Polish authorities, which follows from, among others, the country's commitment to fully participate in the Economic and Monetary Union provided for in the Treaty on the Functioning of the European Union, ratified by Poland. On numerous occasions the Monetary Policy Council presented (among others, in the Monetary Policy Guidelines for 2012) its stance that "Poland's accession to ERM II and the euro area should take place at an earliest possible date, as soon as the necessary legal, economic and organisational conditions have been met".

[6] It has to be emphasised that the NBP and the Ministry of Finance perform a hypothetical convergence assessment based on self-estimated reference values for the respective criteria. These estimates are based on Eurostat data on inflation and interest rates in the respective EU countries and may not comply with the final reference values computed by the EC and the ECB.

[7] For simplicity, it is often assumed that a country meets a criterion if the index for the country does not exceed the reference value. However, the Treaty on the Functioning of the European Union, Protocol on the Convergence Criteria and Convergence Reports contain detailed conditions for the principle thus described, in particular with respect to assessment of criterion fulfilment sustainability.

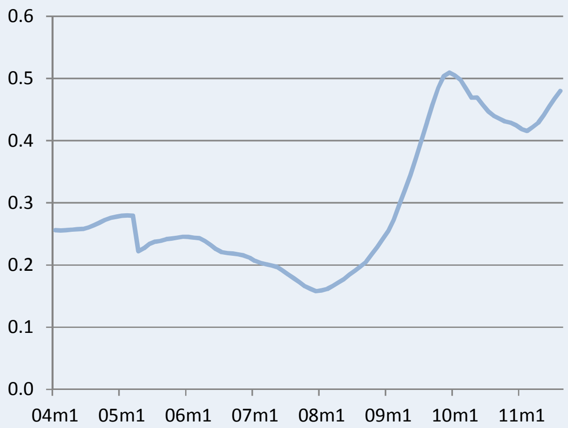
12-month moving average HICP inflation rate is used to assess compliance with the price stability criterion[8].

- For the long-term interest rate criterion, reference value is computed by adding 2.0 percentage points to the average long-term nominal interest rate for three EU countries with the most stable price level (which constitute the so-called reference group, the same one as in the case of the price stability criterion). To assess compliance with the interest rate criterion, average annual yield on long-term (typically 10-year) Treasury bonds is used[9].

Recently, due to the significant imbalances emerging in some countries of the European Union, assessment of compliance with the criteria mentioned above has become problematic. This is due to significant differences in the macroeconomic (in terms of business and fiscal conditions) situation among the respective EU countries which has been reflected in higher divergence of long-term interest rates prevailing in these countries (Figure R.1.1) In addition, following the recession of 2009 and 2010, there was a sharp increase in the number of countries with a very low or negative HICP inflation. In effect, the variability over time of the reference values for both criteria had risen (in particular, with respect to the long-term interest rate criterion), thus adding to uncertainty about their future levels, including the periods subject to a formal assessment by the EC and the ECB.

Figure R.1.1

Coefficient of variation (relationship of the standard deviation to the mean) for average 12-month long-term nominal interest rates in 27 EU countries



Source: Eurostat data, NBP calculations

According to the hitherto applied interpretation of the EC and ECB criteria, the reference group comprises three EU countries with the lowest inflation rates - as long as these do not deviate by a wide margin from the euro area average. However, in the recent period, the countries with the lowest inflation have included also the ones where low inflation resulted, to a great degree, from a severe downturn in their economies. The downturn has led to increased tensions in the financial markets, a significant rise in public debts and the resultant growing risk of insolvency, which has been reflected, inter alia, in a high level of long-term nominal interest rates. Latvia and Ireland have recently been examples of such countries, where low inflation has been accompanied by relatively high interest rates. The alternating exclusions and inclusions of these countries into/out of the reference group was the primary cause behind the increased variability of the reference value over time (Figure R.1.2 and Figure R.1.3). Looking ahead, it is also possible – under the current interpretation – of the criteria that countries like Greece or Spain, where slow economic growth and efforts at regaining competitiveness will drag on inflation while long-term interest rates will remain relatively high, may be included in the reference group.

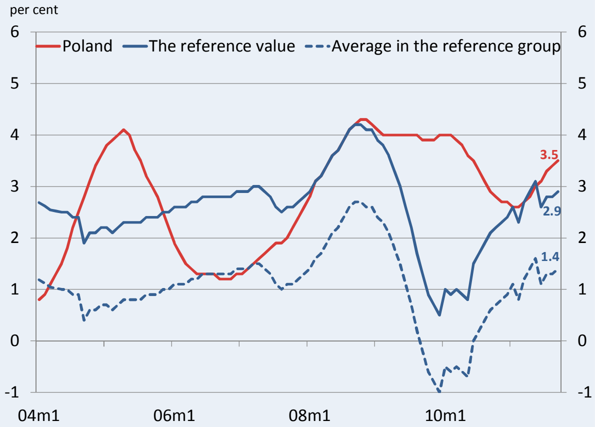
While assessing the degree of convergence, however, the EC and the ECB may exclude from the reference group countries which, notwithstanding their low or negative inflation, are not characterised by sustainable price stability (the so-called "outliers", see the European Commission's Convergence Report 2010). The exclusion of outliers has already been done in the Convergence Reports of 2004 and 2010 (when, respectively, Lithuania and Ireland were excluded). The current interpretation of the "outlier" concept does not provide full information as to the grounds on which such an exclusion might take place.

[8] The 12-month moving average of HICP inflation is calculated as the relationship of the arithmetic average of single-base price indices in the 12 months preceding the assessment and the arithmetic average of single-base price indices of the earlier 12 months.

[9] The 12-month moving average yield on long-term Treasury bonds is calculated as the arithmetic average of the twelve latest average monthly yields on these bonds.

Figure R.1.2

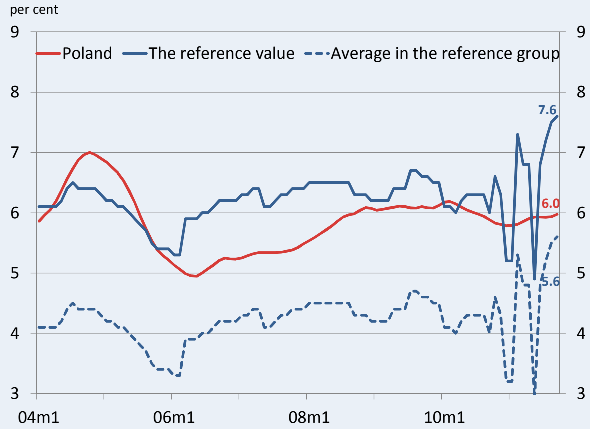
12-month average HICP inflation in Poland and the estimated Maastricht reference value.



Source: Eurostat data, NBP calculations

Figure R.1.3

12-month average yield on bonds in Poland and the estimated Maastricht reference value.

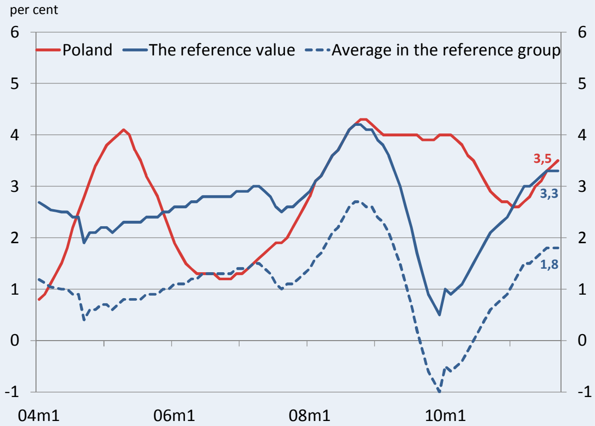


Source: Eurostat data, NBP calculations

The exceptional macroeconomic situation in some countries provides motivation to construct an alternative scenario, whereby the exclusion from the reference group might concern those countries which may be considered outliers (Figure R.1.4 and Figure R.1.5) due to exceptional factors which are at work there, even though their inflation is low, positive, and does not significantly deviate from the euro area average. In the following analysis it was therefore assumed that the countries which were beneficiaries of IMF and EU assistance programmes in the convergence assessment period would be subject to exclusion from the reference group (Greece, Ireland, Latvia, Portugal, Romania, Hungary). The rationale for such a choice lies in the recognition that the macroeconomic situation in these countries is being affected by exceptional factors and, as a result, their indices (inflation or long-term interest rate) do not constitute an economically meaningful benchmark for economic convergence assessment of countries aspiring to enter the euro area.

Figure R.1.4

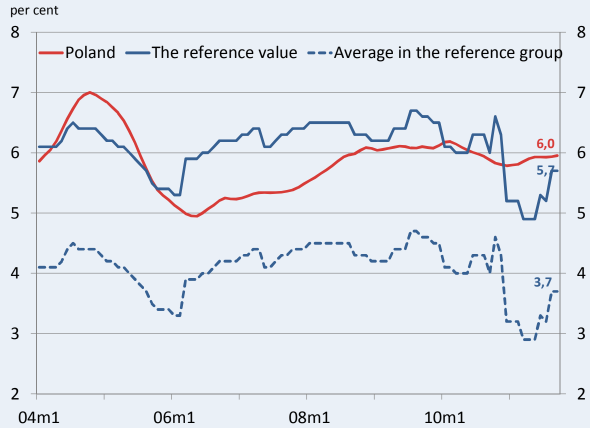
12-month average HICP inflation in Poland and the estimated Maastricht reference value in the alternative scenario.



Source: Eurostat data, NBP calculations.

Figure R.1.5

12-month average yield on bonds in Poland and the estimated Maastricht reference value in the alternative scenario.



Source: Eurostat data, NBP calculations

The adoption of alternative assumptions concerning exclusions from the reference group has changed the estimated reference values for both criteria discussed, as a result of replacing Latvia and Ireland in the reference group by, interchangeably, Belgium, the Czech Republic, Germany and Sweden (Table R.1.1). Moreover, as a result of adopting alternative assumptions, in many of the months covered the relationship between the indices of inflation and long-term interest rates in Poland (as well as other countries with a derogation) and the reference value has changed. For instance, in June 2011 the HICP inflation index for Poland was lower than the reference value under the current interpretation of the criteria, while it was higher in the alternative scenario (Figure R.1.2

and Figure R.1.4). By the same token, from June to August 2011 the 12-month nominal interest rate in Poland was lower than the reference value for the interest rates criterion, while in the alternative scenario it was higher (Figure R.1.3 and Figure R.1.5). Thus, a different interpretation by the EC and the ECB from the one hitherto employed may affect the assessment of Poland's fulfilment of the Maastricht convergence criteria.

Table R.1.1

The impact of adoption of alternative assumptions concerning the composition of the reference group on the price stability criterion and the long-term nominal interest rate criterion

	Country excluded from the reference group in the alternative scenario	Country included in the reference group in the alternative scenario	Reference value for the price stability criterion [%]		Reference value for the interest rate criterion [%]	
			Scenario under current interpretation of convergence criteria	Alternative scenario	Scenario under current interpretation of convergence criteria	Alternative scenario
2010m04	Latvia	Belgium	0.9	1.1	10.4	6.0
2010m05	Latvia	Belgium	0.8	1.3	10.4	6.0
2011m02	Latvia	Germany	2.3	2.8	7.3	5.2
2011m03	Latvia	Sweden	2.7	3.0	6.8	4.9
2011m04	Latvia	Germany	2.9	3.0	6.8	4.9
2011m06	Ireland	The Czech Republic	2.6	3.2	6.8	5.3
2011m07	Ireland	Germany	2.8	3.3	7.2	5.2
2011m08	Ireland	The Czech Republic	2.8	3.3	7.5	5.7
2011m09	Ireland	The Czech Republic	2.9	3.3	7.6	5.7

Source: Eurostat data, NBP calculations.

It has to be noted, however, that a new interpretation of the convergence criteria, along with a possible decision to exclude a country from the reference group as an outlier will be made by the EC and the ECB in the Convergence Reports, hence the alternative scenario discussed here is of purely illustrative nature.

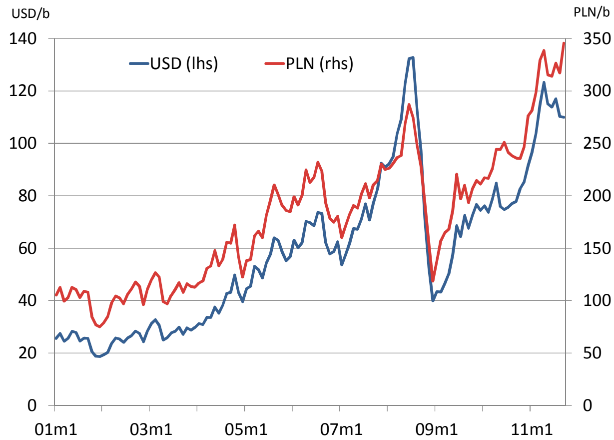
The above analysis shows that not only the variability of the criterion resulting from changes to the composition of the reference group, but also a possible adjustment by the EC and the EBC of the monetary criteria interpretation to the changing macroeconomic environment may materially affect the fulfilment of these criteria by the countries aspiring to join the euro area. Since this constitutes a source of uncertainty for the countries with a derogation, it would seem justified that the EC and the EBC should make the interpretation of the criteria more precise.

1.4. Global commodity markets

May 2011 saw a halt to the strong increase in oil prices observed since mid-2010 and in the following months oil prices gradually declined (Figure 1.18). The decline in prices was related primarily to increased concerns about the sustainability of economic recovery in the biggest developed economies following the deterioration of the economic growth outlook for the United States and the intensification of the debt crisis in some euro area countries. Moreover, increased risk aversion brought a decline in the activity on the oil market of investors from outside the fuel sector. Still, emerging economies' relatively high

Figure 1.18

Brent crude oil prices in USD and PLN.



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

demand for oil, coupled with a limited increase in its supply supported the persistently high prices of this commodity. Also the decline in European oil inventories resulting from the interruption of supplies of Libyan oil was a factor conducive to persistently high oil prices. Disruptions in oil production in Libya translated also into a reduction of idle production capacity in OPEC countries, which increased supply side tensions in the oil market stemming from geopolitical factors.

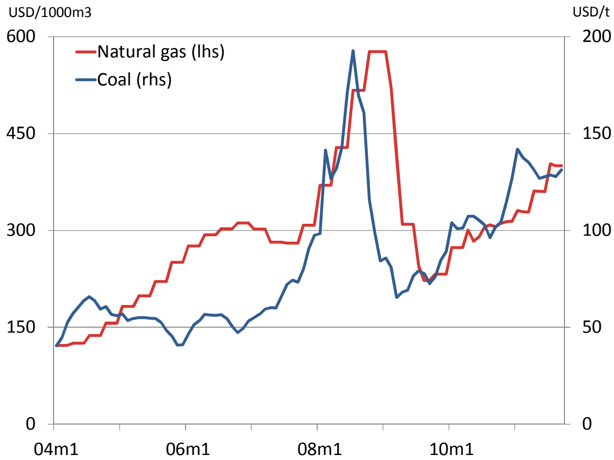
Since the publication of the previous *Report* oil prices have fluctuated around 99-120 USD/b, and in 2011 Q3 they were on average 4.3% lower than in 2011 Q2. Their relatively moderate decrease coupled with the appreciation of the US dollar translated into an increase in oil prices expressed in numerous currencies, including the zloty, which reached the highest level in history (see Chapter 2.1.4 *Import prices*).

Following a very sharp increase (to 142 USD/t) in January 2011, in response to Australian floods and the resulting reduction in coal production in this country, coal prices in subsequent months declined and since the publication of the previous *Report* have stabilized at approx. 128 USD/t (Figure 1.19). Meanwhile, gas prices have been rising consistently and at present they are running at slightly above 400 USD/1000 m3. The increase in gas prices is to a large extent related to the earlier increase in oil prices, which is transmitted into the prices of gas with a lag.

In turn, global prices of agricultural commodities continued to rise until April 2011, and have stabilized at a high level since May (Figure 1.20), exceeding the level reached in August 2008. The halt of growth in the prices of agricultural products was related to the improved outlook of their supply in the nearest term, following a bad harvest in the 2010/2011 season. At the same time, high food prices are still supported by the rising demand for food, particularly in emerging economies, and by the production of biofuels

Figure 1.19

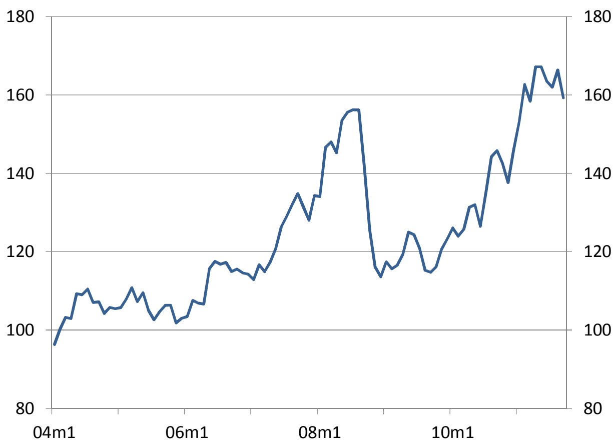
Gas and coal prices in the global markets.



Source : IMF data.

Figure 1.20

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



Source: IMF data, NBP calculations.

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

supported by high oil prices and the energy policy of the European Union and the United States.

Chapter 2

DOMESTIC ECONOMY

2.1. Inflation developments

2.1.1. Consumer prices

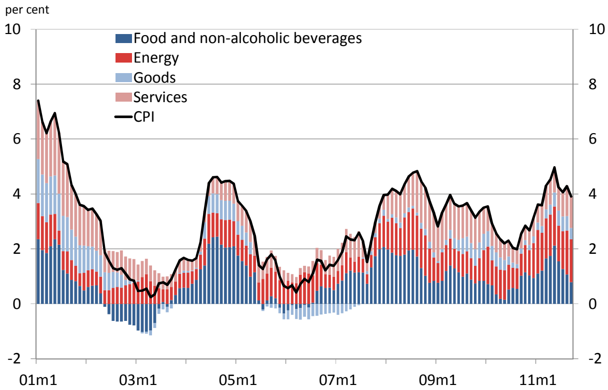
Following an acceleration to 5.0% in May 2011, in the subsequent months annual consumer price growth in Poland subsided gradually, reaching 3.9% in September 2011. However, inflation still remains significantly above the NBP's target of 2.5% (Figure 2.1).

This decline in inflation in recent months was mainly driven by a fall in food prices, in particular those of unprocessed food. This, in turn, has been related to ample – as compared with last year – supply of vegetables and fruit owing to a good crop[10], coupled with weak demand for food products (as evidenced by retail food sales rising only sluggishly). In September 2011, the increase in food prices was further dragged by a decline in the annual price growth of bread and cereal products. This was due to a negative base effect resulting from the unexpectedly sharp rise in those prices a year ago (as a consequence of booming global cereal prices).

On the other hand, the decrease in inflation in the analysed period was limited by persistently high growth in energy prices, including fuels. This was driven by mounting prices of energy

Figure 2.1

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



Source: GUS data, NBP calculations.

[10] Vegetables and fruit account for 15.8% of the food and non-alcoholic beverages included in the CPI basket.

commodities expressed in zlotys (as a result of zloty depreciation, especially in August and September 2011, causing prices of imported energy commodities expressed in zlotys to increase, notwithstanding their slight decline in dollar terms in the global markets), combined with a rise in the administered prices of energy carriers charged to households (new rates for natural gas, introduced in July 2011).

An additional factor restraining the decline in inflation in the analysed period, was the change in the GUS method for recording prices of seasonal goods, introduced at the beginning of 2011[11]. According to GUS estimates[12], these changes resulted in annual inflation indices rising by approx. 0.3 percentage points in June and July, and by 0.1 percentage points in August (in September 2011, the new price-recording method did not affect the inflation rate).

The elevated annual inflation continued to be also supported by the rise in VAT rates effective as of January 2011.

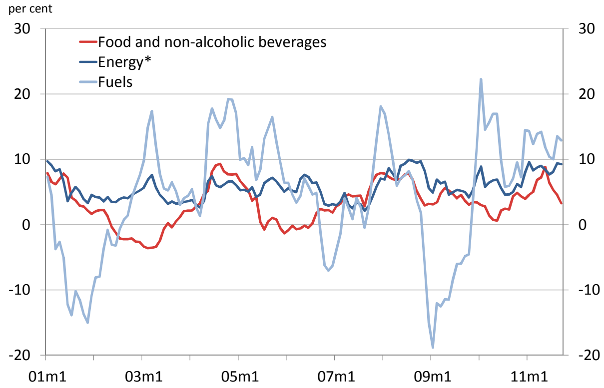
2.1.2. Core inflation

The decline in CPI inflation between June and September 2011 was accompanied by a rise in most core inflation measures (Figure 2.4). Core inflation net of food and energy prices increased to 2.6% in September 2011. This was primarily the effect of rising prices of telecommunication services (mainly telephone subscription fees) in August 2011, as the period of price discounts had ended.

In addition, the rise in core inflation in the analysed period was underpinned by accelerating growth in the prices of other services, in particular the administered prices of

Figure 2.2

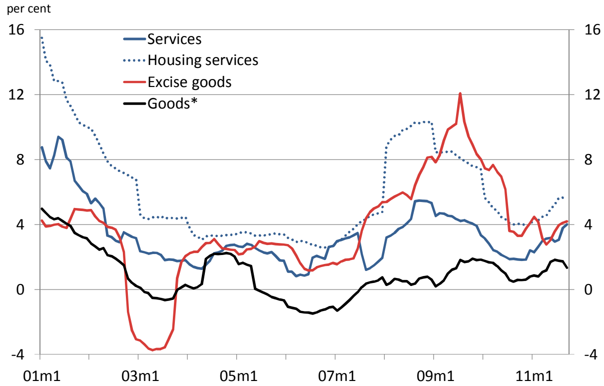
Changes in food and energy prices (y/y).



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

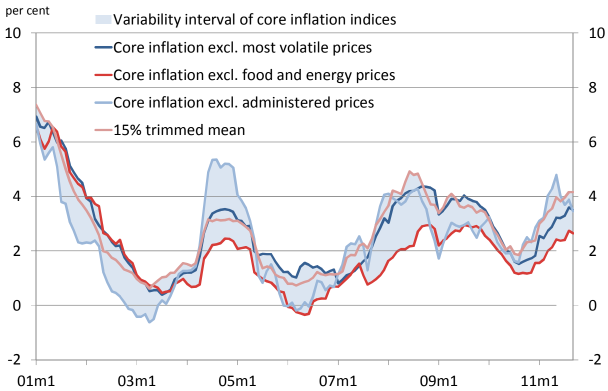
Changes in the prices of services and goods (y/y).



Source: GUS data, NBP calculations.
* The category of *goods* does not include food, non-alcoholic beverages or energy.

Figure 2.4

Core inflation measures (y/y).



Source: GUS data, NBP calculations.

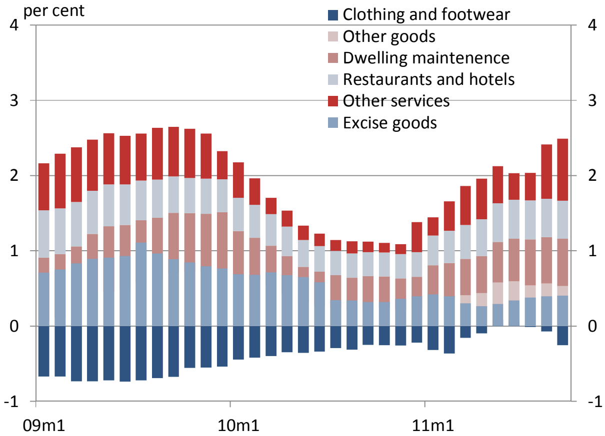
[11] The change in the method of recording the prices of seasonal goods (in particular, of vegetables and fruit as well as clothing and footwear) has a particularly strong impact on price growth in the months in which, until 2010, those goods were included in/excluded from the households' consumer basket (see GUS release of 13 September 2011 entitled *Seasonal products in consumer price surveys*).
[12] GUS release of 13 October 2011 entitled *Seasonal products in consumer price surveys - impact estimates*.

dwelling services (waste water and water utility rates), transport services (an increase in city transport fares mainly due to rising fuel prices) and a rise in recreational, cultural and educational services prices (higher kindergarten fees). Accelerated core inflation was also an effect of a further rise in the prices of excise goods, mainly tobacco products. It was additionally fuelled by the weakening zloty, especially in August and September 2011, triggering, among others, a rise in the prices of products related to home maintenance and furnishings, which are mainly imported.

In turn, a decline, in year-on-year terms, in the prices of clothing and footwear (related to a stronger than in 2010 decrease in August in prices in the summer sales season this year and a weaker than in 2010 seasonal rise in prices in September 2011) was a factor with a dampening effect on core inflation.

Figure 2.5

Composition of core inflation (y/y).



Source: GUS data, NBP calculations.

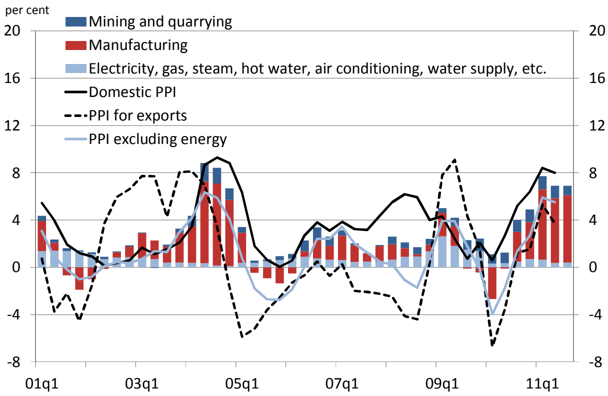
2.1.3. Producer prices

Producer prices in industry (PPI) increased 6.9% y/y both in 2011 Q2 and Q3 as against 7.7% y/y in 2010 Q1. The stabilisation of annual PPI growth at an elevated level was primarily due to fast growth in manufacturing prices. However, while continued high PPI growth in 2011 Q2 resulted from a further rise in global commodity prices coupled with only a slight appreciation of the nominal effective zloty exchange rate, in 2011 Q3 it was caused by a depreciation of the zloty amid a slight fall in commodity prices in the global markets.

In the domestic market, PPI growth eased down to 8.0% y/y in 2011 Q2 (from 8.4% y/y in the previous quarter), and in the export goods market to 3.7% y/y (from 5.3% y/y; 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.



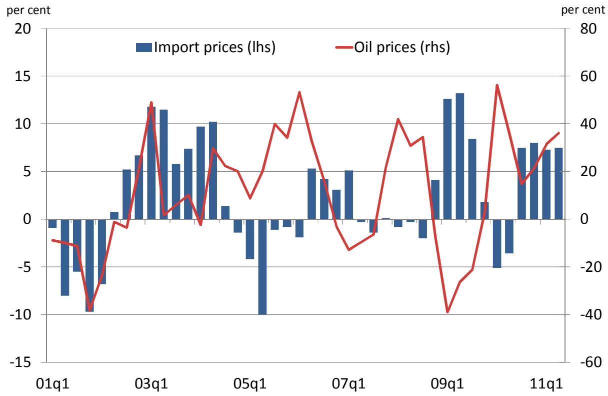
Source: GUS data.

2.1.4. Import prices

In 2011 Q2, despite a slight appreciation of the nominal effective zloty exchange rate, import prices in zloty terms continued to rise fast - by 7.5% y/y as compared with 7.3% y/y in the previous quarter (Figure 2.7). This was driven by a further rise in prices of energy commodities – including, above all, those of crude oil – in the global markets. On the other hand, price growth in most of other groups of imported goods decelerated. In particular, food prices rose more slowly than in the previous quarter (in particular those of unprocessed food, mainly vegetables imported from the European market, due to the E.coli epidemic in Germany) and the prices of consumer goods (mainly due to a further decline in durable goods prices).

Figure 2.7

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



Source: GUS data.

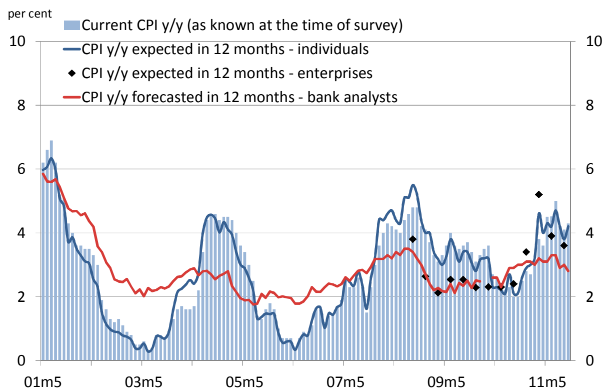
2.1.5. Inflation expectations

12-month inflation forecasts by financial sector analysts sank to 2.8% in October 2011, following an increase to 3.3% in June and July 2011 (Figure 2.8).

The objectified measure of individuals' inflation expectations in the period May-October 2011 remained above 4% (except for September). Due to the adaptive nature of inflation expectations in this respondent group, the reading for this measure tends to run close to the inflation known to the subjects at the time of the survey. Within the analysed period, only the September figure for expectations was strongly affected by a change in subjects' response structure, which had improved, thereby reducing consumer inflation expectations. In the analysed period, inflation expectations were probably elevated due to the fact that the rise in prices had been particularly sharp with respect to frequently purchased goods, to which individuals attach relatively more weight, e.g. fuels.

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.

Inflation expectations of enterprises over the 12-month horizon (objectified measure) declined in 2011 Q2 and Q3, to 3.9% and 3.6%, respectively (as compared with 5.2% in 2011 Q1). While in 2011 Q2, the decline in enterprises' inflation expectations was the effect of an improvement in the structure of responses to the survey question, its further reduction in Q3 resulted from a fall in current inflation as known at the time of the survey.

2.2. Demand and output

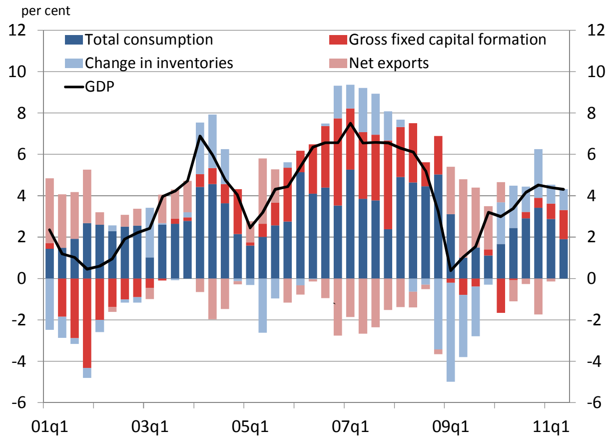
In 2011 Q2 the relatively buoyant GDP growth was sustained. The growth rate stood at 4.3% y/y in 2011 Q2 as against 4.4% y/y in 2011 Q1 (Figure 2.9). In accordance with the NBP estimates, GDP growth in quarterly terms accelerated somewhat (up to 0.9% q/q in 2011 Q2 from 0.8% q/q in 2011 Q1 in seasonally adjusted terms).

Growth continued to be driven primarily by domestic demand, which rose by 4.3% y/y in 2011 Q2 (as against 4.5% y/y in 2011 Q1). The persistence of a relatively strong increase in domestic demand was stimulated by a further acceleration of investment growth, steady rising consumption and a positive contribution from changes in inventories.

Private consumption, albeit it ebbed down in comparison to the previous quarters, remained relatively high in 2011 Q2. The growth of private consumption in 2011 Q2 stabilised, despite elevated inflation, a decline in consumer loans and a rescheduling of some purchases for late 2010 due to changing VAT rates as of 2011. This may indicate a significant role of households' propensity to smoothen consumption over time. However, public consumption continued to trend downwards. The growth in this category stood at -1.3% y/y in 2011 Q2 as against 1.5% in 2011 Q1.

Figure 2.9

Contribution of aggregate demand components to GDP growth.



Source: GUS data

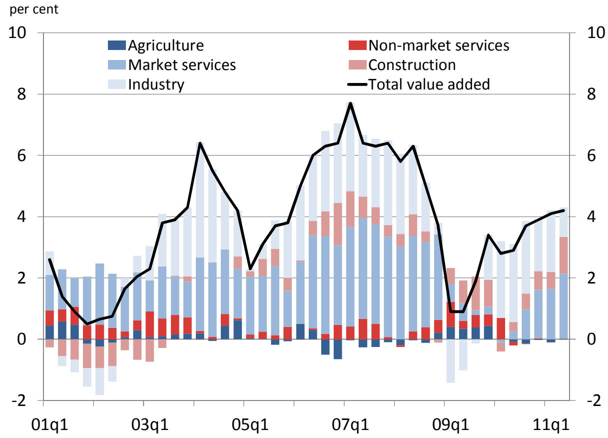
2011 Q2 saw a continuation of investment recovery, observed since 2010 Q3. Meanwhile, enterprises continued to rebuild their inventories, which resulted in a positive contribution of this category to GDP growth.

2011 Q2 (according to national accounts data) saw a slight gain both in the momentum of exports (up to 6.7% y/y), and imports (up to 6.6% y/y), with a near-null contribution of net exports to GDP growth.

With reference to the composition of growth in 2011 Q2 all main components made positive contributions to gross value added (Figure 2.10), with market services being the main growth driver. As compared to the previous quarter, the contribution of industry to the growth of gross value added posted a decline, which may be attributable to a certain slowdown in the upward tendencies in this sector at that time. By contrast, construction expanded its contribution, which is associated with considerable investments of the public sector.

Figure 2.10

Sector contribution to annual growth of gross value added.



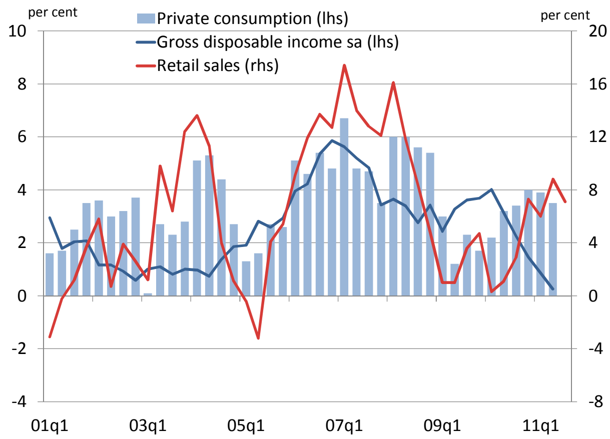
Source: GUS data, NBP calculations

2.2.1. Consumption demand

Following a robust expansion in 2010, consumption demand was waning in the first half of 2011, yet remained at relatively high levels. According to the GUS data, private consumption growth stood at 3.5% y/y in 2011 Q2 (as against 3.9% y/y in 2011 Q1 and 4.0 % y/y in 2010 Q4; Figure 2.11). According to NBP estimates, in seasonally adjusted quarter-on-quarter terms, private consumption stood at 0.8% q/q in 2011 Q2 as against 0.9% q/q in 2011 Q1 and 1.0% q/q in 2010 Q4.

Figure 2.11

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



Source: GUS data, NBP calculations.

The real growth in private consumption in the first half of 2011 was inhibited by a further decline in the growth of household disposable income (in seasonally adjusted terms). The real growth in disposable income shrank in that period, subdued by elevated inflation, weaker growth in the income from hired employment[13], despite a relatively strong expansion of the wage fund in the economy and a slower rise in social transfers. In turn, the accelerating income of sole traders, which rose steeper than last year, was the main factor conducive to the growth in disposable income. This may suggest a certain improvement in the financial position of the smallest businesses in the first half of 2011 (see Chapter 2.2.2. *Investment demand*).

As disposable income rose slower than private consumption in the first half of 2011, households' saving rate shrank from 10.0% in 2010 Q4 to 5.3% in 2011 Q1 and 6.2% in 2011 Q2, i.e. stood below its multi-year average[14].

As private consumption ebbed down, retail sales continued their relatively steep upward trend, at 6.0% y/y in 2011 Q1 and 8.8% y/y in 2011 Q2. This trend also persisted in Q3 (7.1% y/y) which indicates that consumption demand in 2011 Q3 remained broadly unchanged as compared to the first half of the year. Despite some variation, the majority of retail sales display relatively high growth which is indicative of a further relatively broad base of consumption demand.

The slowdown of consumption demand in 2011 Q3 may be indicated by slower real growth in aggregate wages in the enterprise sector in July-September, coupled with a deteriorated financial situation of some households (drop in share prices, depreciation of the zloty, employment cuts). Meanwhile, as indicated in the NBP estimates (see Box 2 *The impact of the depreciation of the zloty against the Swiss franc on households' expenditure, debt-service costs and consumption*) depreciation of the zloty which translates into a heavier debt burden of households with Swiss franc-denominated

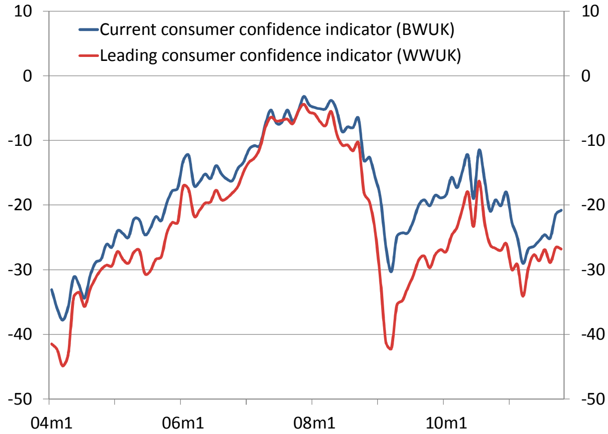
[13] Income from hired employment includes, apart from wages, some forms of benefits, non-cash income, transfers from the Employee Benefit Fund and severance pay.
[14] Saving rate calculated as the share of savings in household disposable income, in seasonally adjusted terms. The average savings rate (seasonally adjusted) in the period 1999 Q1- 2011 Q2 stood at 9.9%.

loans should not materially impact private consumption.

The relatively low sentiment of households in 2011, observed in surveys, may also restrain the growth of private consumption (Figure 2.12). At the same time, some improvement in consumer confidence indices observed since 2011 Q2, particularly the steady upward move in customers' propensity to make major purchases observed since July 2011, may imply an optimistic outlook for consumption demand[15].

Figure 2.12

Consumer confidence indicators.



Source: GUS and NBP data.

Box 2. The impact of the depreciation of the Polish zloty against the Swiss franc on households' expenditures, debt-service costs and consumption

A strong depreciation of the Polish zloty against the Swiss franc – observed in 2011 Q2 and Q3 – increased the total debt and loan repayment burden for borrowers with Swiss franc mortgages, and thus materially impacted the financial condition of some Polish households[16]. This box presents the results of simulations aimed at estimating the direct impact of zloty depreciation against the Swiss franc on the debt burden on households' disposable income and, subsequently, on consumption and GDP.

The impact of the zloty depreciation against the Swiss franc on the total value of outstanding debt and on the burden of loan repayment was calculated on the basis of the following data: the total amount of Swiss franc-denominated housing loans as at 2011 Q2, the banking system's interest income from the Swiss franc-denominated housing loans in 2011 Q2, households' gross disposable income in 2011 Q1 and an estimated average quarterly principal installment of a Swiss franc-denominated housing loan.[17] The above approach assumed that the rise in the total debt value, interest payments and the average installment is proportional to the depreciation of the zloty against the Swiss franc.[18]

The estimated impact of zloty depreciation on the financial condition of households is presented in Table R.2.1. The impact was related to gross disposable income of the whole household sector and not just to gross disposable income of those households (less than 10% of the total) which hold a mortgage loan, in particular, a Swiss franc-denominated one. Thus the relation of total debt to quarterly gross disposable income of the entire household sector (for Swiss franc-denominated loans it amounts to approx. 70%) is running at a level lower than the corresponding ratio for the indebted households.

[15] Despite this improvement since the beginning of 2011 all components of consumer confidence indices (except the change in the unemployment level) persist at a permanently lower level compared to the previous year.

[16] At the end of 2011 Q2, Swiss franc-denominated loans accounted for 53% of total household mortgage debt and 86% of household mortgage debt in foreign currencies.

[17] Most data on household debt used in this part of the study related to 2011 Q2, when the exchange rate fluctuated within the range of 3.01 - 3.37 CHF/PLN, with an average of 3.16 CHF/PLN.

The analysis was restricted to examining the effect of exchange rate developments on household liabilities, as household income from Swiss franc-denominated deposits is marginal.

The average debt repayment installment of a Swiss franc-denominated housing loan (for 2010) used in the analysis has been calculated on the basis of NBP data on foreign currency loans adjusted for the impact of exchange rate fluctuations and the Polish Bank Association data on the value of newly granted loans.

[18] The calculations do not take into account, among others, the impact of depreciation on other sectors of the economy, such as external trade.

Table R.2.1 shows that the zloty depreciation against the Swiss franc causes a significant increase in the relation of outstanding debt value to the quarterly disposable income of households (assuming a 30% zloty depreciation, the relation of Swiss franc-denominated liabilities to the quarterly disposable income of the entire household sector rises from 70% to 90%, i.e. the increase in the value of liabilities accounts for approx. 20% of quarterly income). At the same time, the depreciation-related increase in interest payments and principal installments is modest (even a 30% zloty depreciation raises it from 1.1% to just 1.4%, i.e. by about 0.3% of the quarterly disposable income of all households). This, however, results primarily from the low proportion of households holding a mortgage loan in the total population of households. Hence, while the increase of the debt burden for the whole household sector is not considerable, this may not be true for the indebted households, whose debt burden probably rises significantly.

Table R.2.1

The impact of the depreciation of the Polish zloty against the Swiss franc on households' debt value and debt-service costs.

	The scale of zloty depreciation against the Swiss franc								
as percentage of gross disposable income	**5.0%**	**7.5%**	**10.0%**	**12.5%**	**15.0%**	**17.5%**	**20.0%**	**25.0%**	**30.0%**
1. Increase in the value of outstanding debt	3.58	5.37	7.16	8.95	10.74	12.53	14.33	17.91	21.49
2. Increase in quarterly interest payment	0.03	0.05	0.06	0.08	0.09	0.11	0.12	0.15	0.18
3. Increase in quarterly principal installment	0.02	0.03	0.04	0.06	0.07	0.08	0.09	0.11	0.13
4. Increase in debt service cost (2+3)	0.05	0.08	0.11	0.13	0.16	0.18	0.21	0.26	0.32

Source: NBP estimates based on GUS and NBP data.

The above analysis was supplemented with a study based on data obtained from the GUS Household Budget Surveys, allowing an approximate estimation of the distribution of the debt repayment burden across households depending on their wealth[19]. At the beginning, however, it should be noted that the largest group of mortgage-indebted households is the group of average-wealth households (Figure R.2.1). This results not so much from their propensity to incur debt (which, with respect to mortgage loans, rises together with household wealth), but from the distribution of the household population with respect to their monthly spending.

In the context of examining the impact of the zloty's depreciation against the Swiss franc on households' financial condition, it would be appropriate to restrict the analysis to households holding Swiss franc-denominated mortgage loans. However, due to the lack of appropriate microdata, the analysis comprised households with any kind of mortgage loan (both zloty- and foreign currency-denominated). The study uses individual data from the GUS Household Budget Surveys of 2010, and the distributions of outstanding debt and the debt repayment burden were considered in relation to the wealth of households, approximated with households' total spending[20].

Mortgage service costs, measured as the value of installments (including interest payments) in relation to a household's total spending, declines as the household's wealth increases (Figure R.2.2). A very high debt burden related to mortgage loan repayment (accounting for more than a half of total spending) is however observed among the least wealthy – though also the least numerous (Figure R.2.1) – group of indebted households, with monthly spending below PLN 1,000. There is a fairly large group of mortgage-loan-repaying households, with monthly spending in the range of PLN 1,000 – PLN 2,000, for which the observed level of the debt burden related

[19] This part of the analysis is based on data for 2010, when the exchange rate fluctuated within the range of 2.65-3.19 CHF/PLN, with an average of 2.90 CHF/PLN.

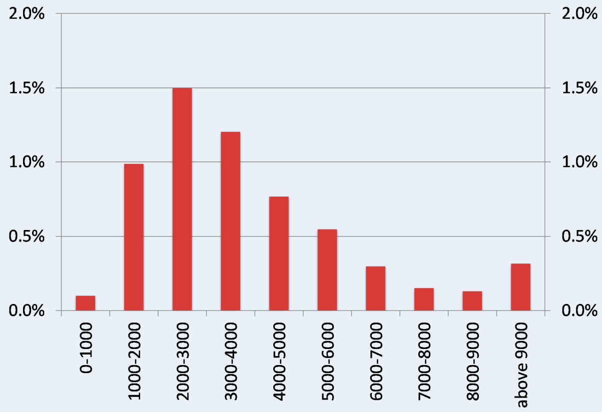
[20] In the Household Budget Survey published by the GUS, the category „mortgage loan" encompasses all kind of mortgage loans– the category is not broken down into zloty- and foreign currency-denominated loans.

Due to specific character of individual surveys, income is no treated as a good measure of household's wealth. Firstly, as shown in numerous studies, households tend to understate their income (this is particularly true for sole traders). Secondly, income of certain groups (especially of farmers and sole traders) fluctuates considerably, and since the GUS Household Budget Survey is conducted on a monthly basis, the registered income may inadequately reflected wealth of households.

to the mortgage loan is significant, i.e. it exceeds 30% of their spending. At the same time, the share of debt repayment in total household spending declines together with the rise in wealth – already with monthly spending above PLN 2,000 the loan repayment burden on average does not exceed 30% of household spending.

Figure R.2.1

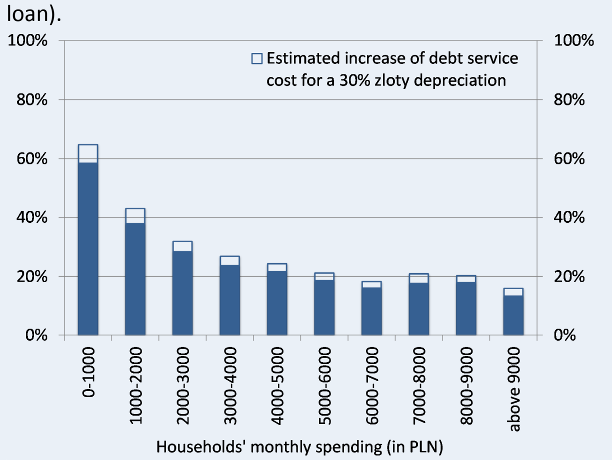
The share of households repaying a mortgage loan (zloty or foreign currency-denominated, including Swiss franc-denominated loans) in the total number of households depending on total household spending.



Source: GUS Household Budgets Survey, data for 2010.

Figure R.2.2

The average value of mortgage payments (including interest) in relation to total household spending depending on total household spending (for households with mortgage loan).



Source: GUS Household Budgets Survey, data for 2010.

Taking into account the significant differences in the loan repayment burden depending on household wealth, the impact of the zloty depreciation against the Swiss franc has been estimated for individual income groups (Figure R.2.2). Under the assumption that the distribution of households with a Swiss franc-denominated mortgage loan depending on the wealth level is analogical to the distribution of households with any kind of mortgage loan (scaled accordingly)[21], a 30% depreciation of the zloty against the Swiss franc increases the average loan repayment burden among the least wealthy households by 6 percentage points (from 59% to 65% of household monthly spending), and for the most numerous group, with monthly spending in the range of PLN 2,000 – PLN 3,000 the burden rises by 3 percentage points (from 29% to 32%). The assumption relating to the distribution of households with a Swiss franc-denominated mortgage loan may, however, lead to overestimating the rise in the debt repayment burden for the least wealthy households. This is so as wealthy households are likely to have relatively more often Swiss franc-denominated loans as compared to zloty loans than the less wealthy households.

The analysis of the impact of zloty depreciation on Swiss franc-denominated debt was complemented with the evaluation of its macroeconomic effects. For this purpose, based on simulations from the NBP forecasting model (NECMOD), the effect of the zloty's depreciation against the Swiss franc on household consumption and GDP were estimated. The simulation took into account the income effect of depreciation related to higher household loan installments and the wealth effect resulting from the rise in household liabilities. Under a scenario of a 30% zloty depreciation against the Swiss franc for the period of 1 year (with unchanged zloty exchange rate against other currencies), in any quarter within the projection horizon the impact does not exceed 0.1% for consumption or GDP.

It is worth noting that the above estimates may not fully account for all effects of the zloty's depreciation against the Swiss franc and thus the actual impact on consumption may be higher. Moreover, even though for the household sector as a whole the aggregate impact of zloty depreciation on consumption is not considerable, it curbs consumption of those households that are indebted in Swiss francs significantly more strongly.

[21] The adopted assumption is necessary, given that no data are available on the costs of foreign currency-loan service (including in particular the costs of Swiss franc-denominated loan service) in the population of households, depending on their wealth.

2.2.2. Investment demand

2011 Q2 saw continuous investment expansion. The annual growth in gross fixed capital formation stood at 7.8% y/y (as against 6.0% y/y in 2011 Q1 and 1.6% y/y in 2010 Q4; Figure 2.13), and in quarterly terms, in accordance with NBP estimates, 2.2% q/q (as against 2.5% q/q in 2011 Q1 and 0.9% q/q in 2010 Q4).

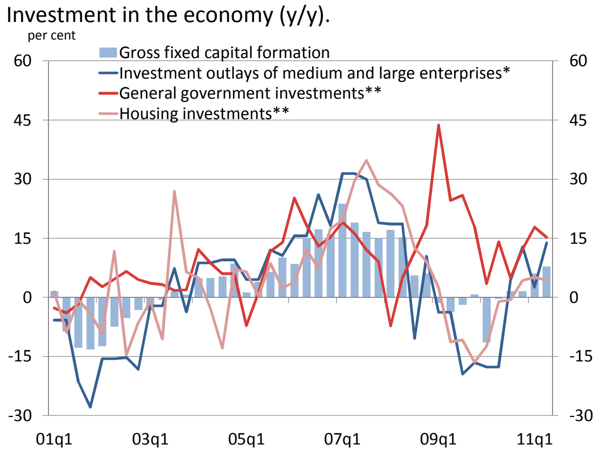
The increase in investment outlays in the economy draws, to a large extent, on further buoyant pickup in public investment and acceleration in enterprise outlays. Public investment grew at 15.2% y/y in 2011 Q2 (as against 17.8% y/y in 2011 Q1 and 12.3% y/y in 2010 Q4). In turn, corporate investment rose by 13.8% y/y in 2011 Q2 (as against 2.6% y/y in 2011 Q1 and 12.8% y/y in 2010 Q4). At the same time, housing investment growth remained stable for the third consecutive quarter at 4.2% y/y in 2011 Q2, as against 5.1 % y/y in 2011 Q1 and 4.3% y/y in 2010 Q4.

Corporate investment demand soared, stimulated by continued upward trend in outlays on plant, machinery and equipment (Figure 2.14). Growth in investment outlays was hampered by lower outlays on means of transport, linked to their increased purchases in late 2010, prior to the announced abolishment of VAT rebates for purchases of cars with goods vehicle approval certificates.

Looking ahead, the NBP business conditions surveys imply limited growth in investment in the coming months[22]. The percentage of companies which plan to embark on new investment projects remains low, which is associated with uncertainty about the future economic situation (Figure 2.15). Specifically, the deteriorating global macroeconomic outlook may contain investment growth in Poland in the coming

Figure 2.13

Investment in the economy (y/y).



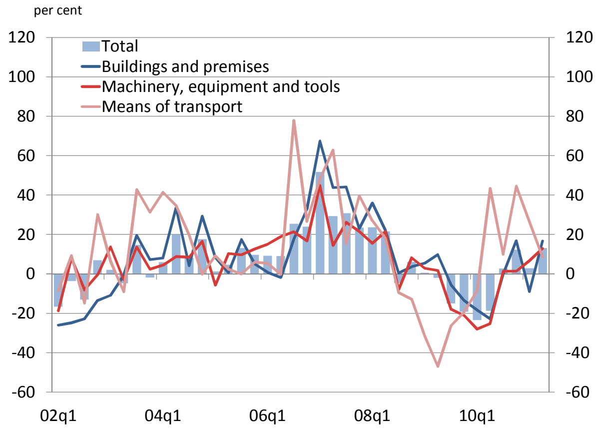
Source: GUS data, Ministry of Finance data, NBP estimates.

* Due to the lack of data on investment outlays of enterprises in Q1 and Q2 up to 2010, the chart presents the growth for the first half of a year till 2011.

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

Figure 2.14

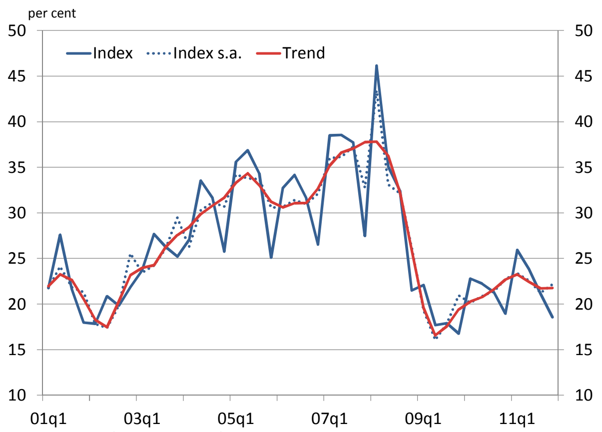
Gross fixed capital formation in medium and large enterprises (in nominal terms, y/y).



Source: GUS data, NBP calculations.

Figure 2.15

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



Source: NBP business tendency survey.

[22] *Information on the condition of the enterprise sector with a particular focus on business conditions in 2011 Q3 and forecast for 2011 Q4, NBP.*

quarters. Other business climate indicators also suggest a likely deterioration in the prospects for commencing new investment projects[23]. Furthermore, a decline in the estimated cost of newly started investment projects in 2011 Q2 may signal a possible decline in fixed capital formation.

At the same time, high levels of companies' profitability and liquidity ratios indicate their sound financial position (Table 2.1), which should support corporate investment activity, once the uncertainty about the business conditions has waned[24]. Large resources of liquid funds held by the companies may also facilitate their access to external financing, as confirmed by the growth in investment loans observed since October 2010. Moreover, capacity utilization grew in 2011 in Q2 and Q3, above the multi-year average level (Figure 2.16).

NBP surveys of business conditions also reveal considerable diversification in the planned outlays in individual groups of enterprises. As before, small and medium-sized enterprises (SMEs) plan to embark on fewer new investments, and delay more new projects than large companies (especially in the energy sector). This is associated with higher (in SMEs than among large companies) uncertainty about the macroeconomic outlook, tighter lending conditions and worse liquidity situation.

Table 2.1

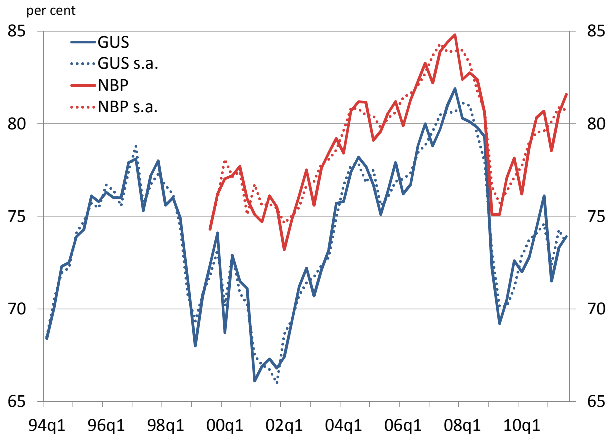
Selected financial efficiency indices in the enterprise sector.

percent	2006	2007	2008	2009	2010	2011 q1	2011 q2
Return on sales ratio	5.5	5.6	5.0	5.0	5.2	5.3	10.4
Net profitability ratio	4.7	5.0	3.3	4.1	4.4	4.3	6.1
Cost level index	94.3	93.9	95.8	95.0	94.7	94.7	93.0
	end of period						
Liquidity ratio of the first degree	34.9	33.7	33.6	38.5	39.7	38.9	37.7

Source: GUS data.

Figure 2.16

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



Source: GUS data, NBP business tendency survey.

The production capacity utilisation obtained from the GUS business survey is significantly lower from one obtained from the NBP business survey. However, the changes in this indicator are similar in both surveys. The difference is due to the fact that the two surveys are based on different enterprise samples. The difference may also reflect the over-representation of big enterprises in the NBP sample, while the GUS sample is representative with respect to enterprise size.

2.2.3. Government demand

In the period January-September 2011 the central budget deficit stood at approx. PLN 21.9 billion, i.e. at 54.5% of the annual plan[25]. Total budget revenues over the first nine months of 2011 exceeded those of the corresponding

[23] Worsening business conditions are signalled by: the general index of the forecast economic situation in manufacturing, the IRG-SGH business climate index, the PMI index and the leading indicator of business climate, whereas the BIEC index indicates a lack of significant changes in business conditions.

[24] It results from the fact that – as in previous years – a significant share of firms (currently approximately a half of surveyed companies) declare that their investment is self-financed.

[25] In the same period of 2010 the central budget deficit stood at 88.7% of the annual plan.

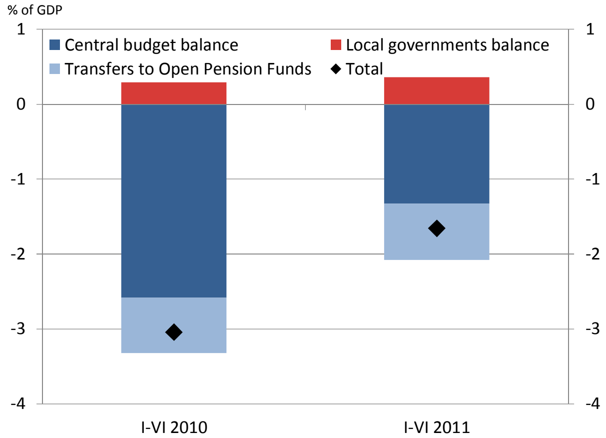
period of last year by 13.0% y/y, with tax revenues growing by 10.6% y/y. This rise was primarily driven by a VAT revenues increase (by 13.8% y/y), being the result of increases in VAT rates and relatively fast growth of retail sales in the period under review. CIT revenues rose by 19.4% y/y, stimulated, to a large extent, by the positive settlement balance in this category for 2010. In turn government expenditures in the analysed period rose by 2.7% y/y. So far, the expenditures have grown slower than provided for in the draft *Budget Act* for the whole year (6.3%), as the implementation of some investment expenditures has been re-scheduled for the last quarter of the year, and the execution of the current spending of local government units was less advanced.

In the first half of 2011 local government units recorded a surplus of PLN 5.5 billion, i.e. PLN 1.3 billion higher than last year (Figure 2.17), due to an increase in local governments' own revenues (by 9.8% y/y)[26]. At the same time, the growth of local governments' expenditure, particularly of their current expenditure, slowed down relatively to the preceding quarters[27].

By the end of September 2011, the Social Security Fund had received the entire subsidy provided for in the central budget for this year (PLN 37.9 billion). In the following months of 2011 the gap between expenses on benefit payments and revenues from contributions will be covered with funds from the Demographic Reserve Fund (PLN 4 billion)[28], central budget loan (PLN 3 billion) and bank loans (PLN 1.6 billion)[29], with the total level of Social Security Fund deficit being financed from those sources

Figure 2.17

Selected components of public finance sector balance (to annual GDP).



Source: Ministry of Finance data.

[26] The increase in own revenues is i.a. the effect of favourable receipts of PIT and CIT for 2010.

[27] Despite relatively fast growth of current expenditure in the largest, as far as local government expenditure is concerned, group – *education* (7.6% y/y), connected with a raise in the salaries of teachers, total current expenditure increased by 6.0% y/y, that is significantly less than in 2010. This was related to slow growth in expenditures among others in public administration (3.6% y/y), transport and communication (4.3%), waste management and environmental protection (1.6%) and public security (-1.9%). The restrained growth of expenditure may be connected with more and more local government units approaching the binding 60% limit of debt to revenue.

[28] Based on the 3rd of December 2009 amendments to the Social Security Act (Dz.U. z 2009 r., nr 218, poz. 690).

[29] In line with the anticipated realization of the Social Security Fund's financial plan for 2011, outlined in the draft *Budget Act for 201,* adopted by the Council of Ministers on 27 September 2011.

declining in comparison to the preceding year. The Labour Fund and the National Health Fund recorded small surpluses during the first eight months of 2011, as against deficits recorded in the corresponding period of 2010.

In the first half of 2011, public debt increased by PLN 40.0 billion, to stand at PLN 787.9 billion at the end of June. This increase was lower than the one recorded in the corresponding period of the previous year (PLN 52.1 billion) which was largely due to reduced public sector net borrowing requirement. In accordance with the *Public Finance Debt Management Strategy in the years 2012-2015* the borrowing requirement is to decline from PLN 65.4 billion in 2010 to PLN 35.7 billion in 2011 and rise to PLN 47.3 billion in 2012. Such a strong decline in the government's borrowing needs in 2011 results partly from the implementation of the consolidation mechanism for public finance liquidity management, which will result in a one-off reduction in the borrowing requirement in 2011 by approx. PLN 22 billion[30].

According to the autumn fiscal notification of the EDP[31], the deficit of central and local government budgets in relation to GDP (in ESA95 terms) will decline by 2.2 percentage points in 2011 as compared to 2010, and will stand at 5.6% of GDP. Further deficit reduction is planned for 2012, which should decrease below 3% of GDP, according to the *Convergence Programme. 2011 Update*. Meeting this target is subject to risk, which has intensified over the recent months due to a deteriorating outlook for the external environment of the Polish economy. The situation in the public finance sector in 2012 will be discussed at length in *the Monetary Policy Council's Opinion to the draft Budget Act for 2012*.

[30] In line with the *Background document* to the draft *Budget Act for 2012*, adopted by the Council of Ministers on 27 September 2011.

[31] EDP (Excessive Deficit Procedure) specifies the criteria, time schedules and deadlines used by the Council of the EU when making decisions about the existence of an excessive deficit in a member state. This decision is made after the 1st of April and 1st of October deadlines have passed, before which EU member states have to submit to the Commission reports on their public finances.

2.2.4. Exports and imports[32]

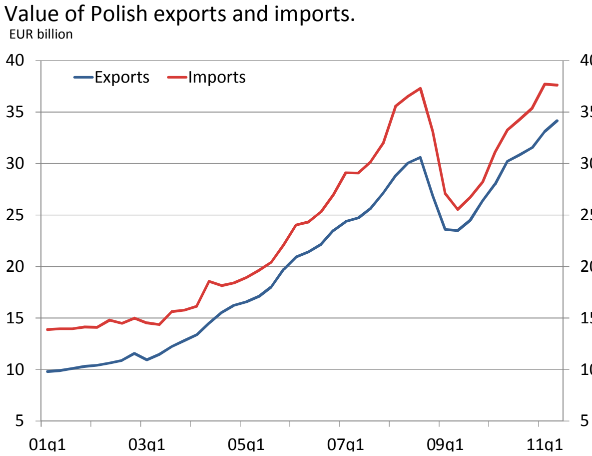
In 2011 Q2 Polish external trade slowed down. The value of Polish goods export (Figure 2.18) rose by 13.1% y/y (compared to 18.3% y/y in 2011 Q1) and 3.2% q/q (compared to 4.9% q/q in 2011 Q1). The decline in the growth of exports was, to a large extent, driven by a fall in external demand for Polish consumer and intermediate goods (exports of consumer goods rose by 0.1% q/q in 2011 Q2 compared to 5.6% q/q in 2011 Q1, whereas exports of intermediate goods rose by 2.6% q/q in 2011 Q2 compared to 4.6% q/q in 2011 Q1). The slowdown in export growth, including primarily consumer durables as well as passenger cars, concerned mainly exports to the euro area.

In 2011 Q2 a slowdown in imports could also be observed, their value rose by 13.1% y/y (compared to 21.2% y/y in 2011 Q1) and fell by 0.2 % q/q (compared to growth of 6.6% q/q in 2011 Q1). The slowdown in the value of imports reflected a decline in the imports of consumer goods; the imports of intermediate and capital goods also slowed down.

In 2011 Q2, both the real and nominal effective exchange rate of the zloty were relatively stable, whereas in 2011 Q3 it depreciated considerably (Figure 2.19), which was conducive to maintaining the price competitiveness of Polish products. According to NBP business climate surveys the observed fluctuation of the exchange rate made exports more profitable. In 2011 Q3 the exchange rate of the zloty was markedly weaker than the threshold exchange rate of exports profitability declared by enterprises (Figure 2.20).

Figure 2.18

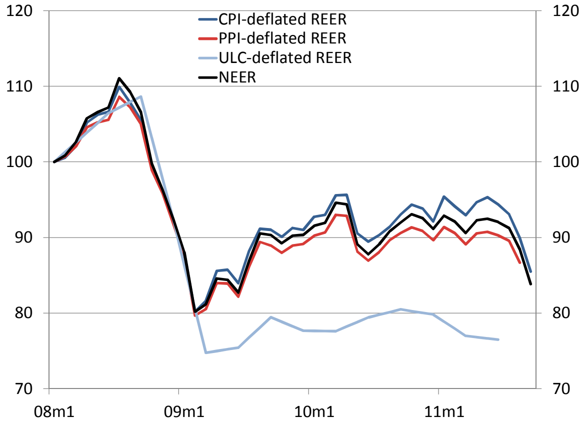
Value of Polish exports and imports.



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

Figure 2.19

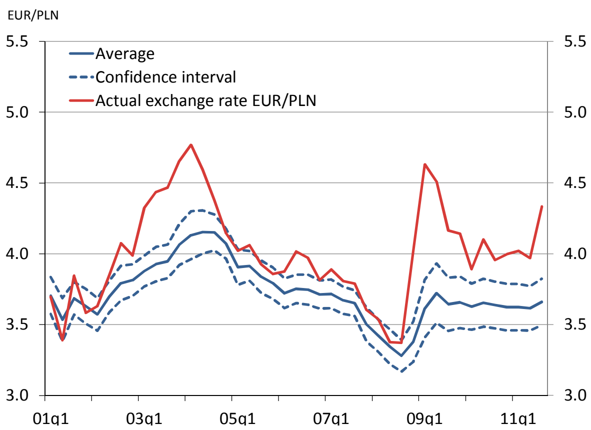
Zloty real and nominal effective exchange rate (increase denotes appreciation; January 2008=100).



Source: NBP and European Commission data.

Figure 2.20

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



Source: NBP data and estimates.

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

[32] Information about the value of Polish exports and imports refers to GUS data (in EUR) adjusted for seasonal factors.

2.2.5. Output

Trends in GUS economic conditions indices imply a deterioration of the macroeconomic outlook (Figure 2.21). All the indicators of the economic situation in individual sectors remain markedly below or close to their long-term averages.

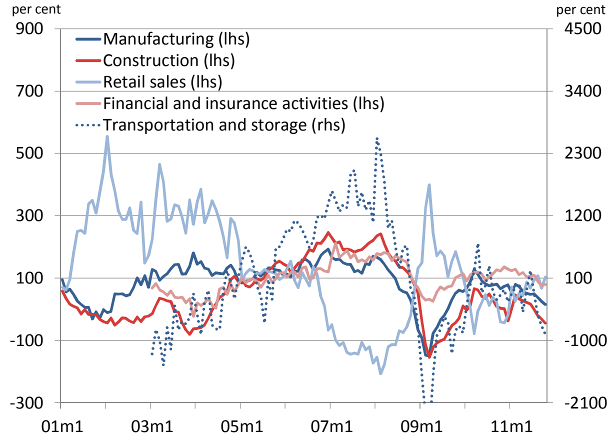
At the same time, despite a marked acceleration in industrial production output, data on the portfolio of orders in this sector indicate a possible deceleration in growth tendencies in this sector (Figure 2.22). Likewise, the recently observed drop in the PMI index indicated the possibility of slower growth in industry.

Similarly, data on construction may indicate some deterioration in the business climate. The annual growth in construction and assembly output significantly declined in August and September 2011, whereas the growth of orders has recorded a steady decline since March 2011 (Figure 2.23).

Since the publication of the previous *Report* the upward trend in the market services sector has also lost momentum. Growth in wholesale trade (in nominal terms) fell to 11.8% y/y on average in the period July-September, down from 18.3% y/y in the first six months of 2011. A slowdown also affected growth in the sales of services in the transport entities in general, which amounted (in real terms) to 8.9% y/y in period July-September 2011 as against 12.9% y/y in the first six months of 2011. At the same time the relatively buoyant growth in retail sales was continued (see Chapter 2.2.2 *Consumption demand*).

Figure 2.21

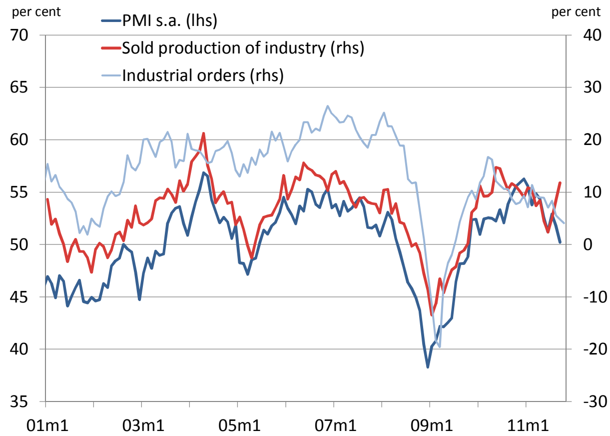
Forecast of economic situation in relation to the long-term average (long-term average=100)



Source: GUS business tendency survey, NBP calculations.

Figure 2.22

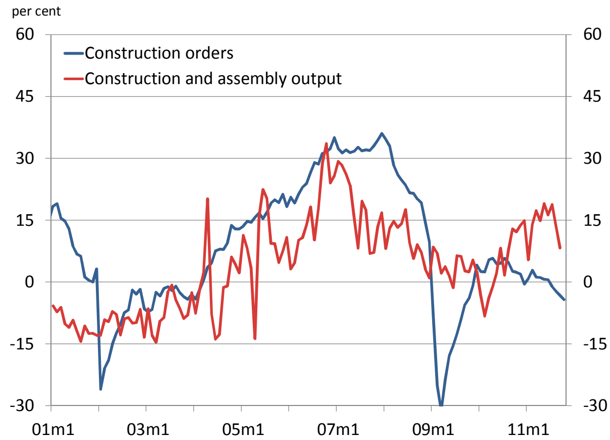
PMI and annual growth of sold production of industry and of industrial orders.



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

Figure 2.23

Annual growth of construction and assembly output and construction orders.



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

2.3. Labour market

2.3.1. Employment and unemployment

In 2011 Q2 the growth of employment, which in previous quarters was observed both in the economy and in the enterprise sector, slowed (Figure 2.24). At the same time the number of economically active persons in the economy increased at a lower pace, while the unemployment rate remained elevated.

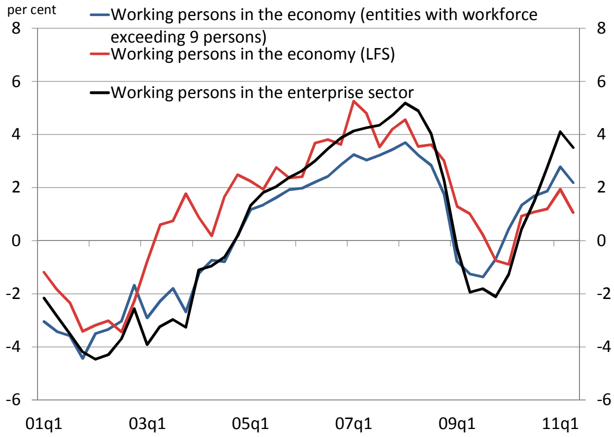
According to Labour Force Survey data, the rate of growth in the number of working persons decreased in 2011 Q2 to 0.3% q/q, against 0.5% q/q in 2011 Q1 (in seasonally adjusted terms; Figure 2.25).[33] The increase in employment was supported by an increasing number of persons working in the private sector. In turn, the number of persons working in the public sector – following a decline in 2011 Q1 – did not change in 2011 Q2.

In sectoral terms, in 2011 Q2 the growth in the number of persons employed in industry decreased visibly (to 0.3% q/q against 1.5% q/q in the previous quarter, seasonally adjusted data), while the employment in services did not change significantly for a third consecutive quarter (in 2011 Q2 it increased by 0.1% q/q, seasonally adjusted data).[34] Employment in agriculture remained at the same level as in the previous quarter.

Monthly data concerning employment in the enterprise sector in 2011 Q3, particularly a strong – compared with the previous years – drop in employment in August and in September (in m/m terms) – may indicate a further

Figure 2.24

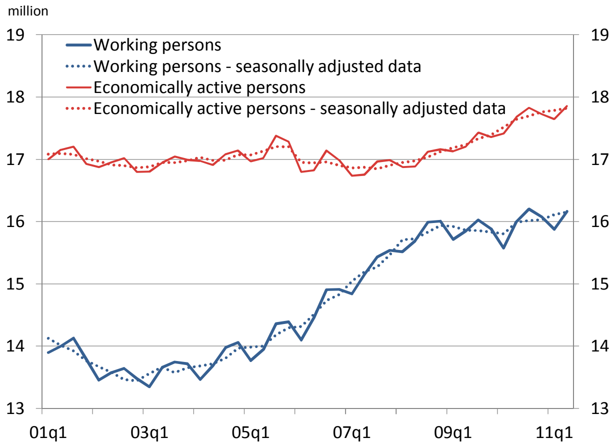
The rise (y/y) in the number of persons working in the economy according to the Labour Force Survey and to reports by entities with workforce exceeding 9 persons and in the enterprise sector.



Source: GUS data, NBP calculations.

Figure 2.25

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



Source: GUS data, NBP calculations.

[33] The slowdown in the quarterly pace of growth of employment was attributable to both a slower increase in the number of persons employed on fixed-term contracts and with indefinite time contracts.

[34] In Labour Force Survey terms, the industry sector includes manufacturing, mining, energy, gas and water supply as well as construction.

slowdown of employment in the economy. Such a conclusion is also supported by a gradual deterioration of employment climate indicators in NBP surveys. [35]

In 2011 Q2 the increase in the number of economically active persons observed since 2007 persisted, although it was significantly lower than in 2010 (Figure 2.25). The slower growth in the labour supply was related to a slight decline of the economic activity rate among younger persons as well as persons aged 25-44, despite including in LFS estimates persons returning from economic migration who display higher activity. This development could have been related to the exit from the labour market of persons discouraged by the diminishing probability of finding a job.[36] At the same time, the increase in the activity of persons in pre-retirement age was still recorded, which was due to previously introduced limitations on earlier exit from the labour market.

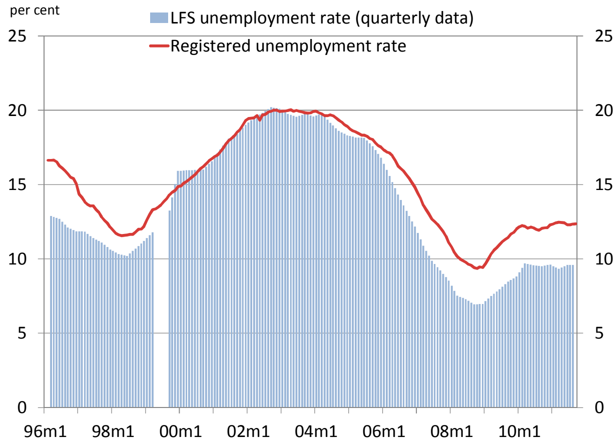
The slowdown of labour supply growth coupled with diminishing growth of demand for labour kept in 2011 Q2 the LFS unemployment rate at an unchanged – comparing with 2010 Q2 – level of 9.6% (Figure 2.26, Figure 2.27), and resulted in its rise in quarterly terms by 0.3 percentage points (seasonally adjusted data).

NBP estimates indicate that the increase in the unemployment rate in 2011 Q2 was related both to the rise in transitions to unemployment from employment and from occupational inactivity, and to a weakening outflow to employment.[37]

Data from employment offices indicate that the registered unemployment rate in 2011 Q3 was only slightly lower than in the first half of the

Figure 2.26

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



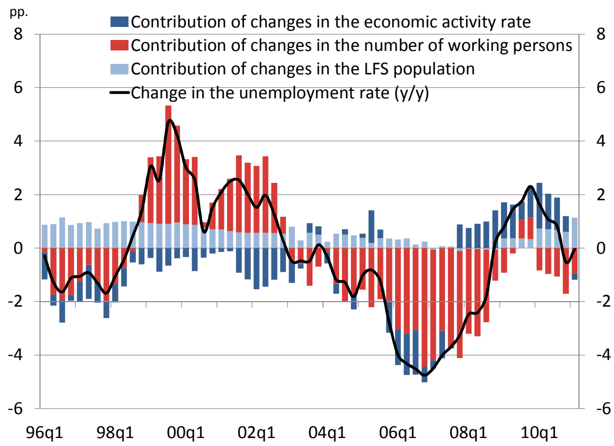
Source: GUS data (seasonally adjusted).

Data until 2002 adjusted for the results of the 2002 National Census. No Labour Force Survey was conducted in 1999 Q2 and Q3.

There are two reasons for the differences between the unemployment rate according to 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 2.27

Decomposition of changes in unemployment rate (seasonally adjusted) in q/q terms according to Labour Force Survey*.



Source: GUS data.

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 acitivity rate), 3) change in labour demand (change in the number of working persons in Labour Force Survey terms). Changes in the population in the Labour Force Survey may stem from demographic trends or migration.

---

[35] *Information of the condition of the enterprise sector with a particular focus on business conditions in 2011 Q3 and the forecast for business conditions in 2011 Q4*,NBP.

[36] As suggested by NBP estimates based on Labour Force Survey data. See footnote 37.

[37] The analysis of flows in the labour market is based on unit data from the Labour Force Survey, and in the case of 2011, on the extrapolation of unit data from previous quarters and aggregated data from 2011 Q1 and Q2.

year (Figure 2.27). The number of newly registered unemployed continued to drop, and the number of persons struck off the register declined as well.

2.3.2. Wages and productivity

In the first half of 2011 growth of wages in nominal terms remained moderate (close to 5%), and was low in real terms. At the same time the growth of unit labour costs in the economy was also moderate.

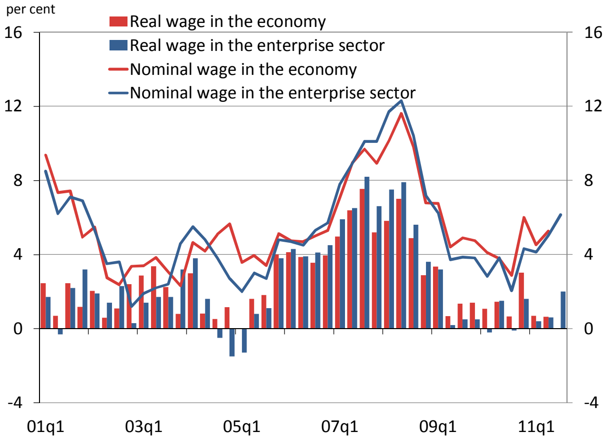
In 2011 Q2 the growth of nominal wages in the economy and in the enterprise sector was slightly higher than in the previous quarter, which was partly driven by one-off factors, i.e. additional remuneration in the largest enterprises, linked to very good financial results of enterprises in this period (Figure 2.28). However in the context of higher inflation, the growth of real wages in the economy and in the enterprise sector remained below 1%.

In 2011 Q3 the growth of nominal wages in the enterprise sector remained stable and moderate.[38] At the same time, according to the results of the NBP economic climate survey, in 2011 Q3 more than half of the enterprises declared a lack of wage pressure among employees. This means that the wage pressure level is close to the lowest values in the history of the survey.[39]

The lack of an intensification of the wage pressure is corroborated by the development of the labour market tensions index (the number of job offers per one unemployed person, (Figure 2.29). Following a strong slump at the beginning

Figure 2.28

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



Source: GUS data, NBP calculations.

Figure 2.29

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

Source: GUS data, NBP calculations.

[38] In 2011 Q3 the increase in wages in the enterprise sector amounted to 6.1% y/y (against 5.3% y/y in 2011 Q2) and was much higher than the average of monthly data. This discrepancy, however, is the result of including by GUS in data of 2010 Q3 (instead of 2010 Q2) a downward wage revision for June 2010. In effect, the level of average remuneration in 2010 Q3 was underestimated and the annual growth in 2011 Q3 – overestimated. The acceleration of the annual wage growth in 2011 Q3 is therefore mainly due to a statistical effect.

[39] *Information on the condition of the enterprise sector with a particular focus on business conditions in 2011 Q3 and the forecast for business conditions in 2011 Q4,* NBP.

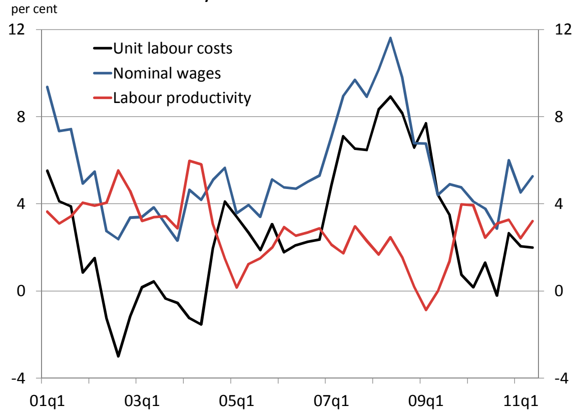
of 2011, related mainly to a reduction in government-subsidized job offers (in particular, jobs offered under the so-called employment activation programmes) this index has remained stable in recent months.

Labour productivity in the economy in 2011 Q2 rose faster than in the previous quarter, fuelled by slower growth in the number of working persons (Figure 2.30). With a slightly higher pace of growth in wages, the growth of unit labour costs ran at a similar level to the one of 2011 Q1 (2.0% y/y).

Following a gradual increase since mid-2010, in August and September 2011 the annual growth in unit labour costs in industry came to halt, which was due to the accelerated increase of sold industrial output, coupled with a slightly lower growth in wages and employment (Figure 2.31).

Figure 2.30

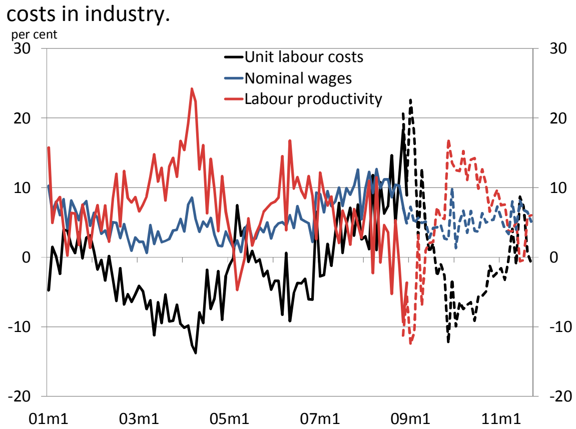
Annual growth in labour productivity, wages and unit labour costs in the economy.



Source: GUS data, NBP calculations.

Figure 2.31

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 from November 2008 (dotted line in the figure) are not fully comparable with previously recorded rates.

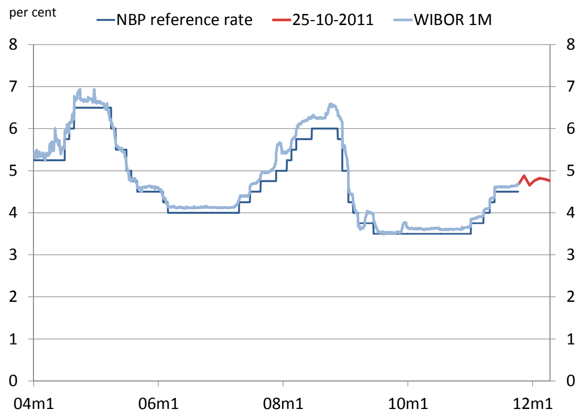
2.4. Financial markets and asset prices

2.4.1. 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 2.32). Both the money market rates and the 3-month WIBOR-OIS spread, which reflects the credit risk premium on the interbank market, have also remained broadly stable.

Figure 2.32

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



Source: Reuters data, NBP calculations.

According to the results of the Reuters survey of 4 October 2011 bank analysts expected the NBP reference rate to remain stable until the end of 2011 and to decline over a one-year horizon[40]. FRA contracts reflect expectations that the

[40] According to the results of the survey all the analysts-respondents anticipated the reference rate to remain stable at 4.50% until the end of 2011, whereas two thirds of them anticipated the reference rate to decline by October 2012 (41% of the analysts anticipated the rate to stand at 4.00% in October 2012, 14% - at 4.25%, and 9% - below 4.00%).

1-month WIBOR rate will run at 4.50% over the next 6 months, and will decline by 25 basis points over a year.

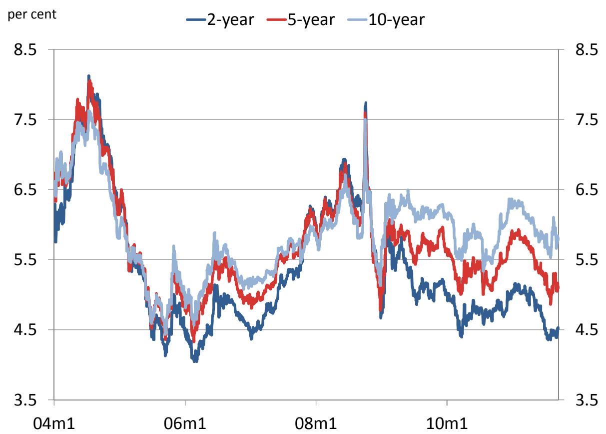
Since the publication of the previous *Report* the Polish bond yield curve has steepened. The yields on 2-year bonds have dropped significantly, mainly due to the disappearance of market expectations of NBP rate hikes. Meanwhile, the yields on 5- and 10-year bonds remained broadly unchanged, despite temporary strong fluctuations. In July and August the yields on medium- and long-term bonds were declining steadily but they soared in September as a result of increased risk aversion in the global financial markets. Higher uncertainty in the financial markets altered the perception of the credit risk of emerging economies, including Poland, and boosted the growth of the CDS prices of Polish T-bonds. Despite the increase, Polish CDS rates stood markedly below those for the peripheral countries of the euro area (Figure 2.35) and below the average emerging market level[41].

Despite heightened risk aversion in the recent period, non-residents increased their exposure to the domestic debt market (Figure 2.34). Investors continued to purchase bonds with shorter maturities, thereby reducing the interest rate risk, in line with global investment tendencies.

Since the publication of the previous *Report* the stock prices on the Warsaw Stock Exchange have fallen significantly, following the developments in the major global capital markets (Figure 2.36). Between early July 2011 and 23 September 2011, the WIG index fell by 25% in the wake of intensified uncertainty on the international financial markets and the sell-off of risky assets. Following a period of strong share price falls, the WIG index increased somewhat.

Figure 2.33

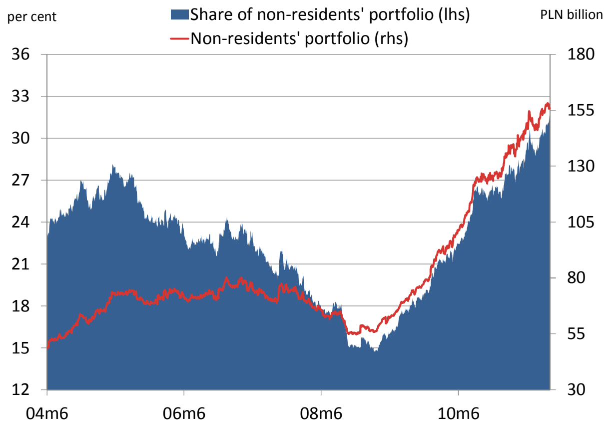
Yields of Polish benchmark bonds.



Source: Reuters data.

Figure 2.34

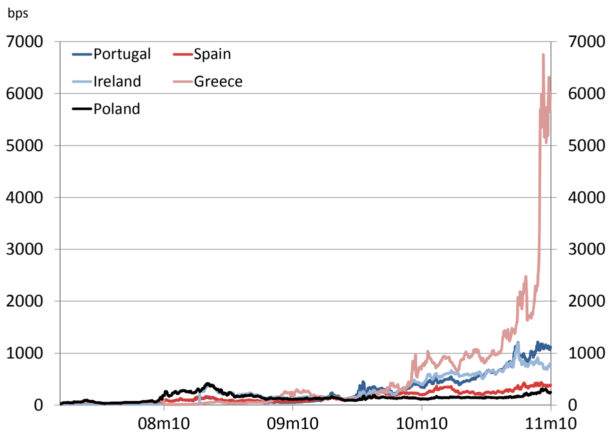
Non-residents' involvement in the Polish Treasury bond market.



Source: National Depository for Securities (KDPW) data.

Figure 2.35

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



Source: Reuters data.

[41] On 21 October CDS on 5-year Polish bonds stood at 232 bps, index of CDS spreads for a group of 15 emerging economies from Latin America, Eastern Europe and Asia stood at 313 bps (Bloomberg data).

2.4.2. Housing prices

2011 Q2 saw no significant changes in the housing market in major Polish cities as compared to 2011 Q1[42]. Asking and sale prices in the primary market as well as the sale prices in the secondary market edged up. By contrast, asking prices in the secondary market continued to decline (Figure 2.37).

In the first half of 2011 the number of completed flats was approx. 14% lower than in the corresponding period of 2010. However, profit margins in the residential construction sector remained high, which encouraged property developers to embark on new investment projects. In the first half of 2011 the number of newly commenced construction projects stood at a similar level as in the previous year and the number of issued construction permits rose by approx. 8% over the corresponding period of 2010.

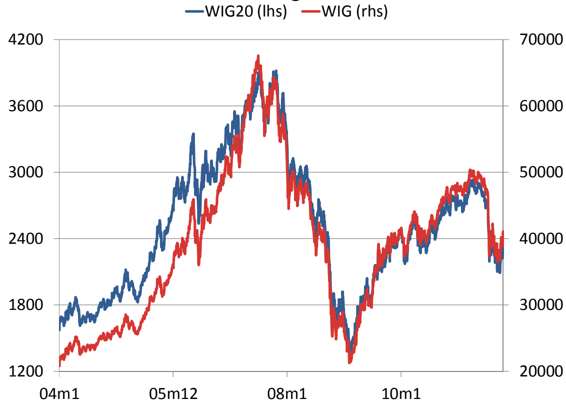
2.4.3. Exchange rate

Since the publication of the previous *Report* the nominal exchange rate of the zloty has depreciated vis-à-vis the euro and the US dollar, by 9.5% and 11.3%, respectively, and vis-à-vis the Swiss franc - by 6.3% (Figure 2.38).

Following slight appreciation in July 2011, in August the zloty depreciated against both the euro and the US dollar, and the depreciation gathered momentum in September. The zloty weakened as uncertainty in the global financial markets grew amidst the further aggravation of the sovereign debt crisis in the euro area and the publication of a series of unfavourable macroeconomic data on the world's major economies. Most of the emerging market

Figure 2.36

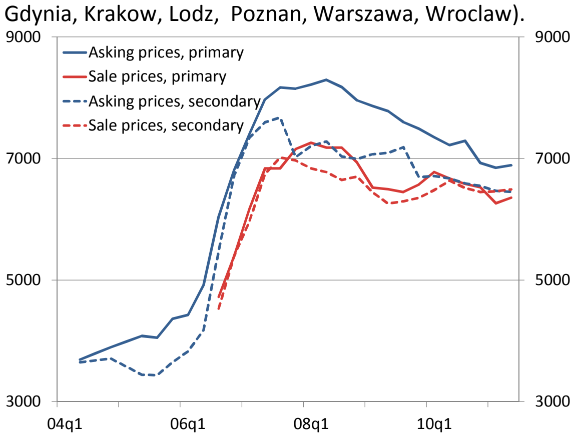
WIG and WIG20 stock exchange indices.



Source: Reuters data.

Figure 2.37

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

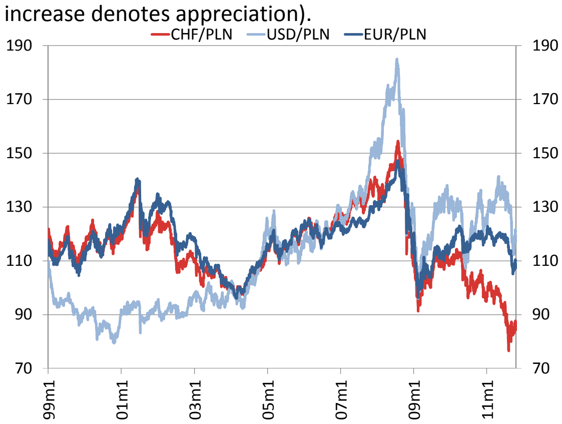


Source: Sale price data from an NBP survey. PONT Info Nieruchomości asking price data. NBP calculations.

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

Figure 2.38

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.

[42] 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 Q2,* 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 also depreciated in that period, including the currencies of Central and Eastern Europe (since early July 2011 the Hungarian forint and the Czech koruna depreciated vis-à-vis the euro by 10.9% and by 2.7%, respectively). On 23 and 30 September and on 3 October 2011 the NBP sold certain amounts of foreign currencies for zlotys, which helped stem the depreciation of the Polish currency. In October 2011 the zloty appreciated slightly.

The exchange rate of the zloty vis-à-vis the Swiss franc depreciated both in July and in early August 2011, whereupon it started to appreciate as a result of the measures undertaken by the Swiss National Bank with a view to halting the massive overvaluation of the Swiss currency. The strengthening of the zloty against the Swiss franc resulted also from the measures undertaken by the NBP in September and October 2011.

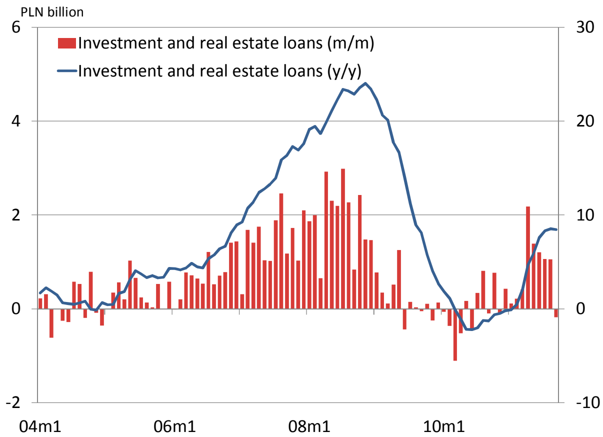
2.5. Credit and money [43]

2.5.1. Loans

The recent period brought a continued rebound in corporate lending. Since June 2011, monthly increases in corporate debt with domestic banks amounted to a level close to the average recorded since the beginning of 2011, standing at approx. PLN 2.1-2.8 billion month-over-month. (Figure 2.39; Figure 2.40). August 2011 was the only month in which the increase in corporate debt shrank considerably, albeit on a temporary basis (to PLN 0.4 billion) which brought the monthly increase in these loans in the period from June to September down to PLN 2.0 billion. The annual growth rate in total corporate loans hit its highest level since May 2009 and in September stood at 9.4% y/y.

Figure 2.39

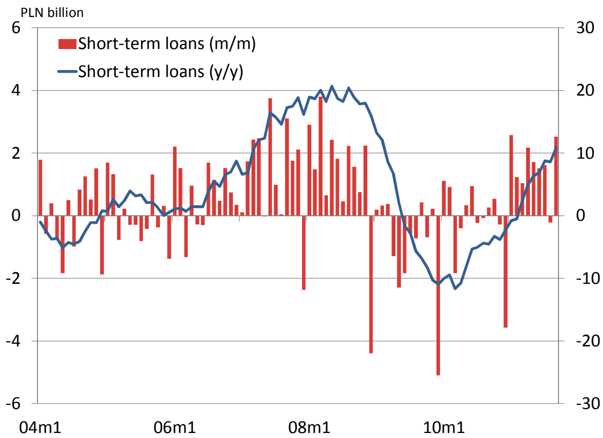
Investment and real estate loans to enterprises.



Source: NBP data.

Figure 2.40

Short-term loans to enterprises.



Source: NBP data.

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

Growth in lending was driven by both a considerable rise in investment loans as well as current loans (i.e. overdrafts and operating loans), extended to enterprises for the purpose of financing current liabilities related to their core business activity. The rise in investment loans, observed already since July 2010 boosted investment growth (see Chapter 2.2.2 *Investment demand*), whereas investment growth waning in September, and in particular the fall in real property loans, may be indicative of a certain slowdown in the upward trend in investment demand.

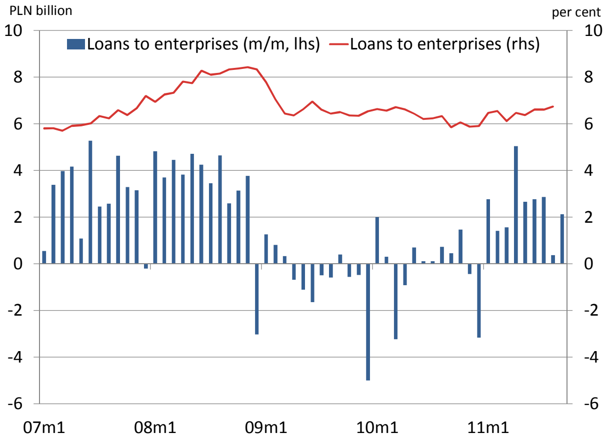
Senior Loan Officer Opinion Surveys conducted in 2011 Q3 point to a certain tightening in corporate loan granting criteria[44]. Moreover, most lending conditions deteriorated or were eased to a lesser extent than in the preceding quarter, in particular, the net percentage of banks announcing reduction in margins diminished considerably. The results of bank surveys suggest that the tightening of loan granting criteria may be driven by heightened risk related to the future economic situation. In the recent period interest charged on newly granted corporate loans did not change significantly (Figure 2.41).

On the demand side, in accordance with banks' answers, the rise in demand for credit is observed only among large enterprises, in particular, in the category of long-term loans, which may be indicative of growing investment activity of those companies (Figure 2.42). At the same time, data on bank liabilities still point to a stronger rise in debt of small and medium-sized enterprises than that of large enterprises which are less dependent on external sources of financing.

Domestic sources of corporate financing were supplemented with foreign debt, which in 2011 Q2 amounted to EUR 101.5 billion, with the

Figure 2.41

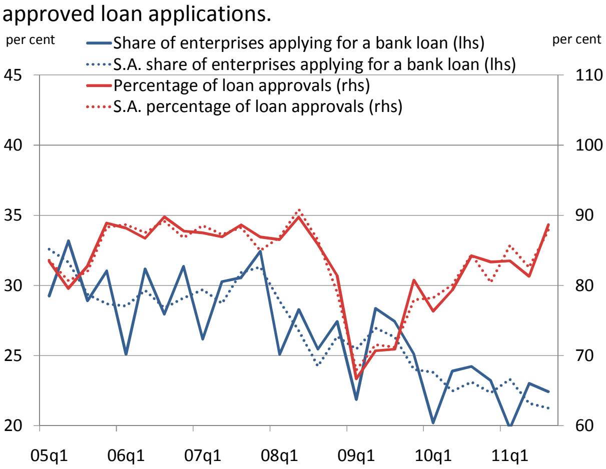
Monthly increases and average interest charged on newly granted loans to enterprises.



Source: NBP data.

Figure 2.42

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



Source: NBP data.

[44] *Senior Loan Officer Opinion Surveys on Bank Lending Practices and Credit Conditions, 2011 Q3,* NBP.

annual growth rate at 9.5%, of which EUR 54.9 accounted for loans[45].

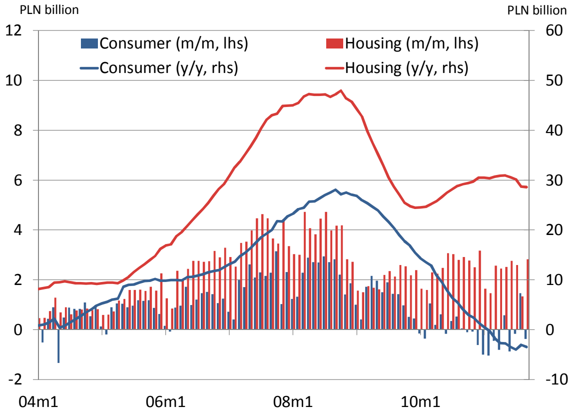
Since the previous *Report,* monthly increases in housing loans to households (with the exception of August, when the increase was considerably weaker[46]) exceeded the average level observed since the beginning of 2011 – i.e. were in the range of approx. PLN 2.6-2.8 billion as compared to PLN 2.1 billion in January-May 2011 (Figure 2.43). Stronger increases in these loans than in the loans in other market segments resulted in their higher share in the total loans of non-financial sector (Figure 2.44). At the same time – due to a stronger rise in housing loans in 2010 – the annual growth in these loans continued to decline, reaching in September 11.2% y/y[47]. A relatively rapid rise in housing loans is supporting demand in the housing market, which limits the decline in housing prices. (see Chapter 2.4.2 *Housing prices*).

In the recent period, the majority of newly granted housing loans were PLN loans (76.9% in September 2011; Figure 2.45), which translated into a consistent rise in the share of PLN loans in the total housing loans and was conducive to growing effectiveness of the monetary policy transmission mechanism. Yet, housing loan debt extended in foreign currencies continues to exceed PLN housing loan debt (the share of foreign currency denominated loans in the total housing loans amounts currently to approx. 63%).

The results of the bank survey studies show that the rise in housing lending was accompanied in 2011 Q3 by a slight tightening of loan granting criteria and a deterioration in most lending conditions for this category of loans. Only in the case of margins and non-interest credit cost,

Figure 2.43

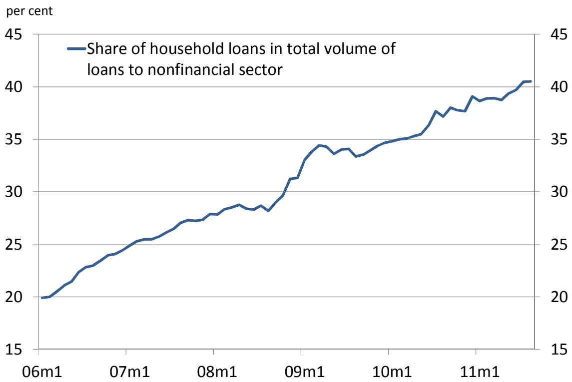
Loans to households.



Source: NBP data.

Figure 2.44

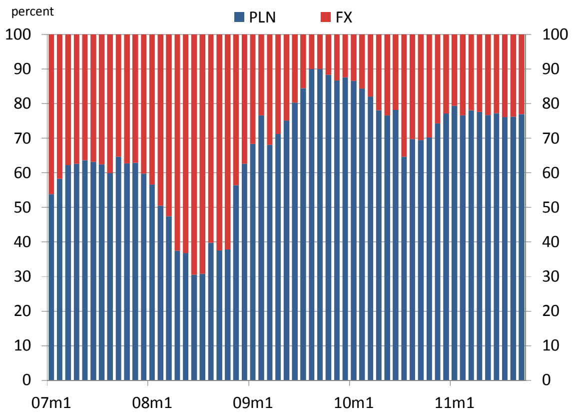
Share of housing loans in the total of loans to nonfinancial sector.



Source: NBP data.

Figure 2.45

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%.

[45] As a comparison, the total volume of debt of Polish enterprises with domestic banks in June 2011 amounted to PLN 225 billion.

[46] The low increase in housing loans and high increase in consumer loans in August 2011 were driven by some mortgage loans being reclassified from housing loans to consumer loans in one of the banks.

[47] Decline in the growth rate was observed both in the category of housing loans in PLN and foreign currency denominated housing loans, whose growth in September stood at 26.4% y/y and 2.9% y/y, respectively.

banks announced certain easing in loan conditions in 2011 Q3. In the period June-August interest charged on housing loans did not change significantly (Figure 2.46).

The recent period saw a further decline in household debt resulting from consumer loans by an average of PLN 0.5 billion in June, July and September (with the exception of August when this debt increased by PLN 1.5 billion[48]), and its growth rate in September stood at -2.5% y/y (Figure 2.46). A further decline in consumer loans was observed, despite the easing in loan granting conditions as announced by banks and putting an end to lending criteria tightening in this segment in 2011 Q3 (Figure 2.47).

2.5.2. Deposits and monetary aggregates

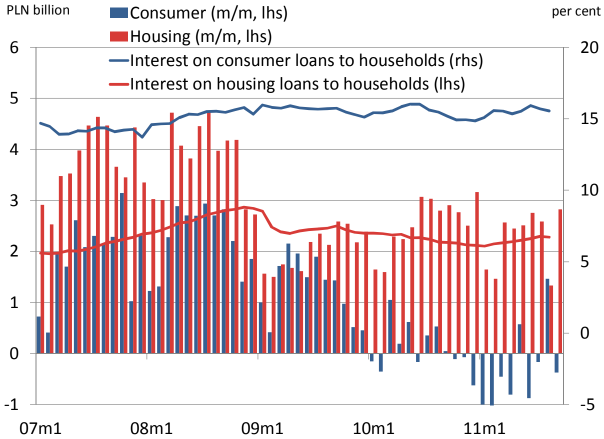
Following a period of persistently moderate increases in broad money, accompanied by its growth rate at the level close to the growth rate of nominal GDP, August and September 2011 saw a significant rise in M3 money (by PLN 15.9 billion in August and PLN 8.7 billion in September, along with a growth rate of 8.8% y/y and 9.3% y/y respectively; Figure 2.48). This was, to some extent, due to certain more risky financial assets, not classified as M3 money (shares, bonds) being transferred to bank deposits, which was driven by a sharp decline in assets prices observed in the past few months (see Chapter 2.4.1 *Prices of financial assets and interest rates*).

In July-September 2011, the more liquid components of M3 money classified as the M1 aggregate increased at a lower pace than broad money for the first time since October 2009. The growth of M1 money in September 2011 stood at 5.2% y/y. The annual growth rate of M0, after running at relatively low levels in May-July, increased in September to 19.9% y/y, which was

[48] This growth was driven by one-off factors. See: footnote 46.

Figure 2.46

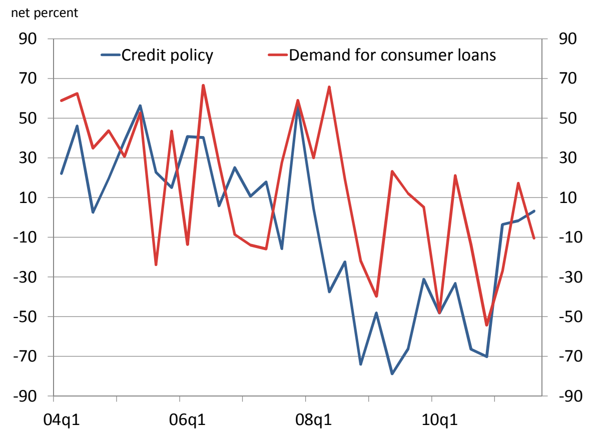
Monthly growth and average interest charged on newly granted PLN loans to households.



Source: NBP data.

Figure 2.47

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

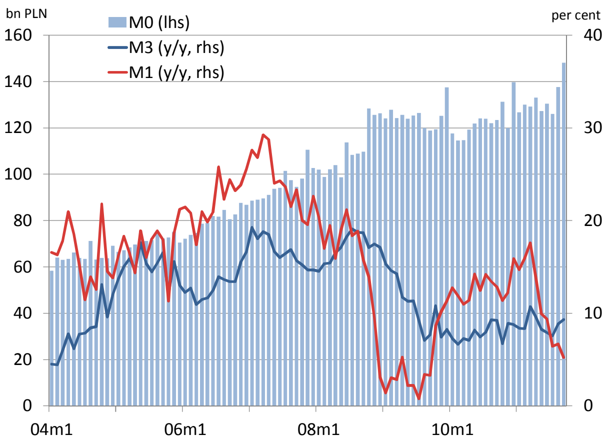


Source: NBP data.

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.

Figure 2.48

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



Source: NBP data.

mainly driven by a larger volume of assets held by banks in current accounts at the NBP (PLN 38.6 billion at the end of August as compared to PLN 19.4 billion at the end of July).

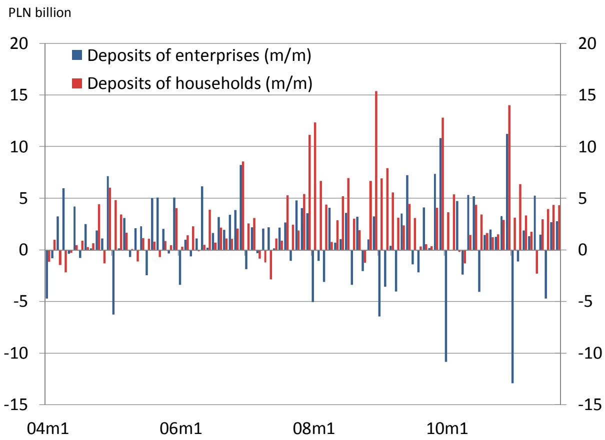
In June-August 2011, annual growth in corporate deposits was slower than in February-May 2011 (standing at 7.4% y/y in September as compared to 9.1% y/y in May; Figure 2.49, Figure 2.50). This could have been driven by a higher degree of deposit utilization for current activity. The annual average interest earned on new corporate deposits in PLN in the period June-August increased by 0.7 percentage points as compared to the period February-May, reaching the level of 4.1%.

The growth of household deposits accelerated once again in June-September 2011. Their volume increased in this period by an average of PLN 3.9 billion a month, as compared to their average increase of PLN 2.3 billion recorded in February-May, while their annual growth stood at 11.4% in September 2011 as compared to 10.5% in May (Figure 2.49, Figure 2.50). Accelerated growth in household deposits in June-August 2011 was accompanied by rising interest earned on new deposits in PLN (in the period it was by 0.5 percentage points higher than in the period February-May 2011).

The rise in deposits in May-September was supported by price declines in the stock market. This led to a lower share of more risky financial assets in the total financial assets of households. The analysed period saw a fall in the value of investment fund assets of PLN 6.8 billion, of which PLN 0.6 billion accounted for the negative net contribution of new assets. The total value of households' financial assets decreased in this period by PLN 3.8 billion (fall of 0.5%)[49].

Figure 2.49

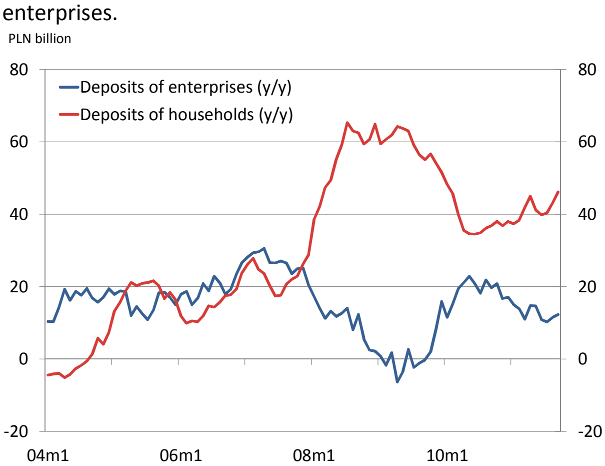
Monthly growth of deposits of households and enterprises.



Source: NBP Data.

Figure 2.50

Annual growth of bank deposits of households and enterprises.



Source: NBP Data.

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

2.6. Balance of payments

Relatively stable growth in economic activity was accompanied by a further gradual increase in the current account deficit, largely driven by a growing deficit in the trade account and in the income account. The observed increase in the foreign trade deficit was caused not only by growing imports amidst increasing economic activity in Poland and a concurrent smaller increase in exports in the face of global economic slowdown but was also partly caused by a further deterioration of terms-of-trade. Moreover, good financial results of enterprises translated into a rise of remittances from Poland to foreign company owners (paid mostly as dividends), which aggravated the deficit in the income account. In turn, the current account deficit was still reduced by a surplus in the current transfers account and in the services account.

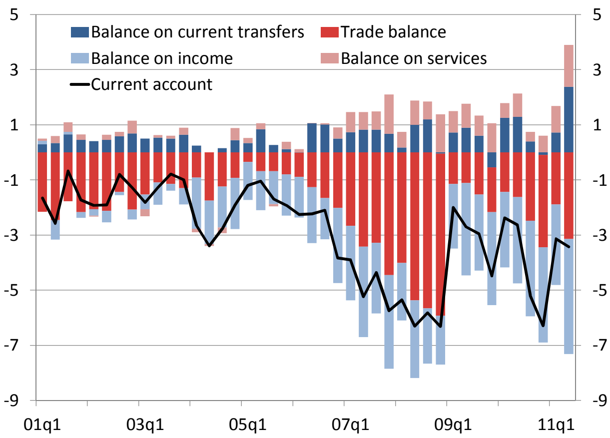
The current account deficit of the balance of payments amounted to EUR 3.4 billion in 2011 Q2 (as compared to EUR 2.6 billion in 2010 Q2 and EUR 3.1 billion in 2011 Q1; Figure 2.51). Balance of payments monthly data in July-August 2011 indicate that during that period the current account deficit widened to EUR 3.8 billion (as compared to EUR 3.6 billion in July-August 2010).

At the same time, high utilization of EU funds for financing investment projects was reflected in an inflow of funds to the capital account. In 2011 Q2 the capital account surplus amounted to EUR 1.4 billion (as compared to EUR 1.1 billion in 2010 Q2 and EUR 1.7 billion in 2011 Q1). In July-August 2011 the inflow to the capital account amounted to EUR 1.2 billion (as compared to EUR 1.0 billion in the corresponding period of 2010).

According to the financial account data, in 2011 Q2 net inflows of capital to Poland took mainly the form of portfolio investments with a small net outflow of capital in the form of direct

Figure 2.51

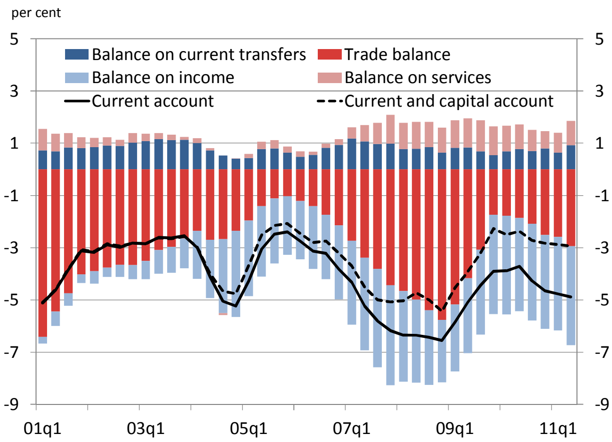
Current account balance (in EUR bn).



Source: NBP data and estimates.

Figure 2.52

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



Source: NBP data.

investments related mainly to the persistently high level of Polish investment abroad. In 2011 Q2 the financial account surplus amounted to EUR 3.8 billion (as compared to EUR 4.5 billion in 2010 Q2 and EUR 11.5 billion in 2011 Q1). In July-August 2011 net inflows of capital also came largely in the form of portfolio investments, which, given a concurrent strong outflow of capital in the form of other investment, translated into a financial account deficit of EUR 0.7 billion (as compared to a surplus of EUR 7.8 billion in the corresponding period of 2010).

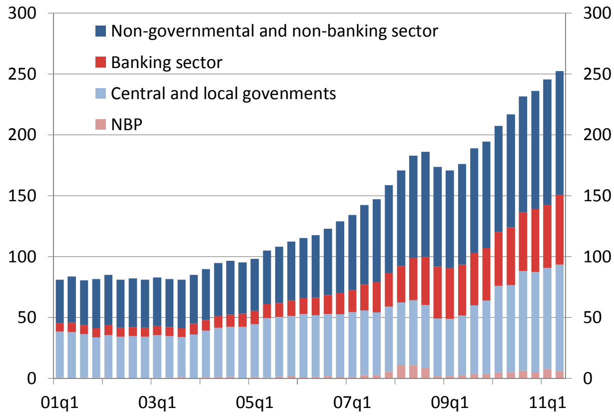
The current account deficit (over 4 subsequent quarters) at the end of 2011 Q2 increased only slightly – to 4.9% of GDP (as compared to 4.8 % of GDP in 2011 Q1), while the deficit in the current and capital account remained at 2.9% of GDP (Figure 2.52). At the same time a more pronounced outflow of Polish direct investment abroad (coupled with a lack of significant revival in the inflow of foreign direct investment to Poland) led to a further decline in the financing of current and capital account deficits via net inflows of foreign direct investment (Table 2.2). The financing has been diminishing since mid-2010 and it dropped from around 100% to a mere 6.0% in 2011 Q2.

Due to the increase in public sector debt (driven by T-bond issuance), and banking sector debt (driven by an inflow of funds to non-resident current accounts and deposits in Polish banks), Poland's foreign debt increased in 2011 Q2 by EUR 6.9 billion (to EUR 252.2 billion). Balance of payments transactions led to a rise in foreign debt by EUR 3.7 billion, while the remaining rise was due to positive exchange rate differentials, changes in valuation and other changes (Figure 2.53).

In 2011 Q2 there was a further slight deterioration in basic indicators measuring Poland's external imbalance (Table 2.2). At the same time, the ratio of reserve assets to imports remains relatively high and the ratio of

Figure 2.53

External debt of Poland (in EUR bn).



Source: NBP data.

Table 2.2

Selected indicators of external imbalances.

	2007	2008	2009	2010	2010 q1	2010 q2	2010 q3	2010 q4	2011 q1	2011 q2
Current account balance/GDP (in %)	-6.2	-6.6	-3.9	-4.7	-3.9	-3.7	-4.3	-4.7	-4.8	-4.9
Current and capital account balance/GDP (in %)	-5.1	-5.4	-2.3	-2.8	-2.5	-2.4	-2.7	-2.8	-2.9	-2.9
Trade balance/GDP (in %)	-4.4	-5.8	-1.7	-2.5	-1.8	-1.9	-2.1	-2.5	-2.6	-2.9
Direct investment/current account deficit (in %)	69	30	49	15	62	59	28	15	7	4
Direct investment/current and capital account deficit (in %)	84	36	85	25	96	93	44	25	12	6
Official reserve assets in terms of monthly imports of goods and services	3.9	3.3	5.3	5.4	5.8	6.0	5.9	5.4	5.6	5.4
Foreign debt/ GDP (in %)	51	48	63	67	64	65	67	67	68	68
Short-term foreign debt/ official reserve assets (in %)	93	106	88	82	79	77	79	82	90	87
Net international investment position/GDP (in %)	-53	-48	-62	-65	-59	-58	-63	-65	-64	-65

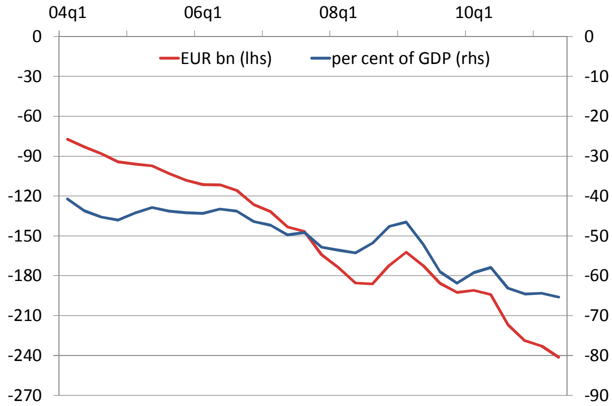
Source: NBP data.

short-term foreign debt to official reserve assets, measuring the share of foreign currency reserves that the central bank would have to use for the repayment of short-term foreign debt, improved[50].

A significant scale of foreign capital inflow to Poland, particularly in the form of portfolio investments and other investments, resulted in a slight deterioration of Poland's negative investment position (to approx. 65% of GDP in 2011 Q2; Figure 2.54).

Figure 2.54

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.

[50] Short-term foreign debt includes debt instruments with initial maturity of up to one year. It covers funds in current accounts and deposit accounts as well as liabilities due to received trade credits (including trade credits from shareholders).

Chapter 3

MONETARY POLICY IN JULY-NOVEMBER 2011

At the meeting in July, September, October and November the Monetary Policy Council decided to keep the NBP interest rates unchanged: the reference rate at 4.5% 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 July, September and October 2011 as well as the *Information from the meeting of the Monetary Policy Council* in November 2011.

Minutes of the Monetary Policy Council decision-making meeting held on 6 July 2011

At the meeting, the Monetary Policy Council analysed the situation in the external environment of the Polish economy, the outlook for economic growth and inflation in Poland, including the prospects for inflation returning to the target, and discussed the current and future decisions on the NBP interest rates.

While addressing the external conditions of economic growth and inflation in Poland, the Council pointed to heightened uncertainty surrounding the outlook for the global economy, including the recent signs of a weakening economic growth in the United States and the prolonged public finance crisis in some euro area countries. In particular, attention was paid to mounting concerns about the stability of the economic situation in Greece and the related rise in risk aversion in the international financial markets.

It was emphasized that the debt crisis might – by increasing uncertainty in the euro area – lead to a decline in economic growth in this region, which would translate into slower GDP growth in Poland. However, some members of the Council argued that activity growth in Poland might be relatively fast even in the case of a moderate GDP growth abroad. In turn, other Council members were of the opinion that increased risk aversion in the international financial markets related to the fiscal problems of Greece was more likely to affect Polish economy through a depreciation in the zloty exchange rate, which would support a heightened inflation in the country.

While discussing the economic growth in Poland in the coming quarters, it was emphasized that GDP growth would most probably weaken gradually, which was also in line with the NBP's July projection. In this context, a slight weakening of the upward trend in industrial output in the past few months and a decline in the PMI anticipating a slowdown in the manufacturing sector in 2011 Q3 were pointed to. The expected decline in GDP growth would be – in the opinion of members of the Council – partly connected with fiscal tightening. Some members of the Council emphasized that a rise in current inflation, through its curbing effect on the growth of households' real disposable income, might also lead to a slowdown in economic growth. Other members of the Council, however, pointed to a drop in households' deposits last month, which might be indicative of a lower propensity to save. At the same time, it was indicated that it was difficult to assess, on the basis of one month's data, whether this situation would be a lasting phenomenon. Moreover, it was pointed out that interest rate increases implemented earlier this year might also act towards slower economic growth, albeit with a lag. Some members of the Council remarked, in turn, that interest rate increases had not so far hindered the growth in corporate loans and a rapid increase in housing loans.

While addressing the outlook for maintaining the current rate of GDP growth in Poland in subsequent years, members of the Council emphasized the related high uncertainty, mainly with respect to investment. More specifically, it was unclear, in their opinion, to what extent the decline in public investment might be offset by rising corporate investment. Some members of the Council pointed out that the expected decline in public investment would reduce the crowding out effect on private investment by mitigating the upward pressure on cost of materials and construction works. It was also added that the rise in corporate investment would be fuelled by a relatively high capacity utilization at present. At the same time, other members of the Council indicated that reduced public investment, resulting in lower demand growth in the economy, might stem private investment. While addressing the developments in demand in subsequent years, it was pointed out that the heightened current inflation would boost public expenditure in 2012 as a consequence of indexation of old-age and disability pensions and social benefits.

While discussing inflation, it was indicated that price growth in Poland was largely affected by external factors. In this context, some members of the Council pointed to a high risk of external factors continuing to push up inflation in Poland. Some members of the Council emphasized that the recently observed halting in commodity price growth in the global markets might be temporary, considering the prospects of persistently high global demand for commodities amidst limited possibilities of increasing their supply and a considerable liquidity surplus in the financial markets. In their opinion, commodity prices might, in the longer run, continue on an upward trend. Some members of the Council pointed to the possibility of other countries, including in particular the United States, further easing their monetary and fiscal policy with a view to stimulate economic growth, despite rising inflation. Among other potential external sources of inflation, the announced tax reduction in Germany was mentioned, which would boost demand pressure in this economy, and persistently high inflation in China.

While addressing current inflation in Poland, in particular the fact that it is presently running above the target, some members of the Council were of the opinion that this was due not only to the external supply shocks but also to the heightened domestic inflationary pressure. This followed, in their opinion, from the fact that both the level and the rate of growth of inflation in Poland exceeded those observed in many other countries which had also experienced external supply shocks.

While discussing the outlook for inflation in Poland in 2011, it was emphasized that although May 2011 saw a marked rise in CPI inflation (partly as a result of a change in GUS quotation of seasonal goods prices), and inflation expectations of individuals remained at a heightened level, the available forecasts suggested that the coming months should see a gradual fall in inflation. Yet, some members of the Council pointed out that, notwithstanding the above, inflation would remain – according to the same forecasts – significantly above the target.

It was emphasized that due to lags in the monetary policy transmission mechanism, the medium-term outlook for inflation was of key importance. It was pointed out that, in line with the July projection based on the NECMOD model, the years 2012-2013 would see inflation lowering close to the target. This would be driven by a weaker GDP growth, a slow-down in the growth of global commodity prices and the statistical base effect. At the same time, some members of the Council indicated the risk of persistence of external sources of inflation and the possibility of a faster GDP growth in Poland than suggested by the projection, which would translate into higher price growth. Some members of the Council emphasized that the persistence of a relatively high core inflation within the projection horizon constituted a risk to CPI inflation subsiding close to the target. According to those members of the Council, a strong deceleration in the growth of food and energy prices expected within the projection horizon is very unlikely.

While discussing the NBP interest rates, the majority of Council members agreed that the interest rates should be kept unchanged at the current meeting. Some members of the Council assessed that the NBP interest rate increases implemented since the beginning of 2011 should enable inflation to return to the target in the medium term as indicated by the July projection of inflation and GDP. It was emphasized that all the available inflation forecasts anticipate its decline within one year. At the same time, the majority of Council members did not rule out the possibility of further interest rate increases in the future, should the prospects of inflation returning to the target deteriorate, and the risk of the so-called second round effects rise.

Some members of the Council indicated, however, that the May 2011 inflation, significantly exceeding expectations, and the fact that it is anticipated to decline only slightly by the end of 2011, coupled with the deepening of the negative real interest rate in Poland amidst a relatively fast economic growth, justified increasing the NBP interest rates at the current meeting.

A motion to raise the NBP interest rates by 25 basis points was put forward at the meeting. The motion was rejected. The Council kept the interest rates unchanged: reference rate at 4.50%, lombard rate at 6.00%, deposit rate at 3.00% and rediscount rate at 4.75%.

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

At its meeting, the Monetary Policy Council addressed the situation in the external environment of the Polish economy and the outlook for domestic economic growth and inflation. It also discussed future decisions concerning the NBP interest rates.

Members of the Council emphasized the recent considerable deterioration of the situation in the external environment of the Polish economy, including a stronger than expected slowdown in the United States and in the euro area, and weaker GDP growth in emerging economies, notably in China, as well as the mounting turmoil in international financial markets. It was pointed out that the flagging business sentiment was also, to a considerable extent, the effect of uncertainty about the effectiveness of political measures undertaken to resolve the fiscal crisis in the euro area. Moreover, the Council emphasised the significant downgrades of global growth forecasts by financial market participants, and the end of the cycle of interest rate increases by central banks in a number of small open developed economies and some developing ones.

In the opinion of some Council members, the risk of a global recession recurring has increased in recent weeks. However, according to other Council members, the current slowdown in key developed economies does not presage a forthcoming recession; it is rather a reflection of the reduced growth potential of those economies in the aftermath of the global financial crisis. In this context, these members emphasised particularly the adverse impact of the steep rise in public expenditure following the financial crisis on the private sector's propensity to invest and to consume. They also pointed to the constrained potential for funding private spending with more debt, since the level of that debt is already high. It was stressed that although it is difficult to assess the depth of the global economic slowdown, the risk of a sudden collapse in global business activity remains limited.

While discussing the impact of deteriorating external conditions on the prospects for the Polish economy, some Council members underlined the relative resilience of this economy to external shocks. They assessed that even in the face of slow economic growth in Poland's external environment, domestic GDP growth may remain steady, in particular - in the opinion of some Council members - exports growth may be sustained at a fairly high level. At the same time, the Council pointed to the risk of Polish exports weakening more markedly, should growth in China decelerate considerably, resulting in smaller exports from Germany to that country.

With regard to the economic situation in Poland it was emphasised that while GDP data indicate sustained relatively robust growth in 2011 Q2, incoming information implies it might lose momentum over the subsequent quarters. However, some Council members pointed out that the scale of the slowdown may be mitigated by a rise in private investment, which could be stronger than in the July NBP projection. In support of their position, those members cited higher than anticipated growth in gross fixed capital formation and a marked acceleration in investment outlays by large enterprises in 2011 Q2, as well as very good financial performance of enterprises. At the same time, it was pointed out, however, that the recently observed heightened uncertainty surrounding the outlook for demand may lower enterprises' propensity to invest, as also indicated by survey results. A year-on-year decline in the estimated costs of new investment started by large companies in 2011 Q2 was also emphasized as a possible sign of corporate investment weakening in the coming quarters.

With respect to inflationary processes in Poland, it was highlighted that in spite of a fall in recent months, partially due to seasonal factors, CPI and core inflation persist at an elevated level. Sustained fast growth in producers' prices was also pointed out. In addition, the Council paid attention to the fact that while inflation expectations of market participants have fallen, households' inflation expectations continue to run relatively high. It was emphasised, however, that given the adaptive nature of these expectations, they are bound to decrease with a decline in current inflation.

The Council members argued that in light of available forecasts, it was reasonable to expect elevated inflation levels until the end of 2011, with a subsequent return to the NBP inflation target in mid-2012. It was emphasised that the monetary tightening implemented this year will be conducive to a fall in inflation. At the same time, it was pointed out that the return of CPI inflation to the target may be jeopardised by exchange rate developments, particularly amid the turmoil persisting in international financial markets. It was also noted that in the event of an economic collapse abroad, weak domestic GDP growth would probably coincide with a zloty depreciation, which would hinder the disinflation process. Among the threats to lower inflation, a possible new increase in commodity prices was also pointed out, along with stronger than currently expected rises in fuel, food and administered prices.

As regards the conditions in the credit market, some Council members assessed that lending growth at the current rate does not, as for now, fuel inflationary pressures in the economy. They pointed, in particular, to a decline in consumer loans and a stabilization of growth in housing loans. However, other Council members highlighted the relatively high ratio of total consumer loans to GDP in Poland in comparison to other countries, adding that a reduction of this kind of debt would be welcome since it would be conducive to greater macroeconomic stability. Moreover, they assessed that given robust growth in housing loans and a continuing expansion in lending to corporations, the conditions in the credit market were conducive to higher aggregate demand in the economy.

When discussing the situation in the domestic labour market, the Council underscored weaker employment growth in the enterprise sector in the recent months, following a period of robust expansion, as well as the stabilisation of the unemployment rate at a relatively high level. Some Council members assessed that given the deteriorating outlook for demand, employment levels in enterprises may be expected to stabilise, or even fall slightly. It was also pointed out that given the circumstances, the wage pressure will probably remain limited.

With regard to monetary policy pursued amid mounting adverse trends in the external environment of the Polish economy, the Council members emphasised that monetary policy should foster sustained macroeconomic equilibrium. They pointed out that a monetary policy which takes macroeconomic stability into account will be conducive to maintaining price stability.

While discussing the NBP interest rates, the Council members agreed that these should remain unchanged at the current meeting. Arguments in support of this stance included the anticipated disinflation in Poland and a weaker outlook for growth in the global economy, and, in consequence, also in Poland.

The Council assessed that recently the balance of risks for inflation has become more balanced, adding that the current evaluation of the inflation and growth outlook for Poland did not imply a need to cut the NBP interest rates. At the same time, some Council members emphasized that the current level of the NBP interest rates was low against the background of their historical levels and vis-a-vis estimates of Poland's natural interest rate. Moreover, it was pointed out that the potential impact of the developments in global financial markets on the zloty exchange rate will constitute an upside risk factor to domestic inflation.

In the opinion of the Council, the significant monetary policy tightening implemented since the beginning of 2011 should facilitate inflation's return to the target in the medium term. Given the above, the Council decided to keep the NBP interest rates at the current level. The Council does not rule out the possibility of further monetary policy adjustment, should the outlook for inflation returning to the target deteriorate.

The Council kept the interest rates unchanged at the following levels: reference rate at 4.5%, 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 5 October 2011

At its meeting, the Monetary Policy Council discussed the impact of external developments on the situation in the Polish economy, the present and future trends in domestic economic activity, the likely shape of fiscal policy in the coming year as well as the outlook for inflation's return to the target. In this context, the Council discussed the current and possible future monetary policy decisions.

While addressing conditions in the external environment of the Polish economy, Council members highlighted the recent signs of a further weakening of economic activity in the United States, the euro area and in some emerging market economies, particularly in China. It was pointed out that the deteriorating outlook for global economic growth was reflected in the fact that international financial institutions considerably downgraded GDP growth forecasts for major advanced and developing economies. The weaker outlook for global economic activity combined with the fiscal problems of some euro area countries resulted in higher risk aversion in the international financial markets, leading, as a consequence, to a depreciation in the exchange rates of emerging market currencies, including the zloty.

While discussing the longer-term outlook for the global economy, some Council members highlighted the fact that the reduction of private sector debt is a significant challenge currently facing economic policy in the United States, while in the euro area the challenge is to solve the sovereign debt crisis. These Council members maintained that given the above one may expect a protracted economic slowdown in both economies. Some Council members pointed out, however, that due to the structural differences between these economies the United States will see a recovery sooner than the euro area. In the opinion of some Council members, in the longer term weaker economic activity can also be expected in China, where the limited possibilities of further export growth mean that domestic demand's role will have to increase, which, considering demographic factors and the absence of a social security system, will be difficult. All in all, according to those Council members, the debt crisis, and, in the longer term, the structural factors (mainly of demographic nature), may result in a prolonged period of slower growth of the global economy. Growth may also be less stable, especially given the limited options to stabilize the economy. Moreover, in this context some members of the Council highlighted the strongly expansionary monetary policy conducted by the major central banks as an additional drag on economic growth in the developed countries in the longer term. In the opinion of those members, such a policy delays the restructuring of these economies by hampering an effective re-allocation of resources.

While assessing the situation in the Polish economy, some Council members underlined the fact that despite its relatively sound fundamentals, the expected deterioration of external economic conditions – mainly in the euro area, including, in particular, in Germany – increases the risk of slower growth of Polish exports, and, hence, of slower GDP growth in the coming quarters. In the opinion of these Council members, despite a larger resilience of the Polish financial system in comparison to the other countries of the region, the links between financial systems in Europe may amplify the negative impact of external developments on economic activity in Poland. However, other members of the Council argued that despite markedly slower economic growth in the euro area, Polish exports have been rising relatively fast. Therefore, it may be expected that domestic GDP growth will not slow down significantly amidst an expected deterioration in the external environment of the Polish economy. While discussing economic activity in Poland, some Council members pointed to August 2011 data showing a marked increase in corporate deposits and somewhat slower lending to this sector, which may signal that enterprises' propensity to invest is decreasing in a situation of a deteriorated outlook for domestic growth.

With regard to the impact of developments in the public finance sector on economic growth in Poland, some Council members pointed to the likely significant reduction of the sector's deficit in 2011 and to the announcements of continued fiscal tightening in 2012. In this context, it was pointed out that although a further reduction of fiscal imbalances will hamper GDP growth in the short term, abandoning it would be viewed negatively by financial markets, which would increase both the cost of public debt servicing and the risk of macroeconomic destabilization. Some Council members emphasized that the way in which fiscal imbalances are contained is important. If it is to be achieved by limiting expenditure, it may contribute to increasing the propensity of enterprises to invest by reducing concerns about a future rise in the tax burden and by easing the wage pressure. According to other Council members, fiscal tightening in 2012 may be significantly smaller than this year and smaller than that assumed by the government in the state's *Multi-year financial plan*.

While discussing current data on inflationary processes in Poland, Council members pointed to the rise in both CPI and core inflation in August 2011. Some Council members also emphasized the concurrent acceleration in producer prices and faster-than-expected wage growth in the enterprise sector as factors that may signal higher-than-anticipated inflation in the future. On the other hand, the persistently elevated unemployment rate and the weaker growth of household disposable income were mentioned as factors conducive to curbing inflationary pressure. In the opinion of some Council members, the somewhat slower growth of lending to the private sector in August 2011 may also point to the absence of mounting inflationary pressure.

The Council members argued that in light of the NBP' internal short-term forecasts one may expect heightened inflation till the end of the year, followed by inflation's return close the NBP inflation target in the first half of 2012. This will be facilitated by the subsiding effects of earlier rises in food and energy prices as well as the VAT increase at the beginning of 2011, despite the forecasted concurrent sustained fast growth in administered prices. It was emphasized that the easing of inflationary pressure in the coming quarters will be fostered by an expected decrease in GDP growth amidst monetary policy tightening implemented in the first half of 2011 and the ongoing tightening of fiscal policy, as well as the expected weakening of economic activity in the external environment of the Polish economy. In the context of the inflation outlook, it was also pointed out that the latest results of business activity surveys show that the number of enterprises intending to reduce employment is larger than that of enterprises that intend to increase it, and that the percentage of enterprises planning to increase wages has fallen, which suggests that that wage pressure in the economy remains limited.

At the same time, Council members indicated that considering the persisting tensions in international financial markets the weakening of the zloty exchange rate may be an important risk factor for the fall of CPI inflation to the inflation target. Some Council members emphasised that if there was a slump in economic activity abroad, the zloty might depreciate further, which would keep inflation at an elevated level, despite a slowdown of domestic GDP growth. Some Council members also indicated that high inflation expectations of individuals may jeopardise the decline in inflation. Although in the past these expectations were strongly adaptive and they decreased in August 2011, they have remained above the inflation target most of the time since the end of 2007.

While discussing the NBP interest rates, the Council members agreed that these should remain unchanged. Arguments in support of this stance included the expected decline in inflation in Poland, particularly in the context of a weakening outlook for growth in the global economy, and, as a consequence, also in Poland. It was also indicated that currently the main risk factor for price stability in Poland is the impact of the unstable situation in international financial markets on the zloty exchange rate. Some Council members emphasized that the NBP interest rates may now be maintained at a lower level than would be justified before the global financial crisis. In their opinion, this is the effect of, on the one hand, the existing financial market frictions increased by the crisis, and, on the other hand, the probable decline in factor productivity growth leading to a decline in the natural rate of interest.

While discussing future monetary policy the Council was of the opinion that given the currently expected macroeconomic scenario which assumes some economic slowdown and a concurrent gradual decline in inflation, the interest rates could remain at the present level in subsequent quarters. It was indicated that the stabilisation of monetary policy parameters is conducive, particularly given increased uncertainty, to maintaining macroeconomic stability. At the same time some Council members argued, however, that in subsequent quarters the likelihood of interest rate increases is larger than that of interest rate cuts, especially if inflation – due to the depreciation of the zloty triggered by the turmoil in the international financial markets – remains above the target for a period longer than currently anticipated. Some Council members indicated that a potentially significant slowdown of GDP growth in Poland in response to significantly weaker economic activity abroad may, given the expected decline in inflation, justify a reduction of the NBP interest rates at some point in the future.

The Council also discussed the long-term challenges to economic policy. The Council members pointed to the need to take measures aimed at enhancing macroprudential policy, including the development by the central bank and other institutions responsible for the financial system of new instruments mitigating systemic risk in the financial sector. The need to coordinate regulatory and macroeconomic policies in order to maintain macroeconomic stability, including the stability of the financial system, was also emphasized.

The Council kept the 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%.

Information from the meeting of the Monetary Policy Council held on 8-9 November 2011

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.

In 2011 Q3 economic sentiment deteriorated considerably in the global economy, including, in particular, in the euro area and the United States. Nevertheless, the released data, including preliminary estimate of GDP in Q3 in the United States, have not so far confirmed a further significant weakening in activity in those economies. At the same time, however, economic growth forecasts for 2012 were further revised downwards and inflation remained elevated. There persists heightened uncertainty about global economic developments in the coming quarters and about the scale of economic slowdown in countries being Poland's main trading partners.

The risk of a global economic slowdown combined with fiscal problems faced by some countries, are behind the enduring tensions in the financial markets worldwide. The decisions taken at the Euro Area Summit supported improvement of financial markets' sentiment, yet, amidst persistently uncertain situation in Greece, risk aversion remains heightened, which adds to increased volatility of asset prices, including of foreign exchange rates. Increased asset price volatility is also driven by ample liquidity in the global financial markets, related to strongly expansionary monetary policy of the major central banks.

According to incoming information on the Polish economy – including favourable data on industrial output, construction and assembly output and retail sales – GDP growth in 2011 Q3 continued to be relatively high and presumably close to the one recorded in 2011 Q2. At the same time, majority of business sentiment indicators suggest that economic activity may weaken somewhat in the coming quarters, which is largely connected to the anticipated economic slowdown in countries being Poland's major trading partners. Data on the enterprise sector point to continued moderate growth in wages amidst concurrent further decline in employment. Unemployment rate remains elevated. Lending to enterprises is growing, a relatively high growth continues also in mortgage lending to households, whereas consumer loans continue to decline in annual terms.

In September, annual CPI inflation decreased to 3.9%, remaining markedly above the NBP's inflation target of 2.5%. Decrease in inflation was related to further decline in food prices, despite continued strong rise in energy prices. Core inflation net of food and energy prices slowed down slightly. Yet, at the same time, continued strong growth was recorded in PPI, and inflation expectations of households shifted somewhat upwards.

In the coming months, annual CPI inflation will continue to run at an elevated level, primarily due to the previous sharp rise in global commodity prices and the zloty depreciation of recent months. Waning impact of VAT rate increases and considerable rises in food and energy prices observed in the first half of 2011 will be conductive to lowering inflation at the beginning of 2012.

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. In line with the November projection – under the assumption of constant NBP interest rates – there is a 50-percent probability of inflation running in the range of 3.9-4.2% in 2011 (as compared to 3.7-4.4% in the July projection), 2.5-3.9% in 2012 (as compared to 2.1-3.4%) and 2.2-3.7% in 2013 (as compared to 1.8-3.4%). In turn, with a 50-percent probability the November projection sees the annual GDP growth in the range of 3.7-4.3% in 2011 (as compared to 3.0-4.9% in the July projection), 2.0-4.1% in 2012 (as compared to 1.9-4.5%) and 1.5-4.0% in 2013 (as compared to 1.5-4.3%).

In the opinion of the Council, in the medium term inflation will be curbed by somewhat lower domestic economic growth amidst fiscal tightening, including reduced public investment spending, and interest rate increases implemented in the first half of 2011, as well as the expected global economic slowdown. Such an assessment is also supported by the November projection of inflation and GDP. The impact of the situation in the global financial markets on zloty exchange rate continues to be an upside risk to domestic price developments.

In the opinion of the Council, the significant monetary policy tightening implemented in the first half of 2011 should enable inflation to return to the target in the medium term. Given the above, 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 outlook for inflation returning to the target deteriorate.

The Council has adopted the *Inflation Report – November 2011*.

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 the contents, works on the projection were supervised by Andrzej Sławiński, General Director of the Economic Institute. The process was coordinated by the Bureau of Macroeconomic Forecasts of the Economic Institute. The projection was prepared with the use of the macroeconomic model NECMOD[51]. The projection is the outcome of an iterative process in the course of which the paths of some variables were adjusted if they diverged from NBP's 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 November projection based on the NECMOD model refers to the period from 2011 Q4 to 2013 Q4. The starting point for the projection is 2011 Q3. The cut-off date for data used in the projection is 28 September 2011.

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

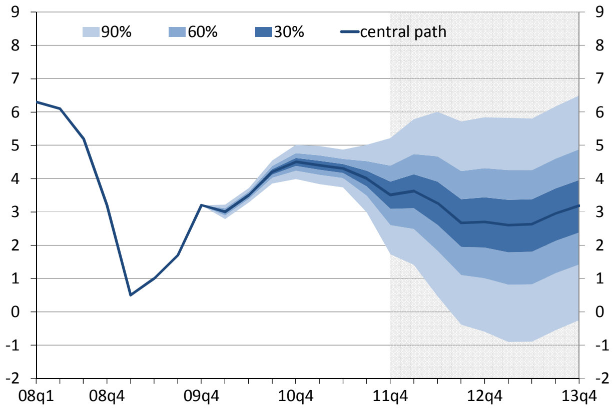
4.1. Summary

The forecast of the external environment developments used in the previous projection assumed a gradual rebound of the economic growth abroad, accompanied with high prices of raw materials and relatively stable situation in the financial markets. Among domestic factors, an important feature of the July projection was a gradual fiscal tightening and associated ceasing of a positive impact of EU transfer aimed at financing public investment. Consequently, a gradual decline of GDP growth in 2012-2013 was forecasted together with a relatively quick return of inflation to the inflation target.

The main factors which gave rise to changes in the projection scenario between its July and November editions are related to the mounting sovereign debt crisis in the euro area. Since the publication of the last projection, the outlook for economic growth in the US and in the euro area has deteriorated, especially with respect to 2012. On the other hand, the zloty has strongly depreciated. Since these developments operate in opposite directions, their overall impact on the GDP projection is moderate. Similarly to the July forecasting round, we expect a significant reduction in the GDP growth rate in the years 2012-2013 (by approx. 1 percentage point, Table 4.1). At the same time, together with a weaker zloty, current projection points out at a prolonged return of the inflation to the inflation target.

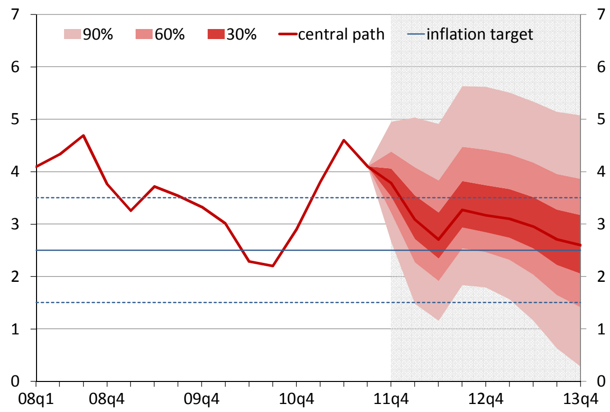
Current data indicate that growth in 2012 Q3 will be sustained at a level close to 4%, in part owing to rising absorption of EU transfers and a related increase in public investments. Consumption continues to be an important driver of growth. On the other hand, gross fixed capital formation in enterprises has seen only a modest increase. According to NBP surveys, in spite of good financial conditions of firms and rising capacity

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, %).



utilisation, businesses are postponing their investment decisions due to a heightened uncertainty as to future business conditions.

With weaker prospects of economic developments in Poland's main trading partners, and given the anticipated fiscal tightening amid decreasing EU transfers, an improvement in the situation of households and businesses in 2012 will be limited. Moreover, global energy commodity prices are expected to remain high within the projection horizon, due to sustained high demand from the emerging countries. As a consequence, demand from households and businesses in 2012 can be expected to expand only moderately, which will translate into reduction of GDP growth to 3%. The scale of the slowdown will be mitigated by the lagged effects of the zloty depreciation which took place in September 2011 that brought enhanced price competitiveness of Polish products. In 2013, this effect will wear away, and the 3% growth will, in turn, be supported by improved business conditions abroad.

Until the end of 2011, CPI inflation will remain at an elevated level close to 4% y/y (Figure 4.2) as a result of unfavourable supply conditions, owing to which domestic prices of food and energy remain high, and the rise in VAT rates implemented at the beginning of 2011. In addition, in the short projection horizon consumer prices will rise as a result of the depreciation of the zloty in September 2011. In effect, the return of inflation close to the inflation target of 2.5% will take longer, in spite of demand pressures easing off as a result of the economic growth slowdown.

Future developments in the euro area constitute the main source of uncertainty for this inflation and GDP projection. Should the sovereign debt crisis be exacerbated, the outlook for external growth is expected to deteriorate further and the zloty to weaken, which will translate into higher inflation and slower GDP growth in Poland. The likelihood of such a scenario unfolding is reflected in the fan charts (Figure 4.1, Figure 4.2), which display a positive asymmetry of uncertainty for the inflation projection, and a slightly negative for the GDP projection.

4.2. External environment

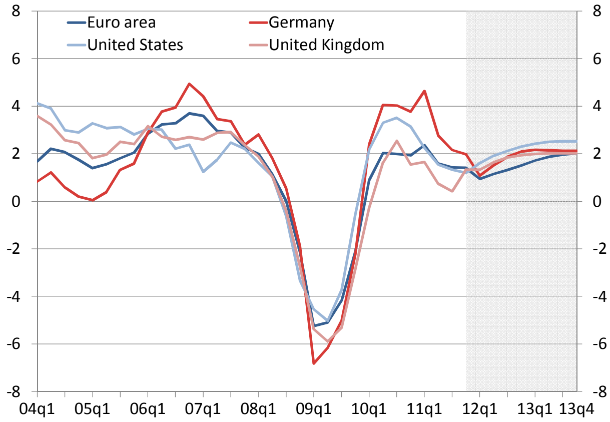
GDP growth in countries being Poland's main trading partners has been revised downwards versus the developments envisaged in the July forecasting round. In particular, the current projection expects growth in the euro area to slow down to 1.2% in 2012 (against 1.8% assumed in the July projection), and in the United States to 2.0% (as opposed to 3.1% in the previous forecasting round; Figure 4.3). In 2013, in turn, economic growth in countries being Poland's main trading partners will speed up, yet, by the end of the projection horizon, GDP in those economies will remain below potential output.

Apart from weaker than expected 2011 Q2 growth in the United States, Great Britain and the euro area, bleaker outlook for economic situation abroad results from a considerable rise in uncertainty in the global financial markets. This is driven, among others, by concerns about possible Greece's insolvency as well as the fiscal position of other euro area countries, leading to a marked deterioration in both consumer and producer confidence indices. The revision of forecasts for Germany, Poland's main trading partner, is additionally fuelled by concerns about the future volume of its exports amid weaker global economic growth. Notwithstanding a substantial downward revision, the scenario envisaged by the current projection for developments in business conditions abroad does not assume any uncontrolled escalation of the debt crisis or collapse in the global financial markets.

Given mounting uncertainty about sustainability of the recovery from the latest crisis and amid

Figure 4.3

Foreign GDP (y/y, %).



concerns related to the fiscal position of some euro area countries, the current projection assumes central banks will postpone the process of abandoning their accommodative monetary policies (Figure 4.4).

The forecasts of energy commodity prices in the global markets have not changed significantly as compared to the previous projection (Figure 4.5). In spite of a weaker outlook for global GDP growth than the one assumed in the July projection, in particular in developed countries, relatively high demand for energy commodities persists on the part of developing countries. In the projection horizon, crude oil prices in real-terms remain stable, amid a moderate rise in demand (approx. 1-1.5%) and a comparable growth in supply.

The agricultural commodity price index in 2011 Q2 was running at a level approx. 4% higher than the July projection figure due to higher than expected rapeseed oil prices, which resulted from tighter supply conditions in the market for this commodity in the 2011/2012 season. Over the projection horizon, prices of agricultural commodities are expected to decline moderately (yet remaining at relatively high levels) as supply is expected to expand in the subsequent seasons (Figure 4.5).

4.3. Polish economy in 2011-2013

Aggregate demand

A relatively rapid recovery of domestic demand, the key driver of growth in 2010, has continued throughout 2011. In 2012-2013, however, domestic demand growth will slow down markedly to approximate 2% y/y as a result of lower absorption of EU funds, weaker consumption growth, completion of the inventories rebuilding process, and measures designed to reduce the general government

Figure 4.4

Interest rate abroad (%).

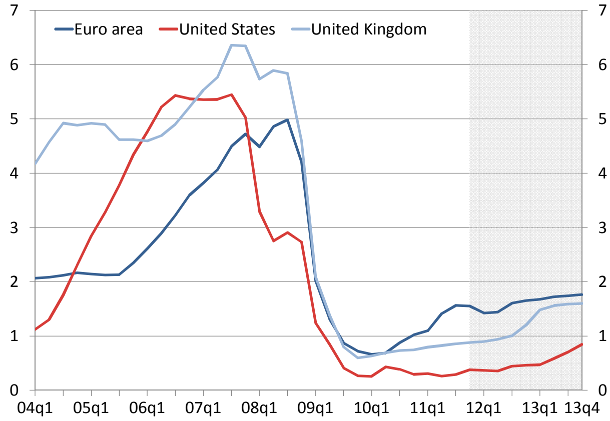


Figure 4.5

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

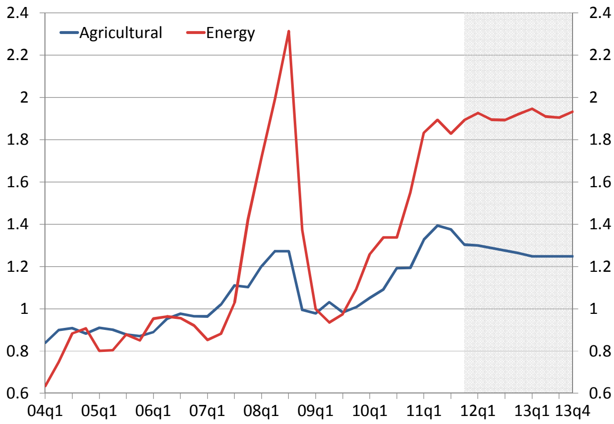
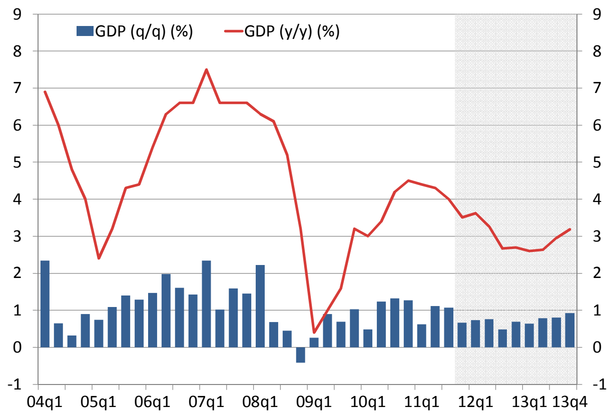


Figure 4.6

Economic growth.



deficit. Owing to the shock-absorbing effect of foreign trade, which will be supported by the effects of the September 2011 depreciation of the zloty, GDP growth will be reduced somewhat less markedly: from 4.1% in 2011 to approx. 3% in 2012-2013 (Figure 4.6, Figure 4.7).

In 2011, in spite of a relatively high growth in the nominal wage bill, growth of households' real disposable income will remain close to zero, mainly as a result of the combined effects of high CPI inflation and reduced growth of social transfers in this period (including retirement and disability pensions indexation lower than in 2010 as well as systemic changes designed to reduce public spending). The 3.5% rise in individual consumption expected this year (Figure 4.8) will thus be financed by a decline in the savings rate to a great extent. In the years 2012-2013, consumption will remain a crucial GDP growth factor, although expanding somewhat less dynamically. The modest rise in households' disposable income in this period will hamper faster consumption growth due to a slower rise in the wage bill (as a result of a considerable slack prevailing in the labour market) as well as slower rise in income from self-employment (as a result of flagging economic activity in the long-term projection horizon). Over the projection horizon, public consumption growth will remain slow, due to the wage freeze in the government sector in 2011-2012 and reductions of other current public expenditures.

Following growth in 2011, the investment rate will start declining gradually in 2012, with an average growth in gross fixed capital formation of 2.7% y/y in 2012-2013 (Figure 4.9). In the short-term projection horizon, expansion of total investment will be primarily driven by robust growth in investment of the public sector, financed to a substantial degree by the inflow of EU structural funds (Figure 4.10). In 2012, the absorption of EU funds and the general government spending on co-financing will remain

Figure 4.7

GDP growth (y/y, %) – breakdown.

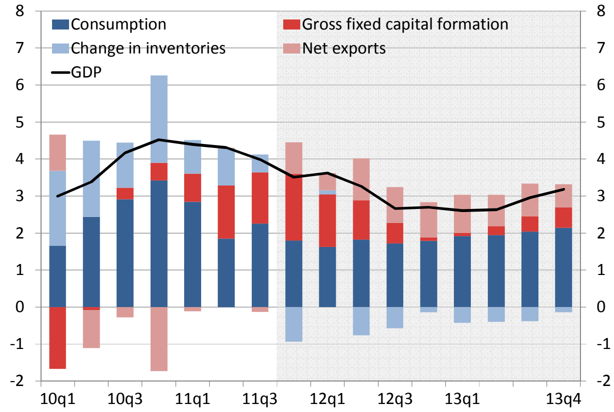


Figure 4.8

Individual and public consumption.

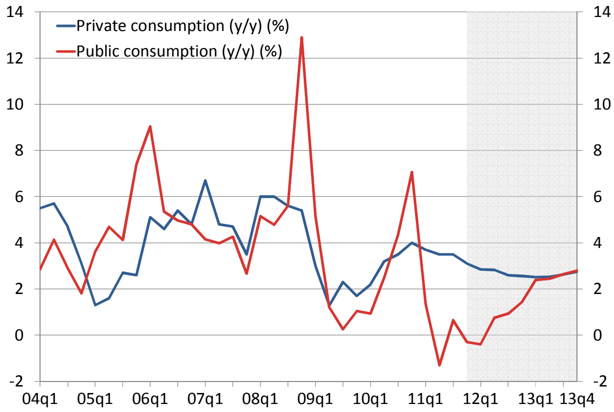
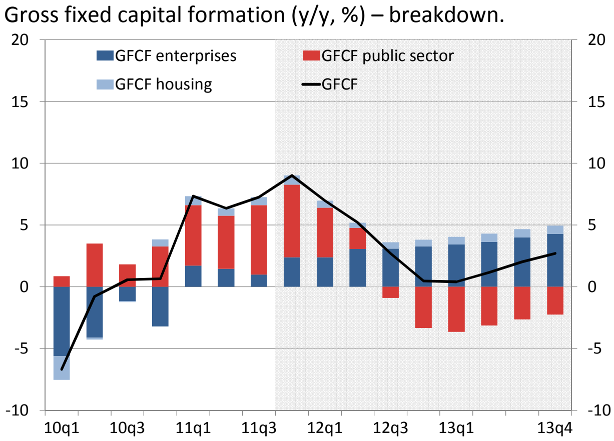


Figure 4.9

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



on this year's level before decreasing in 2013. Consequently, in the years 2012-2013, public investment growth will be significantly lowered. Arguments in favour of this view include government plans announced in the 2012 draft *Budget Act* and the *National Road Construction Programme for the years 2011-2015* as well as possible cuts in investment expenditure by local government due to their mounting debt and imposed fiscal rules. Growth in gross fixed capital formation will be supported by high corporate investment demand, rising faster than GDP over the projection horizon. This, in turn, will be fuelled by gradually rising production capacity utilisation, good financial performance of enterprises, and relatively low cost of capital utilisation (resulting from the projection's assumption of a constant NBP reference rate). However, large uncertainty concerning the situation abroad and persistently high energy commodity prices (expressed in PLN) will limit corporate investment growth to a single-digit figure. Within the projection horizon, housing investment growth will slightly exceed consumption growth. Besides relatively low real interest rates, this will be supported by a high rate of return on real estate development projects given the current relation between housing prices and construction costs (*Information on Dwelling Prices and the Situation in the Residential and Commercial Property Market in Poland in 2011 Q2* (in Polish)).

Following the sharp rise in exports and imports in 2010 and the first half of 2011, which was related to the restoration of trade relations after the global financial crisis, less robust growth in trade is expected for the coming quarters due to weaker economic growth abroad and lower demand in Poland (Figure 4.11). Export growth will, however, be reduced to a lesser extent compared to imports, mainly because the depreciation of the zloty in September 2011 has improved price competitiveness of Polish producers. As a consequence, the contribution of

Figure 4.10

EU transfers (EUR bn) – breakdown.

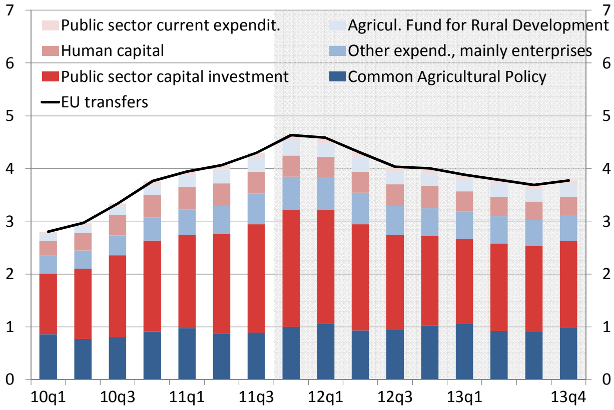
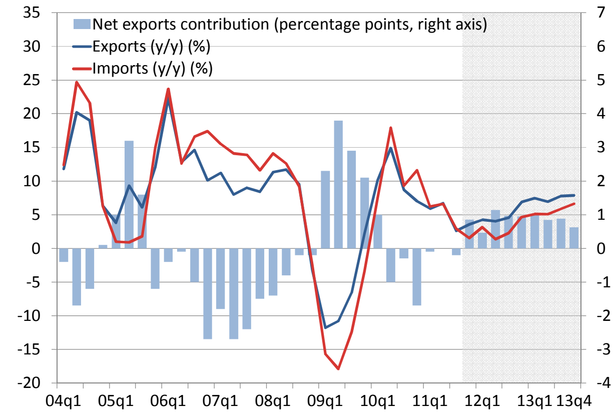


Figure 4.11

Foreign trade.



net exports to GDP growth will rise to 0.9 percentage points in 2012 and stick close to this level in 2013 due to the cyclical upswing abroad while growth of domestic demand will remain low.

Macroeconomic equilibrium

The relatively rapid rise in GDP in 2011 amid reduced growth of potential output in the aftermath of the global financial crisis, will translate into a rising output gap, to 0.9% in the beginning of 2012. From the 2nd half of 2012, growth in potential output will gradually accelerate, which, given overall slower economic growth, will reduce the output gap (however, it will remain moderately positive throughout the projection horizon; Figure 4.12).

Apart from weaker growth in private capital formation (resulting from the lagged effects of reduced investment in the years 2009-2010), growth of potential output will be additionally dragged, in the short-term projection horizon (Figure 4.13), by decelerated growth of the labour force participation rate (due to the rising share of post-production age population in the total population and the economic slowdown) and a concurrent deceleration in population growth (related to the reversal of the trends observed in 2009-2010, i.e. less extensive return migration and a rise in emigration, among others to Germany and Austria. In the long projection horizon, potential output growth will be supported by faster capital accumulation, reflecting increased corporate investment and a gradual recovery of growth in total factor productivity (TFP) to its pre-crisis level.

In the short-term projection horizon, along with the expected slowdown of growth, the improvement in the labour market observed in 2010 and 2011 is losing its momentum - employment growth is decreasing and wage growth is stable (Figure 4.14, Figure 4.15, Figure

Figure 4.12

Output gap.

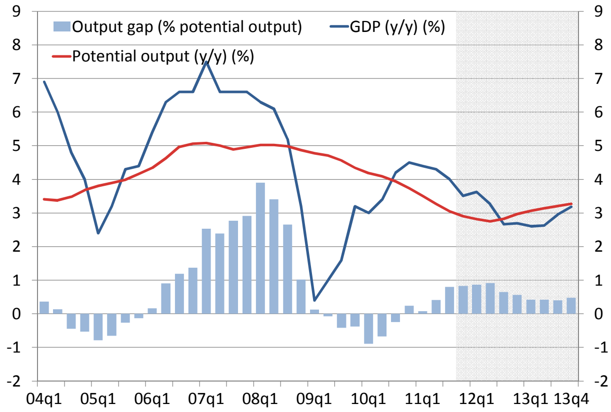


Figure 4.13

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

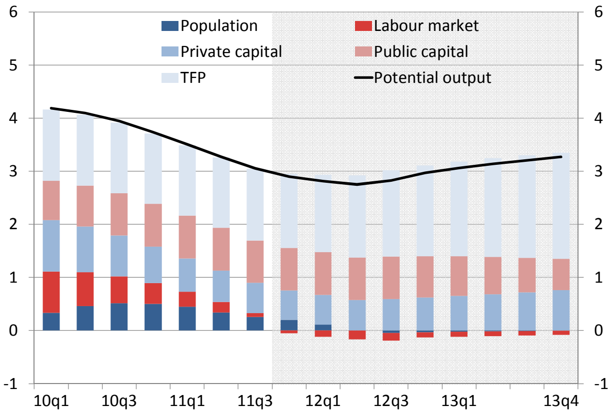
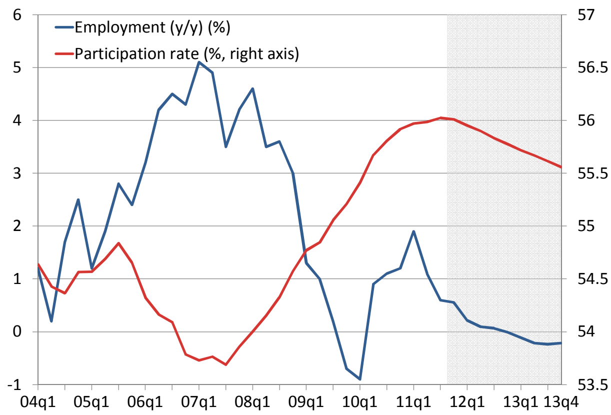


Figure 4.14

Employment and activity in the labour market.



4.16). Total employment will be falling by the end of 2012. However, as labour force participation rate will fall at the same time, the unemployment rate will continue to decrease over the entire projection horizon by about 0.5 percentage points. Given the relatively stable Non-Accelerating Wage Rate of Unemployment (NAWRU), the unemployment gap will widen, thereby mitigating the impact of economic slowdown on wages. In 2012-2013 growth of real wages will be close to labour productivity growth (approx. 3% y/y). Growth of unit labour costs (ULC) will also stabilise at about 3% y/y.

The persistent deficit of income and trade accounts in the projection horizon will be largely offset by the inflow of EU funds. The external imbalance, measured by the ratio of current and capital account deficits to GDP, will improve somewhat over the projection period (reduced from 2.2% in 2011 to 1.3%-1.7% in 2012-2013) due to the improved trade balance besides subsiding inflow of EU funds, as the preparations for European Football Championship 2012 (EURO 2012) have been completed.

Exchange rate and inflation

In September 2011 the zloty exchange rate depreciated seriously as a result of mounting concerns about the debt levels of a number of euro area countries and liquidity problems faced by some European banks. Throughout the projection horizon, the effective zloty exchange rate will gradually appreciate, approximating its equilibrium level. The extent of this appreciation, however, will be curbed by slow domestic and external growth through its dampening impact on the inflow of direct and portfolio investment to Poland and the shrinking interest rate disparity, which results from the adopted assumption of a constant NBP reference rate.

The rise in core inflation in the short-term projection horizon will result, to a large extent,

Figure 4.15

Unemployment.

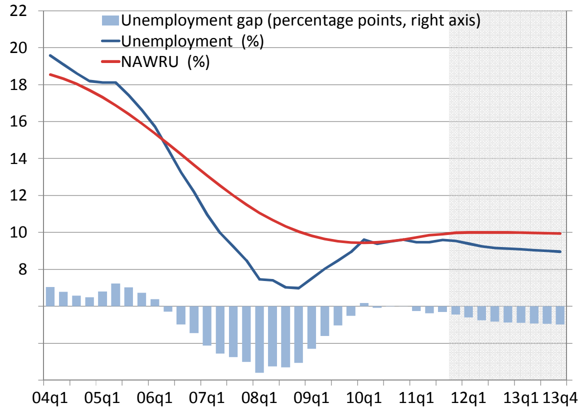


Figure 4.16

Unit labour cost.

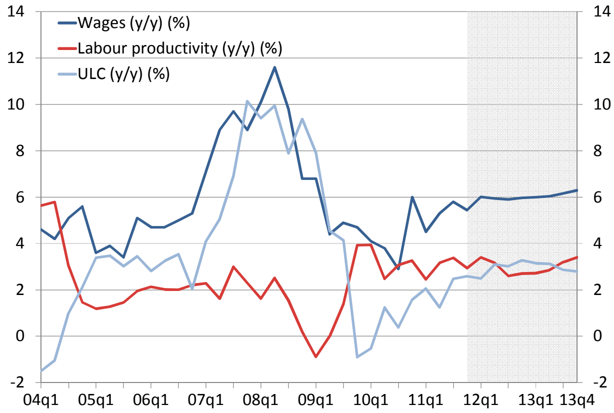
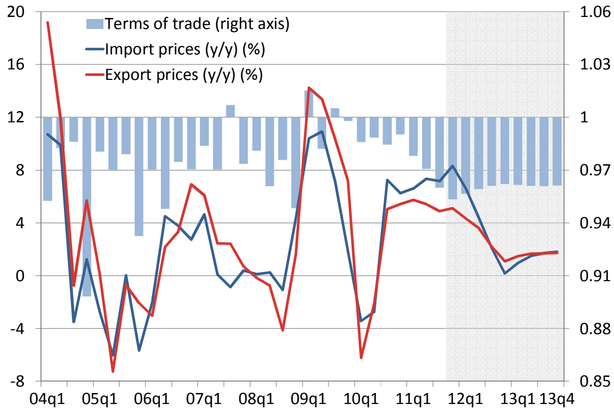


Figure 4.17

Terms-of-trade.



from the lagged effects of fast growing import prices in 2011 (Figure 4.17, Figure 4.18). In the longer-term projection horizon, as the zloty strengthens, import price growth will flatten out, which will result in a reduction in core inflation to 2.5% in 2013. The decline in core inflation will be mitigated by higher unit labour costs.

In the first half of 2011, domestic food prices rose considerably due to limited supply in the domestic market and high prices of agricultural commodities on the world market. Over the projection horizon, the disturbances pushing up those prices will be gradually phased out and global prices of agricultural commodities will decline moderately (Figure 4.5). At the same time, supply in the domestic market will return to its average level. As a consequence, food price inflation will come down to 2.4% y/y towards the end of the projection horizon, while in the short-term projection horizon significant fluctuations in this index result from the so-called base effect (growth in food prices will temporarily fall to approx. 1% y/y in 2012 Q2 due to references being made to the 2011 Q2 elevated prices, Figure 4.19).

Energy price inflation will, in the short-term projection horizon, remain at an elevated level due to high prices of energy commodities on the world market, the increase of the VAT rate at the beginning of 2011, and the endorsement of higher administered energy prices by the Polish Energy Regulatory Office. In the medium- and long-term projection horizon, prices of energy commodities in the global markets will stabilise. Alongside the gradual appreciation of the zloty, this will drive down growth in energy prices, yet remaining above CPI inflation. In 2013 energy price growth will be maintained by the possibility that rising costs in the energy sector connected to purchases of CO_2 emission rights could be translated into prices.

CPI growth in 2011 will be significantly higher than last year (Figure 4.20). The rise in inflation is

Figure 4.18

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

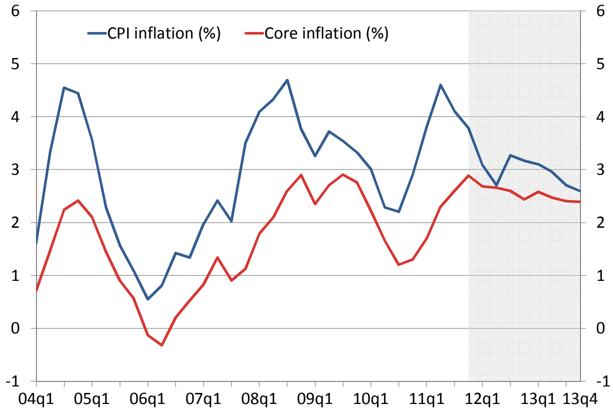


Figure 4.19

Inflation of food and energy carrier prices.

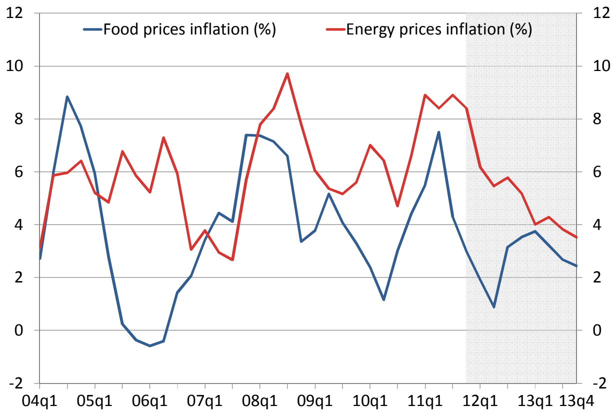
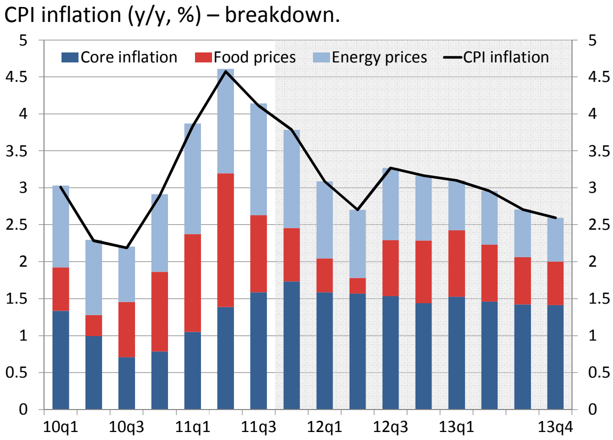


Figure 4.20

CPI inflation (y/y, %) – breakdown.



driven by supply factors contributing to high growth in food and energy prices, and the change in VAT rates which came into force as of January 2011. Over the long-term projection horizon, inflation will decline to the level close to the inflation target. Over the medium- and long-term horizon, Inflation will be pushed higher by growing labour costs, whereas limited internal demand, declining growth in prices of agricultural and energy commodities on the world market, as well as the appreciating exchange rate of the zloty will be factors driving down growth of consumers prices. Under the assumption of a constant NBP reference rate over the whole projection horizon, the probability of average annual inflation ranging from 1.5% to 3.5% rises from 33% in 2011 Q4 to an average of 51% in the years 2012-2013.

4.4. Current versus previous projection

The main factors affecting the change in the path of inflation and GDP between the July and November forecasting round include: weaker zloty exchange rate, deteriorating outlook for economic growth abroad and data on GDP and CPI inflation released after the previous projection. As a result of those changes, the forecasted annual growth in consumer prices in 2011 will remain unchanged, while in the years 2012-2013 it will increase. GDP projection in 2011 will run slightly above the July projection path but in the medium-term it will run below previous projection path (Table 4.1). The reasons for deviations between the July and November projection have been detailed below.

GDP

In 2011 higher contribution of net exports to GDP growth was offset by downward revision of domestic demand, especially total consumption

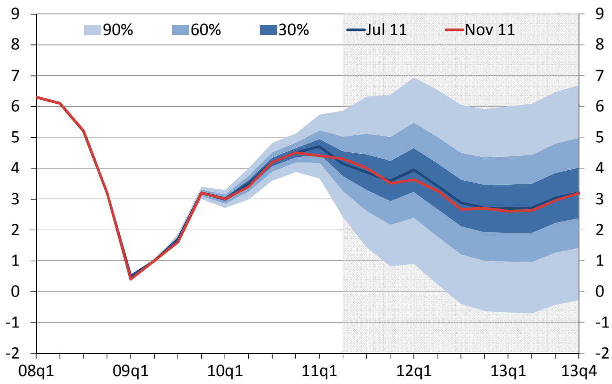
Table 4.1

November projection versus July projection.

	2011	2012	2013
CPI inflation (y/y, %).			
Nov. 2011	4.0	3.1	2.8
July 2011	4.0	2.7	2.4
GDP (y/y, %).			
Nov. 2011	4.1	3.1	2.8
July 2011	4.0	3.2	2.9

Figure 4.21

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



(Figure 4.22). The change in the GDP breakdown between the projections results mainly from newly released data on national accounts. Estimates published by the Central Statistical Office (GUS) for 2011 Q2 point to a weaker than accounted for in the July projection growth in private and public consumption, along with higher contribution of net exports to GDP growth.

A significant downward revision of GDP growth is expected in 2012, resulting from the negative impact of deteriorating outlook for economic growth of our major trading partners, especially in the euro area. This effect will be partly offset by weaker than assumed in the July projection zloty exchange rate (being the effect of zloty depreciation observed in September 2011, driven by the sovereign debt crisis in the euro area) and reduction in the real interest rate (resulting from higher inflation and assumption of a constant reference rate). In 2013 the effect of a weaker zloty will fade away, and economic growth abroad will rise to the level assumed in July, which will shrink the difference between GDP growth in both forecasting rounds.

Inflation

In 2011 the forecasted growth in consumer prices remained at the level forecasted in July. Despite higher than assumed in the previous forecasting round agricultural commodity prices in the global markets, domestic food prices went down as a result of a relatively weak domestic demand. Yet, the impact of this decline on the total CPI was offset by rising core inflation resulting from higher than anticipated prices of imported goods.

Depreciation of zloty that increased import prices and agricultural and energy commodity prices expressed in PLN, will be conducive to higher inflation rate in the years 2012-2013. Demand and cost pressure resulting from the economic slowdown will have lower impact.

Figure 4.22

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

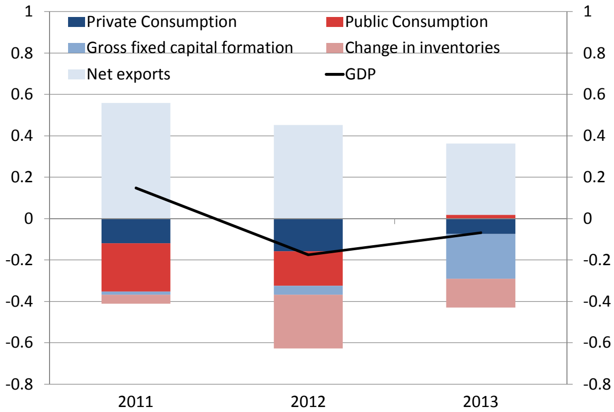


Figure 4.23

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

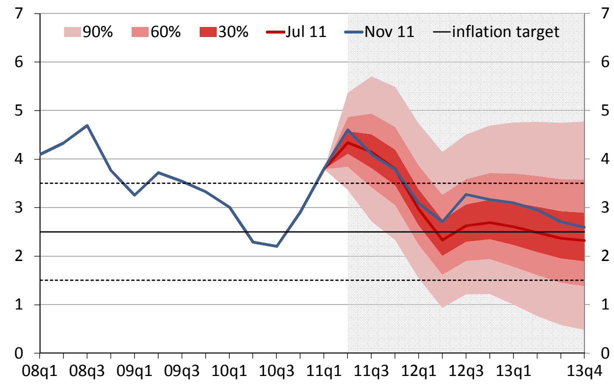
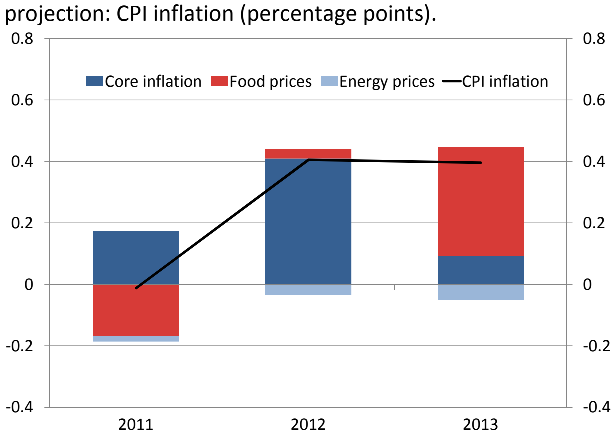


Figure 4.24

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



As a result, CPI inflation in 2012-2013 will run, on average, by 0.4 percentage points above the July forecasting round.

4.5. Sources of projection uncertainty

It is assessed that in the projection horizon, the balance of various risk factors points to a slightly higher probability of GDP path running below and inflation rate above the central path of the projection (Table 4.2). The most important sources of uncertainty have been listed below.

External environment and exchange rate

The external environment remains the major source of uncertainty for the inflation and GDP projection. The outlook for economic growth in the developed countries, in particular, the EU member states, points to a downward trend, especially in the short-term projection horizon. There is a possibility of return of financial crisis resulting from growing sovereign debt of certain euro area countries and mounting liquidity problems faced by some European banks which are likely to limit lending to the private sector (also through banks operating in Poland capitally-linked with euro area banks) and therefore decrease economic growth. The response of governments and central banks to this situation remains difficult to assess. Also the developments in the agricultural and energy commodity markets remain an important source of uncertainty.

Future developments of zloty exchange rate, especially amidst the current level of uncertainty in the global financial markets constitute an inevitable source of uncertainty to the inflation and GDP projection.

It is assessed that the above mentioned sources of uncertainty related to the external

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)
11q4	0.00	0.03	0.33	0.49	0.33
12q1	0.05	0.25	0.60	0.45	0.55
12q2	0.08	0.34	0.68	0.41	0.59
12q3	0.02	0.14	0.46	0.38	0.44
12q4	0.02	0.15	0.47	0.36	0.46
13q1	0.03	0.20	0.52	0.39	0.49
13q2	0.08	0.29	0.60	0.43	0.52
13q3	0.16	0.40	0.68	0.46	0.52
13q4	0.21	0.46	0.72	0.48	0.51

environment of the Polish economy increase the probability of inflation running above and GDP running below the central path.

Domestic demand

In connection with the expected fiscal tightening over the projection horizon, the response of households and the enterprise sector demand remains a significant source of uncertainty for the projection. The historically stable growth of private consumption, growing production capacity utilization in the economy, good liquidity situation of enterprises and low real interest rates allow to expect a relatively strong growth in consumption and corporate investment in the future. Such a scenario would be possible should economic developments improve Poland's perception abroad, leading to higher inflows of capital, including foreign direct investment.

Fiscal policy

Fiscal policy remains an important source of uncertainty for future inflation and GDP, in particular, over the long-term projection horizon. The excessive deficit procedure which obliges Poland to reduce the general government sector deficit below 3% in 2012 may result in further adjustments increasing revenues and reducing expenditure of this sector in the years 2012-2013. As a result, there is a growing probability of GDP running below the central path, whereas the impact of changes in fiscal policy on CPI inflation is burdened with high uncertainty as, depending on the adopted solutions, it may be a factor conductive higher or lower consumer prices. Developments in public sector investments, connected with utilization of EU funds, constitute an additional source of uncertainty for GDP projection.

Food and energy prices in Poland

On account of a significant impact of regulatory policy on developments in food and energy prices, similarly to the previous forecasting rounds, it remains an important source of uncertainty for the inflation projection. Significant uncertainty is also associated with the future EU environmental protection policy (including the implementation of standards of the emission of carbon dioxide), regulatory activities in the food market and the future tariff policy of the Energy Regulatory Office.

4.6. Discussion of data released after 28 September 2011

Data released after 28 September of 2011 indicates that the economic growth expectations in the euro area in 2012 deteriorated and that forecasts of energy commodity prices based on the future contracts has been revised downwards. These data increase the probability of GDP and inflation running below the central projection path.

Table 4.3

Central path of inflation and GDP projection

	2009	2010	2011	2012	2013
Consumer Price Index CPI (%, y/y)	3.5	2.6	4.0	3.1	2.8
Food prices (%, y/y)	4.1	2.7	5.0	2.4	3.0
Energy prices (%, y/y)	5.5	6.2	8.6	5.6	3.9
Core inflation net of food and energy prices (%, y/y)	2.7	1.6	2.4	2.6	2.5
GDP (%, y/y)	1.6	3.8	4.1	3.1	2.8
Domestic demand (%, y/y)	-1.1	4.4	3.9	2.2	2.0
Individual consumption (%, y/y)	2.1	3.2	3.5	2.7	2.6
Collective consumption (%, y/y)	1.9	3.8	0.7	0.7	2.6
Gross fixed capital formation (%, y/y)	-1.2	-1.0	7.5	3.8	1.6
Contribution of net exports (percentage points, y/y)	2.7	-0.6	0.2	0.9	0.8
Exports (%, y/y)	-6.8	10.1	5.5	4.9	7.5
Imports (%, y/y)	-12.4	11.5	5.0	2.8	5.7
Gross wages (%, y/y)	5.2	4.2	5.4	6.0	6.1
Total employment (%, y/y)	0.4	0.6	1.0	0.1	-0.2
Unemployment rate (%)	8.2	9.5	9.5	9.2	9.0
NAWRU (%)	9.6	9.5	9.9	10.0	10.0
Labour force participation rate (%)	55.0	55.7	56.0	55.9	55.6
Labour productivity (%, y/y)	1.2	3.2	3.1	3.0	3.0
Unit labour cost (%, y/y)	3.8	0.7	2.1	3.0	3.0
Potential output (%, y/y)	4.6	4.0	3.2	2.8	3.2
Output gap (% potential GDP)	-0.2	-0.4	0.5	0.7	0.4
Index of agricultural commodity prices (USD; 2009=1.00)	1.00	1.13	1.35	1.28	1.25
Index of energy commodity prices (USD; 2009=1.00)	1.00	1.37	1.86	1.91	1.92
Foreign price level (y/y, %)	1.3	0.7	1.5	1.6	1.9
Foreign GDP (y/y, %)	-4.4	2.2	1.9	1.4	2.0
Current and capital account balance (% GDP)	-2.2	-2.6	-2.2	-1.3	-1.7
WIBOR 3M (%)	4.32	3.89	4.49	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 JUNE-SEPTEMBER 2011

- **Date:** 8 June 2011

Subject matter of motion or resolution:
Motion to symmetrically narrow the corridor between the NBP deposit and lombard rates by 0.5 percentage points.

MPC decision:
Motion did not pass.

Voting of the MPC members:

For:
A. Bratkowski
A. Rzońca
A. Zielińska-Głębocka

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

- **Date:** 8 June 2011

Subject matter of motion or resolution:
Resolution no. 9/2011 on the level of the reference rate, lombard rate, deposit rate and rediscount rate of the National Bank of Poland.

MPC decision:
The MPC increased the level of all NBP interest rates by 0.25 percentage points.

Voting of the MPC members:

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

Against: E. Chojna-Duch

- **Date:** 6 July 2011

Subject matter of motion or resolution:
Motion to raise the NBP interest rates by 0.25 percentage points.

MPC decision:
Motion did not pass.

Voting of the MPC members:

For: A. Kaźmierczak

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

- **Date:** 23 August 2011

Subject matter of motion or resolution:
Resolution No. 10/2011 on adopting *Monetary Policy Guidelines for 2012.*

Voting of the MPC members:

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

Against:

● **Date:** 20 September 2011

Subject matter of motion or resolution:
Resolution No. 11/2011 on setting the ceiling for liabilities arising from loans and credits drawn by the NBP at foreign banking and financial institutions.

Voting of the MPC members:

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

Z. Gilowska and A. Rzońca were absent.