Inflation Report
November 2012

National Bank of Poland
Monetary Policy Council

Warsaw, November 2012

The *Inflation Report* presents the Monetary Policy Council's assessment of the current and future macroeconomic developments influencing inflation. The projection of inflation and GDP presented in Chapter 4 was prepared at the Economic Institute of the National Bank of Poland. In terms of the contents, works on the projection were supervised by Andrzej Sławiński, General Director of the Economic Institute. The projection was prepared with the use of the NECMOD macroeconomic model. The NBP Management Board approved the submission of the projection to the Monetary Policy Council. The inflation projection is one of the inputs to the Monetary Policy Council's decision-making process.

The time horizon of the analysis presented in the *Report* is conditioned by the availability of macroeconomic data. In turn, the periodisation of the analysis (breakdown into sub-periods) is conditioned by the development of particular variables. The cut-off date for the data in this *Report* was 25 October 2012.

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

CONTENTS

SUMMARY

In the second quarter of 2012 – and probably also in the third quarter – global economic activity remained weak. In 2012 Q2 recession continued in the euro area, while growth in the United States (in quarterly terms) remained moderate, despite a slight deceleration. At the same time, annual growth in key emerging economies kept loosing momentum, yet was still markedly higher than in the developed economies. The incoming Q3 data, including global business condition indicators and advance estimate of GDP in the United States, suggest that economic activity in the third quarter – despite some improvement – remained low. In some developed economies, growth continues to be dampened by deleveraging in the private and public sector, as well as the persistently unfavourable conditions in labour and real estate markets. Weak demand from the advanced economies is having an adverse effect on economic activity in the emerging economies. In both the advanced and emerging countries that are not commodity exporters, commodity prices exerted, despite temporary decrease, a downward pressure on GDP growth.

Since the July *Report*, most advanced and emerging economies have seen inflation drop further, although some rebound has been observed in recent months. Decline in inflation was supported by temporary fall in global commodity prices and weak demand pressure in many countries.

Since the release of the previous *Report,* the major central banks have continued to ease their monetary policy, maintaining interest rates at historically low levels or reducing them. Moreover, they expanded existing or announced new quantitative easing programmes. At the same time, many central banks from emerging economies and small developed economies have continued monetary easing.

Until mid-September 2012, the expected launch of the above-mentioned new programmes of quantitative easing by major central banks, the announcement of institutional reforms in the euro area and the release of better than expected data from the United States economy spurred an improvement in the international financial market sentiment and a decline in risk aversion. Since mid-September 2012, however, an improvement in sentiment in global equity markets came to a halt, as the optimism accompanying monetary policy easing by the central banks was offset by worse than expected economic data from the euro area and the emerging economies, including China. Growing uncertainty about the scale of future fiscal tightening in the euro area countries most affected by the sovereign debt crisis and in the United States further dampened the market sentiment.

In recent months, the annual consumer price growth in Poland has been gradually decreasing (down to 3.8% in September 2012), remaining, however, above the upper limit for deviations from the NBP inflation target. The decline in the annual inflation index was driven by waning adverse base effects, which in the last year fuelled growth in administered prices and in prices of some categories of non-administered services. Declining inflation was also supported by the appreciation of the zloty, observed since May 2012, and slowing demand in the economy. At the same time, majority of core inflation measures and annual PPI growth decreased. 12-month inflation forecasts by financial sector analysts had remained at the level higher but close to the inflation target (2.7%). At the same time inflation expectations of enterprises and individuals decreased, though they are still above the inflation target (respectively 3.2% and 3.8%).

In 2012 Q2, GDP growth weakened again and – according to the updated GUS estimates – amounted to 2.3% y/y, as compared with 3.6% in 2012 Q1. Lower annual GDP growth was accounted for by a sharp drop in domestic demand growth, resulting from a decline in the growth of both consumption and gross capital formation, as well as decrease in growth in inventories. On the other hand, the 2012 Q2 GDP growth was supported by a high contribution of net exports resulting from a decrease in imports and a continued – though slower – growth in exports. The weakening of economic activity was accompanied by deterioration in the financial situation of enterprises in 2012 Q2.

In 2012 Q2, with the decreasing GDP, the annual growth in the number of persons working in both the entire economy and the enterprise sector decelerated. At the same time, owing to the further increase in the number of the economically active, the unemployment rate was higher than a year before. The incoming data indicate lack of wage pressure in the economy. The nominal annual wage growth and the nominal annual growth in unit labour costs in 2012 Q2 decreased comparing to 2012 Q1. Data from the enterprise sector in 2012 Q3 indicate that the annual growth of employment had decreased to zero and the annual wage growth in this sector continued to drop.

Since the July *Report*, the Monetary Policy Council has kept the NBP reference rate unchanged at 4.75%[1]. At the same time, the emergence of expectations about the NBP reference rate cut in the subsequent months was reflected in a decline in short-term interest rates, while WIBOR-OIS 3M spread, a proxy for credit risk in the interbank market, decreased slightly. Yields on Polish sovereign bonds declined, temporarily reaching the lowest levels on record. CDS rates for Poland have fallen and remain below the average recorded in the emerging economies. Stock prices at the Warsaw Stock Exchange were influenced by global financial market sentiment (stock indices were rising till mid-September 2012 and stabilized afterwards). In 2012 Q2 and Q3 the housing prices decreased further.

Since the previous *Report*, the zloty appreciated due to improving sentiment in the international financial markets observed till mid-September 2012. This notwithstanding, the analysed period saw the episodes of temporary depreciation of the zloty, triggered by incoming data pointing to a stronger than expected economic slowdown and related surge in expectations of a more accommodative monetary policy in Poland, as well as interest rate cuts in the Central and Eastern Europe.

Since the July *Report*, total lending growth in Poland, including both annual growth of corporate and households debt, has remained moderate. Also the growth of broad money continued at moderate pace nonetheless still higher than the growth of nominal GDP. Corporate deposits have kept shrinking, though less visibly than previously. At the same time, household deposits rose which contributed to a moderate growth in the total value of households' financial assets.

Further slowdown in economic activity at home and abroad in 2012 Q2 was accompanied by a marked reduction of current account deficit. The improvement in the current account was driven mainly by narrowing deficit on goods, as well as reduction of negative balance on income. Financial account surplus in 2012 Q2 decreased as compared with 2011 Q2 which was attributable mainly to the decline

[1] The cut-off date for the data in November *Report* was 25 October 2012. At the meeting held on 7 November 2012, the Monetary Policy Council decided to decrease the reference rate by 0.25 percentage points to 4.50%. Information about this decision is included in Chapter 3 of the *Report*.

in non-residents' deposits with Polish banks. At the same time portfolio investment, mainly investment in debt securities, remained – despite some decrease – the most important source of inflows to the financial account. Following a slight deterioration of certain external imbalance indicators in 2012 Q1, in 2012 Q2 some of them showed improvement.

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 developments in Poland. Those developments 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-October 2012 together with the *Information from the meeting of the Monetary Policy Council* in November 2012 are presented in Chapter 3. Minutes from the MPC meeting held in November will be published on 22 November 2012 and so will be included in the next *Report*. MPC voting records in the period June-September 2012 can be found in Chapter 5. Moreover, Chapters 1 and 2 of this *Report* include three boxes: "Private non-financial sector deleveraging in advanced economies", "Quantitative easing programmes of the major central banks" and "How fixing the nominal exchange rate of the zloty to the euro prior to the crisis would have affected the business cycle in Poland?".

Chapter 4 of the *Report* presents the projection of inflation and GDP based on the NECMOD model, which is one of the inputs into the Council's decision-making process on the NBP interest rates. In line with the November projection based on data available up to 18 October 2012 (cut-off date for the projection) – under the assumption of constant NBP interest rates – there is a 50-percent probability of inflation running in the range of 3.7-3.9% in 2012 (compared to 3.6-4.2% in the July projection), 1.8-3.1% in 2013 (as against 2.0-3.4%) and 0.7-2.4% in 2014 (as against 1.0-2.7%). In turn, with a 50-percent probability the November projection sees the annual GDP growth in the range of 2.0-2.6% in 2012 (compared to 2.3-3.6% in the July projection), 0.5-2.5% in 2013 (as against 1.0-3.2%) and 1.1-3.5% in 2014 (as against 1.7-4.2%).

Chapter 1

EXTERNAL ENVIRONMENT OF THE POLISH ECONOMY

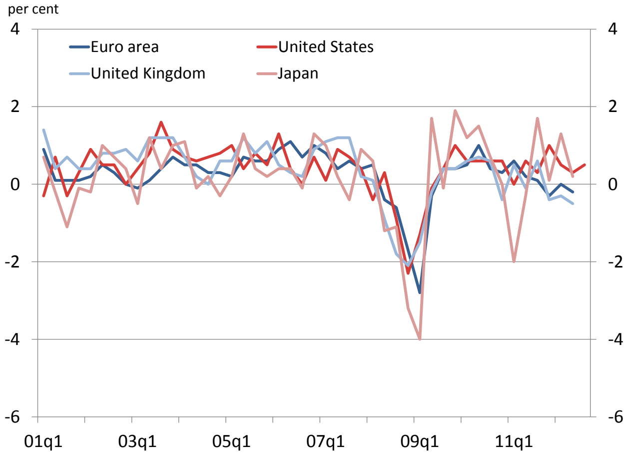
1.1. Global economic activity

In the second quarter of 2012 – and probably also in the third quarter – global economic activity remained weak. In 2012 Q2 recession continued in the euro area, while growth in the United States remained moderate, despite a slight deceleration (Figure 1.1)[2]. At the same time, growth in key emerging economies continued to lose momentum, yet was still markedly higher than in the developed economies (Figure 1.9). The incoming Q3 data, including global business condition indicators and advance estimate of GDP in the United States, suggest that economic activity in the third quarter – despite some improvement – remained low (Figure 1.2).

In some developed economies, growth continues to be dampened by deleveraging in the private and public sector (see Box 1 *Private non-financial sector deleveraging in advanced economies*), as well as the consistently unfavourable conditions in labour and real estate markets. Weak demand from the advanced economies is having an adverse effect on economic activity in the emerging economies. In both the advanced and

Figure 1.1

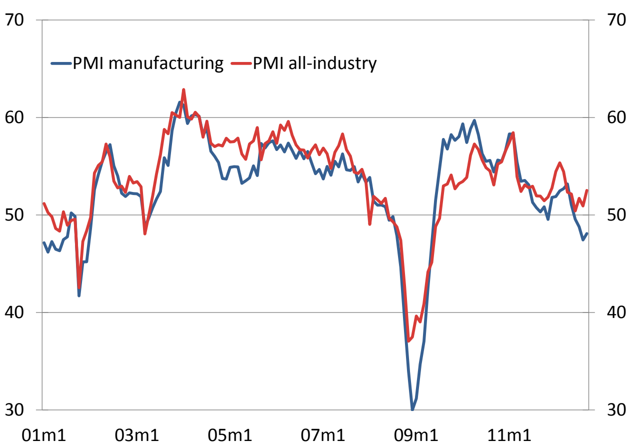
Economic growth in selected developed countries (q/q).



Source: Eurostat data.

Figure 1.2

Global economy PMI index.



Source: Markit data.

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

emerging countries that are not commodity exporters, commodity prices, which rose again in 2012 Q3, exerted a downward pressure on GDP growth.

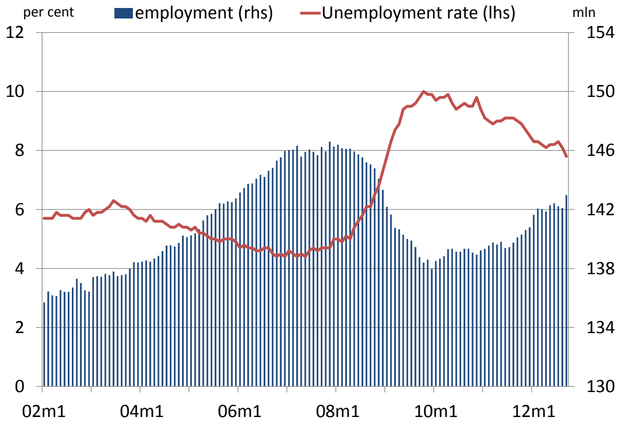
GDP growth in the United States, after a temporary slowdown in 2012 Q2, in 2012 Q3 accelerated somewhat and stood at 0.5% q/q (as against 0.3% q/q in 2012 Q2, Figure 1.1)[3]. Consumption growth remained moderate and added to overall growth. Government expenditure also made a positive contribution to GDP growth in 3Q, mainly due to a strong growth in national defence expenditure. Investment growth decreased again, and its contribution to GDP growth was negligible. On the other hand, demand increase was dragged by net exports (due to a strong slowdown in exports growth) and inventory change.

Moderate economic activity in the United States in Q3 was also confirmed by earlier incoming monthly data. Stalling labour market was put forward by The Federal Reserve Bank as the main reason to further ease monetary policy (see chapter 1.3 *Monetary policy abroad and international financial markets)*. Nevertheless, a decrease in unemployment rate in September, driven by a rise in employment, stands for a positive sign from this economy (Figure 1.3). Drop in the unemployment rate was accompanied by a significant improvement in consumer confidence indicators. In recent months, retail sales accelerated and prices in the real estate market increased, while still remaining depressed versus their pre-crisis levels. In turn, industrial production decreased in 2012 Q3 and PMI index remained low in the recent months, yet at levels exceeding those indicative of a recession.

In the euro area, GDP growth in 2012 Q1 amounted to -0.2% (as against 0.0% q/q in 2012 Q1; Figure 1.4). Economic growth was curbed by

Figure 1.3

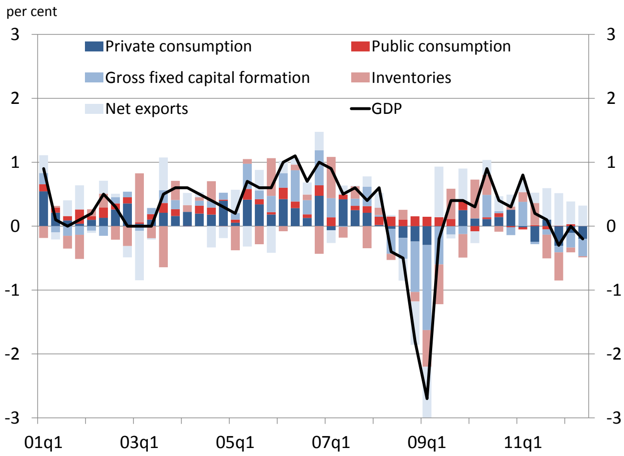
Unemployment rate and employment level in United States.



Source: BLS.

Figure 1.4

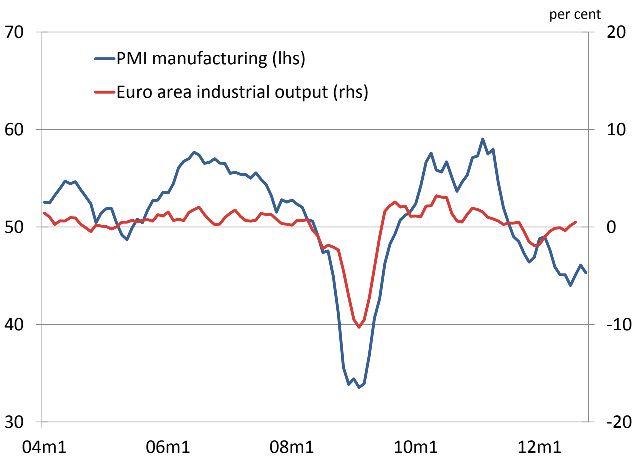
GDP growth in the euro area (q/q).



Source: Eurostat data.

Figure 1.5

Industrial output growth* and PMI index in manufacturing in the euro area.



Source: Eurostat data, Markit.

*Change in the 3-month moving average of industrial output as against the average of three months before.

[3] In annualised terms, GDP growth in 2012 Q3 amounted to 2.0% q/q as compared with 1.3% q/q in 2011 Q1.

lower investment and – to a lesser degree – further decline in private consumption. Public consumption continued to stall and its contribution to GDP growth – similarly to that of inventories change – was close to nought. At the same time, net exports made a positive contribution to GDP growth; both exports and imports rose, with the latter posting a slightly smaller increase.

As in the previous quarters, economic growth in 2012 Q2 varied across the countries of the euro area. In Slovakia, Estonia, Germany and Austria, GDP has followed an upward trend over the last two years, while in Portugal and Greece it has been falling steadily.

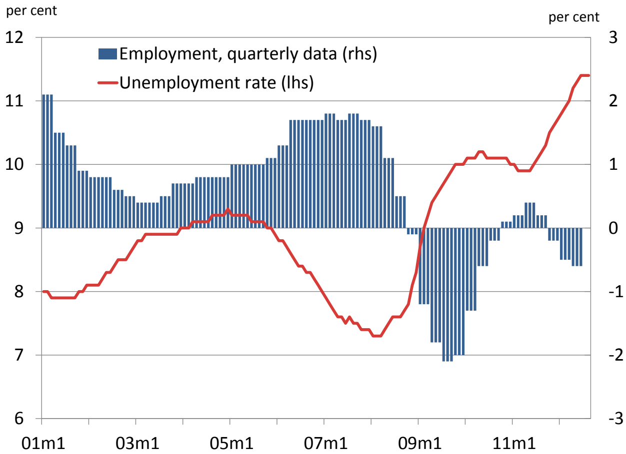
In Germany, a positive – if lower than in 2012 Q1 – GDP growth in 2012 Q2 was supported by a further rise in both external demand (especially from non-euro area countries) and consumer demand, driven by continuing employment growth, decreasing unemployment and rising wages. In France, despite expanding domestic demand, GDP continued to stall, as the contribution of net exports to growth declined.

Large economies affected by the sovereign debt crisis, i.e. Italy and Spain, remained in recession. Demand growth in these countries was constrained by, above all, persistently adverse labour market conditions, ongoing reduction of public and private sector imbalances as well as a decline in lending.

The incoming 2012 Q3 data suggest that economic activity in the euro continued at a sluggish pace. Stagnating retail sales indicated weak domestic demand, being primarily the result of deteriorating labour market conditions in many economies (especially the most seriously stricken by the financial crisis) and a considerable rise in unemployment rate (Figure 1.6).

Figure 1.6

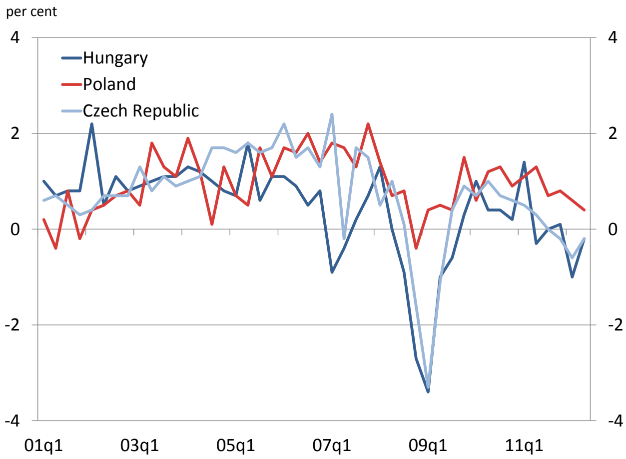
Employment (y/y) and unemployment rate in the euro area.



Source: Eurostat data.

Figure 1.7

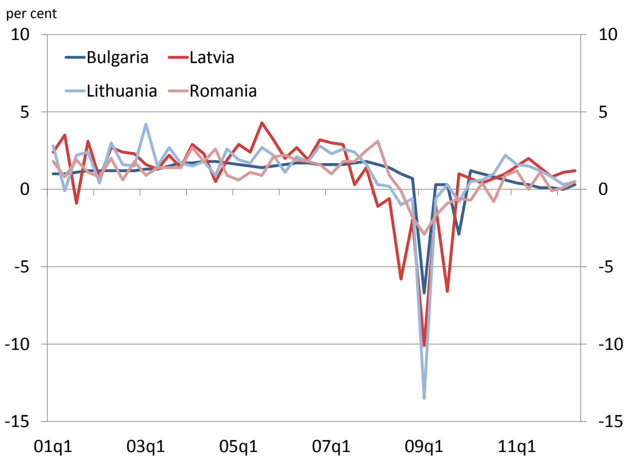
GDP growth in the Czech Republic, Hungary and Poland (q/q).



Source: Eurostat data.

Figure 1.8

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



Source: Eurostat data.

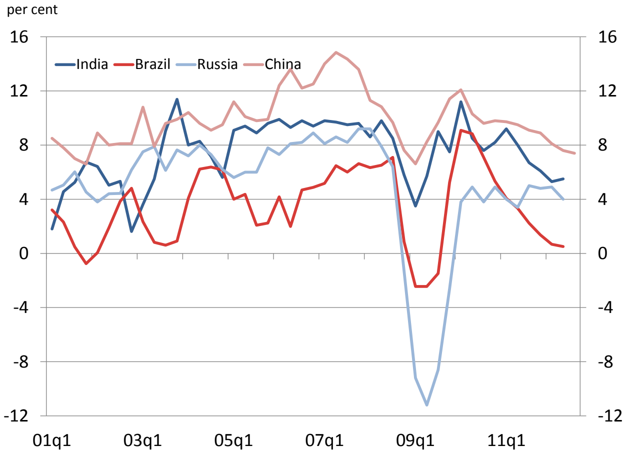
In turn, in recent months industrial output increased, although the PMI index remained at levels signalling recession (Figure 1.5).

In the new EU member states outside the euro area, GDP growth in 2012 Q2 was also diversified (Figure 1.7, Figure 1.8). In some of those countries (particularly Latvia and Lithuania), GDP growth remained relatively sound, while in the Czech Republic and Hungary output decreased, mainly due to the ongoing fiscal tightening and limited external demand (which is of special significance to the Czech Republic).

In the largest emerging economies, GDP growth slowed down (China, Brazil and Russia) or remained low as compared to the previous years (India) (Figure 1.9). In 2012 Q3 GDP growth in China decreased again (and amounted to 7.4% y/y, against 7.6% y/y in Q2). The country's economic activity was particularly suppressed by weaker external demand (mainly from the European Union countries).

Figure 1.9

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



Source: Reuters and OECD data.

Box 1. Private non-financial sector deleveraging in advanced economies

During the first decade of the 21st century, historically low interest rates, financial sector innovations and insufficient financial supervision contributed to a substantial rise in the debt of economic agents, including households and corporations, in many developed economies (Table R.1.1.). A particularly sharp increase was seen in household debt, as households financed home purchases with loans. Rising demand for real estate drove up prices in this market. Thus, the value of assets owned by households – which could serve as collateral for further loans – also increased. This boosted borrowers' creditworthiness and, with financial institutions failing to take sufficient account of the imminent risk, fuelled further credit expansion.

In the second half of the previous decade, after the property bubble burst – initially in the United States and later in other advanced economies (among them, Ireland and Spain; Figure R.1.1) – and the global crisis started to build up, some economies embarked on a process of debt reduction. Decrease in lending growth in these economies exerts an adverse effect upon demand and economic activity across the world.

Past experience shows that excessive private sector debt[4], and its subsequent reduction, may adversely affect economic conditions, an extreme example of which is provided by the 1930s crisis. At that time, deleveraging occurred mainly through mass bankruptcies of the indebted entities; thus the debt-reduction process took on a violent form, causing GDP to plunge. At present, deleveraging in many economies is more gradual and is conducted in different economic environment, including, most of all, active and strongly expansive monetary policy.

[4] In this box we discuss issues related to private debt. It should be emphasised, though, that the issue of excessive debt may also relate to the public sector, as presently observed in some euro area countries. Moreover, the problem of excessive private sector debt may turn into a problem of public sector debt (as was the case in Ireland over the last few years). More on the negative consequences of excessive public sector debt can be found e.g. in Reinhart and Rogoff (2009) or Kumar and Woo (2010).

Recent slump, following strong economic boom, is not so deep comparing to the one seen in the 1930s. However, high current debt level suggests, that deleveraging process could be long-lasting and thus it may drag on economic growth in the longer term.

Table R.1.1
Household and corporate debt in selected developed economies.

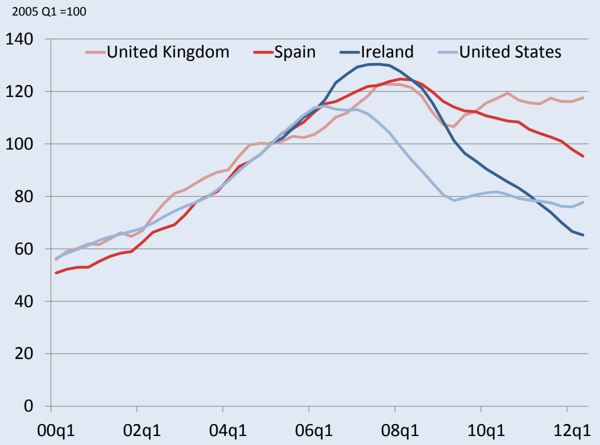
	Household debt in relation to disposable income (%)			Debt of non-financial corporations in relation to GDP (%)		
	2000	**2007**	**2011****	**2000**	**2007**	**2011****
USA*	101	138	118	113	117	107
Japan	144	137	124	173	148	153
Germany	116	103	94	79	78	75
France	70	93	101	82	90	104
Italy	45	71	80	67	88	93
United Kingdom*	117	183	161	93	117	113
Canada*	113	137	184	111	101	104
Australia	124	186	184	73	84	74
Belgium	68	84	92	79	72	73
Greece	29	75	98	48	64	68
Ireland*	n.a.	228	229	n.a.	167	298
South Korea*	96	146	155	n.a.	144	159
Holland	174	261	290	137	118	111
Portugal	112	154	154	119	129	149
Spain	86	147	140	73	128	133
Sweden	109	160	169	119	139	148
Switzerland*	186	201	213	84	88	99
Euro area	85	106	108	79	91	97

*unconsolidated debt
**2011 Q3
Source: OECD (2012).
Between 2000 and 2007 an increase in debt to GDP ratio was mitigated by a substantial GDP growth in that period. Conversely, the increase in debt to GDP ratio between 2007 and 2011 was supported by falling economic activity in many economies.

From theoretical point of view, indebtedness enables entrepreneurs to acquire investment capital, which, if the venture proves profitable, improves the effectiveness of capital allocation and boosts the economy's productive capacity as well as GDP growth. With regard to households, debt allows them to smooth consumption over their so-called lifecycle – as well as the business cycle – thus reducing overall consumption volatility over time.

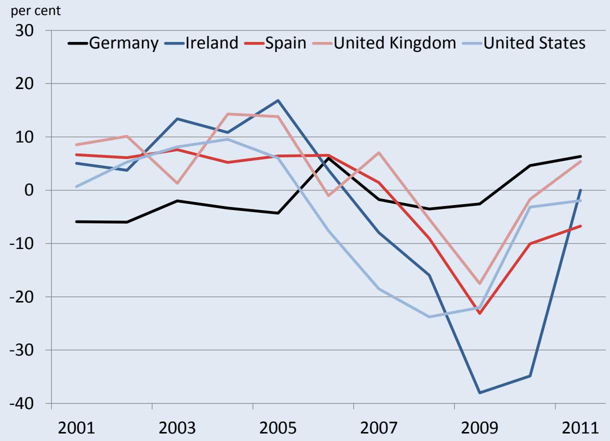
However, excessive debt may have an adverse impact on economic processes. This happens when economic agents are too optimistic about the outlook for their own financial situation or the overall economic conditions. In this case, enterprises take out loans to finance unprofitable – as they later find out – investment projects, while households use credit to finance consumption and housing expenditure, which is excessive relative to their long-term budget constraint. Moreover, economic agents may use debt to finance speculative asset purchases including real estate purchases; this can lead to a price bubble cropping up in the market for these assets. As the bubble bursts, the value of assets held by the indebted entities falls, while the debt level remains unchanged (or even rises due to higher debt service cost reflecting mounting risk aversion amongst lenders). As a result, borrower's net wealth declines, putting a downward pressure on spending and debt. Moreover, when asset prices decrease (e.g. prices of asset-backed debt securities, shares in financial institutions), savers see their wealth eroded, which, in turn, prompts them to them reduce their spending. These factors dampen demand and income in the economy, potentially adding even more to debt repayment problems and asset price declines. Deleveraging has an adverse impact on aggregate demand in the economy, especially as borrowers tend to display a higher propensity to consume/invest than lenders. At the moment, lending is observed to have shrunk the most in countries having experienced the sharpest increases in private sector debt, such as Spain, Ireland and the United Kingdom.

Figure R.1.1
Real estate prices in selected countries (2005=100).



Source: BIS, Fred.

Figure R.1.2
Gross fixed capital formation in the housing sector (y/y).

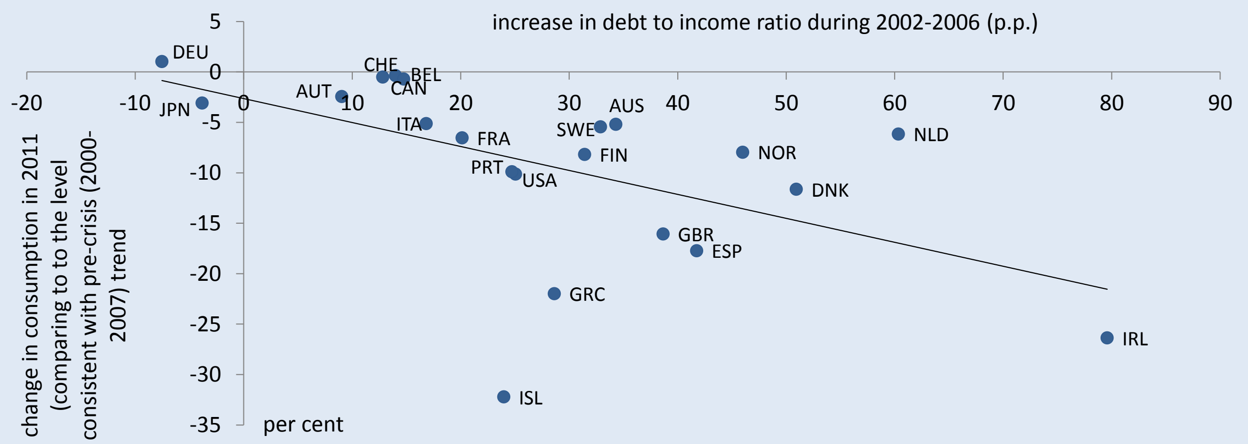


Source: OECD.

Research findings confirm that a high debt level may discourage borrowers from incurring more debt to smooth consumption or finance profitable investments (BIS 2012, Isaksen et al. 2011). IMF (2012) and Mian et al. (2011) argue that recessions preceded by a higher rise in household debt are deeper and longer (Figure R.1.3). McKinsey (2010, 2012) suggests that in the past, deleveraging would typically start 2 years after the onset of the financial crisis and go on for an average of 6 to 7 years. Yet, after the period of debt reduction, growth returned to its long-term trend. Koo (2008) in turn shows, using the example of the late-1980s Japan, with its sharp rise in debt levels followed by asset market bubble bursting, that the debt-reduction process may continue to hamper the economy for as long as 16 years.

It is difficult to determine a precise threshold above which private sector debt may adversely affect economic growth. Some authors (Cechetti et al., 2011) estimate that in the OECD countries, corporate debt exceeding – on average – 90% of the GDP, and household debt above approx. 85% of the GDP has a detrimental effect on economic growth in the subsequent years (although the authors make a reservation regarding low statistical relevance of the result in case of the household)[5].

Figure R.1.3
Household debt increase in 2002-2006 and decline in household consumption in 2011.



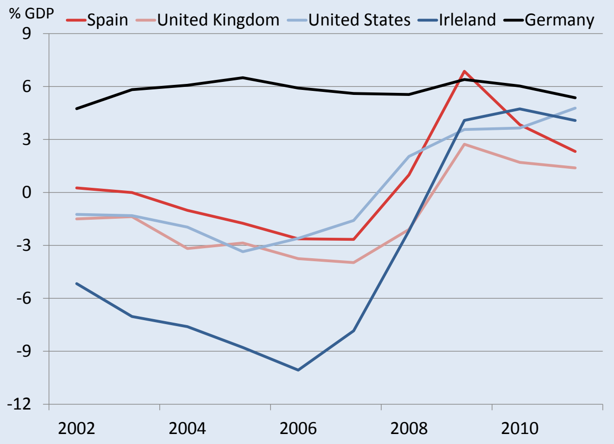
Source: IMF (2012) Eurostat.
For Australia and Canada, 2010 data.

[5] Let us emphasise that due to structural differences, this level may differ significantly between countries and may also vary over time.

What is important from a central bank's perspective is that economic agents' attempts to reduce debt may constrain the effectiveness of accommodative monetary policy in stimulating demand during an economic crisis, as exemplified by the current situation of some countries. In contrast to the pre-crisis period, when economic growth was supported by credit expansion, the recent years have seen – despite historically low interest rates and a significant monetary base increase effected by major central banks – private agents in some economies refrain from incurring new loans and pay off their liabilities (Figure R.1.4, Figure R.1.5). The deleveraging process, which is taking place amidst a global economic slowdown, additionally drags down consumption and investment in many countries, thus adding to the decline in economic activity (Figure R.1.2, Figure R.1.6).

Figure R.1.4

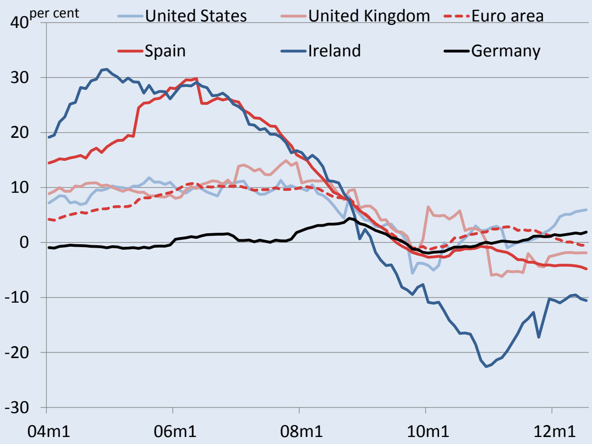
Net household lending (positive values) or net household borrowing (negative values) in relation to GDP.



Source: Ameco.

Figure R.1.5

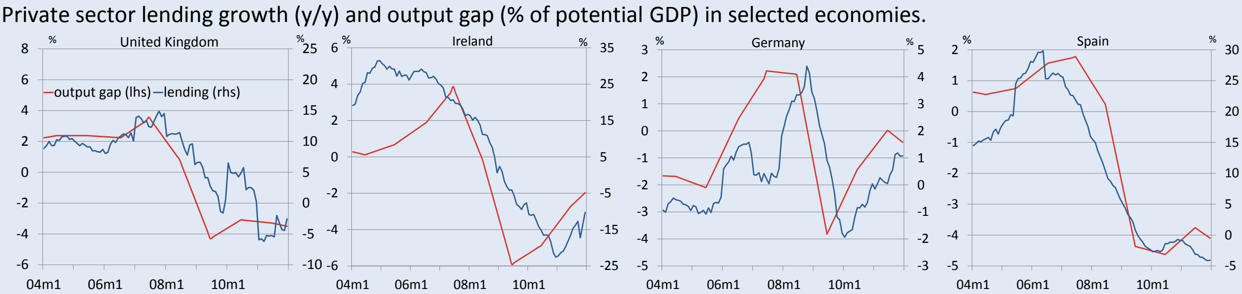
Corporate lending growth (y/y).



Source: ECB, Bank of England.

Figures R.1.6

Private sector lending growth (y/y) and output gap (% of potential GDP) in selected economies.



Source: Ameco, ECB, Bank of England.

To sum up, private agents' ability to incur debt supports the long-run economic growth and may contribute to business cycle smoothing. However, excessive debt growth may boost cycle fluctuations, leading, in the extreme case, to a credit boom followed by a financial crisis. This is why appropriate economic policy, including monetary and supervisory policy, aimed at preventing excessive growth of private sector debt, is of such significance.

Considering the sharp increase in private sector debt preceding the financial crisis, it may be expected that economic growth in some countries will be further curbed by the consequences of high household and corporate debt levels.

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1.2. Inflation developments abroad

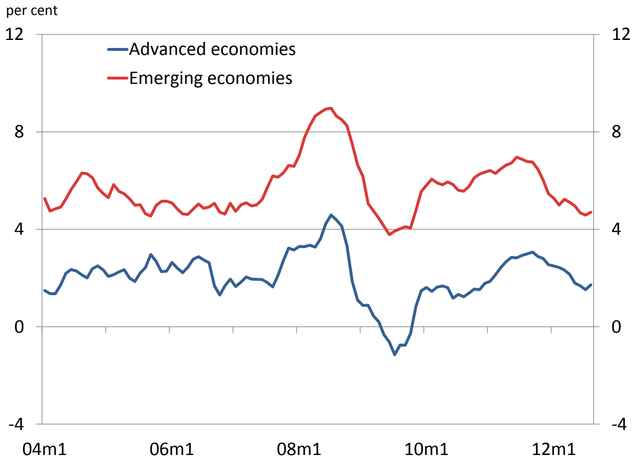
Since the July *Report*, most advanced and emerging economies have seen inflation drop further, although a certain rebound has been observed most recently (Figure 1.10). While declining inflation was supported by temporary fall in global commodity prices and weak demand pressure in many countries, its increase in many economies at the end of the analysed period was driven by reacceleration in energy prices.

In the United States, inflation persisted at low levels in Q3; yet in September it went up (to 2.0% y/y, as against 1.4 y/y in July 2012; Figure 1.11). This jump was particularly related to the accelerated fuel price growth. At the same time, after several months of a steady drop supported by moderate demand growth in the economy, core inflation pace leveled off in September. On the other hand, inflation was mitigated by the gradually weakening food price growth.

In the euro area, following a certain decrease in the previous months, inflation rose again in August and September (to 2.6% y/y as against 2.4% y/y in the period May-July) and remained heightened (Figure 1.11). The rebound in inflation was driven by a reacceleration in energy price growth (which occurred together with the past depreciation of euro against the dollar in annual terms), combined with a rise in indirect taxes and administered prices in some countries.

Figure 1.10

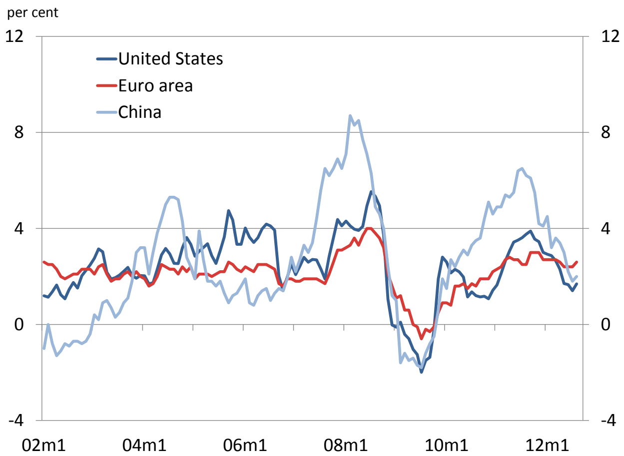
Inflation in major advanced and emerging* economies (y/y).



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

Figure 1.11

CPI inflation in the major economies (y/y).



Source: OECD, Eurostat data.

On the other hand, low demand pressure was conducive to sinking core inflation.

Since the previous *Report,* inflation in the emerging economies followed a downward trend, which was driven by weakening economic activity and slower energy price growth. In particular, inflation in China continued to fall, running at 1.9% y/y in September (as against 3.0% y/y in May 2012), as a consequence – above all – of slower food and energy price growth, amidst stable core inflation. In some emerging economies (in particular, in certain Latin American economies), inflation remained heightened, notwithstanding a certain decrease.

In recent months, the countries of Central and Eastern Europe, despite limited wage pressure, saw inflation rise, particularly on the back of accelerated food price growth (Figure 1.12). In the Czech Republic and Hungary, the annual inflation remained elevated due to a previous rise in indirect taxes and weaker exchange rate than the year before.

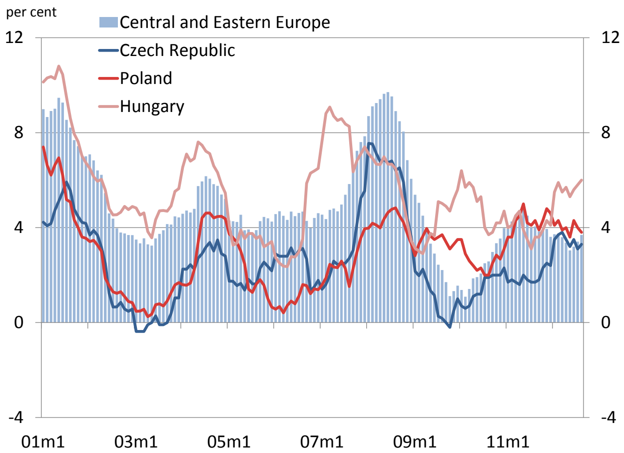
1.3. Monetary policy abroad and international financial markets

Since the release of the previous *Report,* the major central banks have continued to ease their monetary policy, maintaining interest rates at historically low levels or reducing them. Moreover, they expanded existing or announced new quantitative easing programmes (Figure 1.13, Figure 1.14, Box 2 *Quantitative easing programmes of the major central banks*).

The Fed maintained its short-term interest rates close to zero (0.00-0.25%) and extended the period of keeping interest rates unchanged, from end-2014 to mid-2015. It also introduced a new asset purchase programme. Under this programme it will purchase mortgage-backed securities guaranteed by government-sponsored agencies. Furthermore, the Fed continued to

Figure 1.12

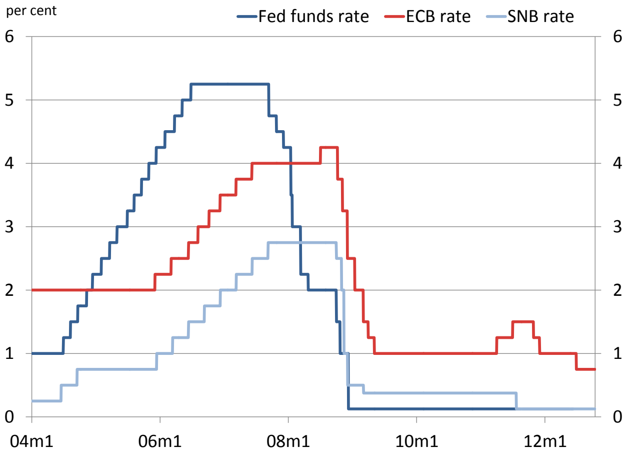
CPI inflation in the Central and Eastern Europe region* and its major economies (y/y).



Source: Statistical offices' data.
*The average of inflation indices in Bulgaria, the Czech Republic, Estonia, Hungary, Lithuania, Latvia, Poland and Romania.

Figure 1.13

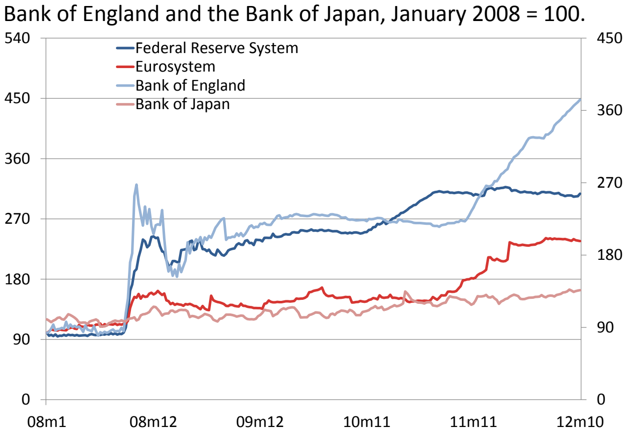
Fed funds rate, ECB refinancing rate, and SNB rate.



Source: Central banks' data.

Figure 1.14

Balance sheets of the Federal Reserve System, Eurosystem, the Bank of England and the Bank of Japan, January 2008 = 100.



Source: Central banks' data, NBP calculations.

extend maturity of its Treasury bond holdings confirming the previously announced expiry of these operations (till end-2012) and their scale (at USD 667 billion).

In July, the ECB reduced its interest rates by 0.25 percentage point, with the main refinancing rate cut to 0.75% and the deposit rate to 0.00%. It also announced the introduction of a new purchase programme of sovereign bonds issued by countries most affected by the sovereign debt crisis, simultaneously abandoning the previous sovereign bond purchase programme. The ECB continued its covered bond purchase programme. It also decided to expand the scope of collateral for its lending operations.

The Bank of England did not change its short-term interest rates, maintaining its main rate at 0.50%. Moreover, it increased the size of the asset purchase programme by GBP 50 billion, to a total of GBP 375 billion, and launched a new liquidity programme, constituting another element of quantitative easing.

Also the Bank of Japan kept its short-term interest rates at an unchanged level (0.00%-0.10%), simultaneously expanding the asset purchase programme by a total of JPY 21 trillion (to JPY 91 trillion). Moreover, the Bank of Japan announced a new liquidity programme aiming to increase lending by the Japanese banking sector.

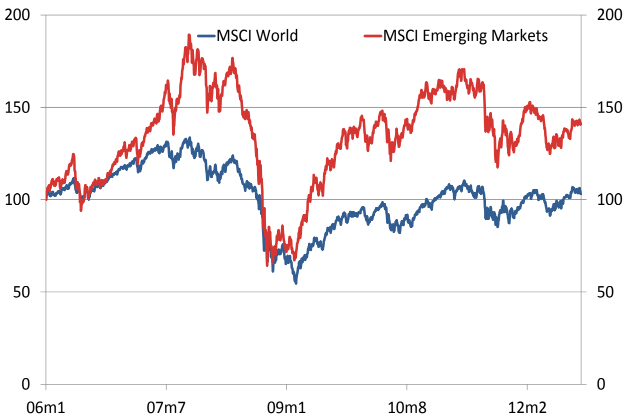
The Swiss National Bank (SNB) maintained the fluctuation band for the 3-month LIBOR rate at 0.00-0.25%. At the same time, the SARON deposit rate[6] was close to zero or slightly negative. Furthermore, the SNB declared its readiness to conduct further unlimited foreign exchange rate interventions aimed at protecting the lower limit for its exchange rate at the level of 1.20 EUR/CHF.

Many central banks from emerging economies and small developed economies continued

[6] Swiss Average Rate Overnight.

Figure 1.15

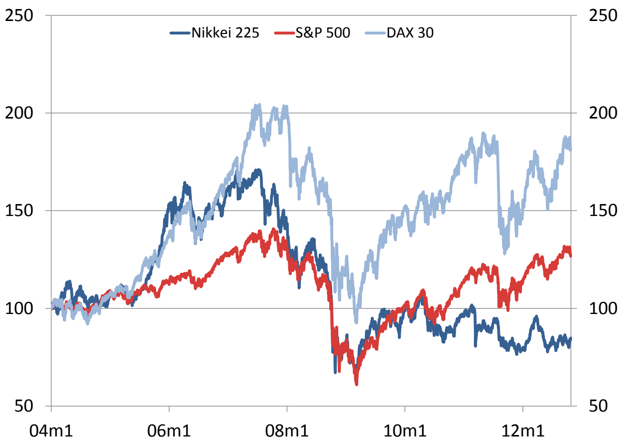
Global and emerging market stock indices (MSCI World and MSCI Emerging Markets), January 2006 = 100.



Source: Reuters data, NBP calculations.

Figure 1.16

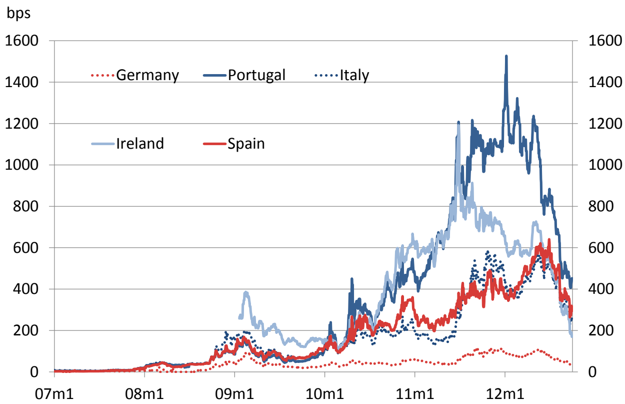
Stock market indices in Germany (DAX 30), Japan (Nikkei 225) and the United States (S&P 500), January 2004 = 100.



Source: Reuters data.

Figure 1.17

CDS spreads in selected euro area countries.



Source: Bloomberg data.

monetary easing or did not change their interest rates[7].

The expected launch of the above-mentioned new programmes of quantitative easing by major central banks, the announcement of institutional reforms in the euro area and the release of better than expected data from the United States economy spurred an improvement in the international financial market sentiment and a decline in risk aversion.

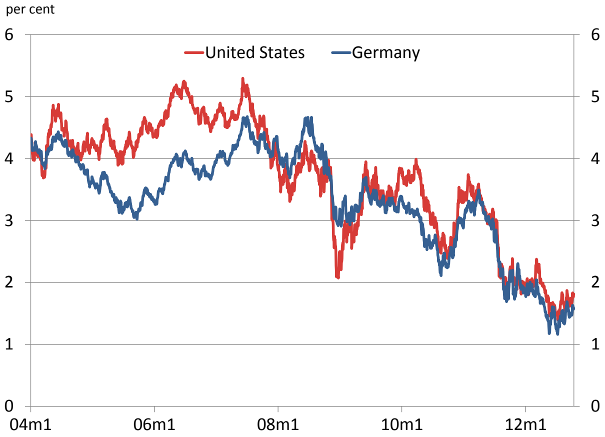
These trends were reflected in growing stock prices in global equity markets. Since mid-September 2012 an improvement in sentiment in global equity markets came to a halt, as the optimism accompanying the non-standard measures taken by the central banks was offset by worse than expected economic data from the euro area and the emerging economies, including China. Growing uncertainty about the scale of future fiscal tightening in the euro area countries most affected by the sovereign debt crisis and in the United States (Figure 1.15, Figure 1.16) further dampened the market sentiment.

Market expectations of the launch of the ECB's bond purchase programme and the ECB's subsequent declarations of its readiness to do so, as well as the continuation of measures aimed at reducing the imbalance of the public finance sector in the euro area countries most severely affected by the sovereign debt crisis, curbed the credit risk perception of these countries. Increase in the creditworthiness of these countries was reflected in a drop in CDS contracts for their sovereign bonds. A decline in the risk perception was also observed in the case of the euro area countries not affected by the debt crisis (Figure 1.17).

On account of lower risk aversion, the yields on assets considered by investors as safe (United

Figure 1.18

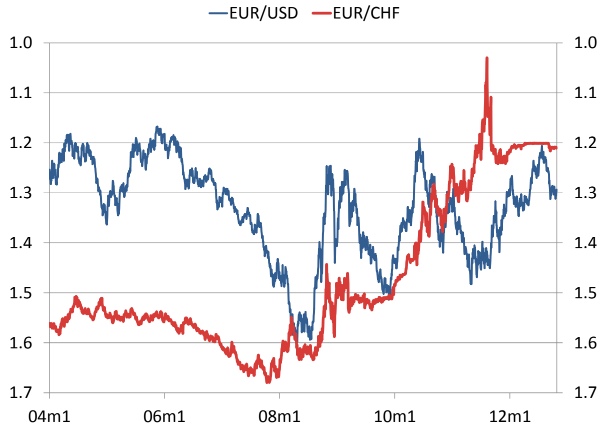
10-year German and United States sovereign bond yields.



Source: Bloomberg data.

Figure 1.19

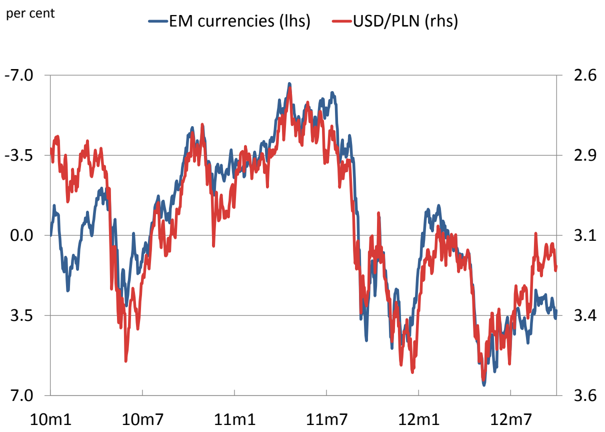
The EUR/USD and EUR/CHF exchange rate (increase denotes an appreciation of the currency).



Source: Bloomberg data.

Figure 1.20

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



Source: NBP calculations based on Bloomberg data.

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

[7] Some central banks tightened their monetary policy (Bank of Russia) or signalled such a possibility (National Bank of Romania and Bank of Mexico).

States and German bonds) increased slightly. They remain, however, close to their historical lows (Figure 1.18).

At the same time, increased risk appetite, resulting in investors shifting to riskier assets, was reflected in the depreciation of the United States dollar and the Swiss franc against the euro. Thus, the exchange rate of the Swiss franc against the euro gained slightly on its lower bound of 1.20 EUR/CHF, declared by the Swiss National Bank (Figure 1.19). The depreciation of the United States dollar against the euro was also driven by the expected new round of quantitative easing in the United States. At the same time, many emerging market currencies strengthened (Figure 1.20). The appreciation of the emerging market currencies and of the euro levelled off in mid-September as the improvement in the financial market sentiment came to a halt.

Box 2. Quantitative easing programmes of the major central banks

In recent months, major central banks have launched new programmes of the so-called quantitative easing of the monetary policy. The following outlines the key features of these programmes.

The Federal Reserve System: Large-Scale Asset Purchase Programme 3 (LSAP 3)

On 13 September 2012, the Federal Open Market Committee (FOMC) announced its new programme of purchase of mortgage-backed securities (MBS). These bonds are guaranteed by government-sponsored agencies (Federal National Mortgage Association – FNMA or Fannie Mae, Federal Home Loan Mortgage Corporation – FHLMC or Freddie Mac and Government National Mortgage Association – GNMA or Ginnie Mae). The programme took effect immediately on its announcement.

As opposed to its predecessors, this asset purchase programme has a conditional expiry date, as the purchases are intended to continue until a marked improvement in the American labour market (with price stability preserved). In this context, the FOMC did not determine the target amount for the asset purchases, as it had done for the previous programmes. Meanwhile, the monthly pace of MBS purchases was set at USD 40 billion.

Another difference, in comparison to the previous asset purchase programmes, is the focus on MBS rather than on Treasury bonds[8]. This is because the Maturity Extension Program (MEP), aimed at increasing the average maturity of the Tresuries in the Fed portfolio, is still in operation. Moreover, available research (Coronado et al. 2010, Swanson 2011, Meaning and Zhu 2011) suggests that the first asset purchase programme, which also covered MBS, contributed the most to reducing long-term interest rates, including those on mortgage loans.

By purchasing MBS, the Fed intends to influence the interest rates on mortgage loans. Their decline might help

[8] The Fed's first asset purchase programme, in operation from October 2008 to October 2009 also included MBS-type securities - apart from Treasury bonds and bills as well as securities issued by government-sponsored agencies, whereas, the second asset purchase programme, operating from October 2010 to June 2011, covered only Treasury bonds with longer maturities.

improve conditions in the American real estate market, and subsequently – through the wealth effect – encourage consumption and investment, which – in the opinion of most FOMC members – will translate into improved labour market conditions.

Eurosystem: Outright Monetary Transactions (OMT)

The Outright Monetary Transactions programme was introduced with the decision of the ECB's Governing Council of 6 September 2012. The programme is aimed at safeguarding the effectiveness of the ECB's single monetary policy through improving the mechanism of monetary policy transmission to the real economy in all the euro area countries. It also seeks to prevent a new wave of intensification of turmoil in the euro area fixed income security markets driven by investors' concerns about a possible disintegration of the monetary union.

Purchase of securities by the Eurosystem central banks under the OMT programme is to take place exclusively in the secondary market and will cover sovereign bonds with maturities of up to three years, issued by the euro area member states. The Eurosystem will not enjoy any privileged treatment in the sovereign bond market and will engage in transactions in this market on an equal footing (*pari passu*) with other investors.

Admission of a member state's sovereign bonds to the OMT is conditional upon the country's participation in the EFSF/ESM programmes. Under such programmes, Treasury securities may be redeemed by the EFSF/ESM in the primary market[9]. Member states eligible for OMT must meet obligations laid down in the EFSF/ESM agreement, including those regarding fiscal tightening and structural reforms[10]. The OMT may be also extended to countries covered by the IMF/EU programmes which are regaining the access to the sovereign bond market.

The Governing Council will consider OMT transactions when they are warranted from the perspective of monetary policy. The Council did not set the ceiling for the amount of securities to be purchased under the programme nor for its duration. With the launch of the OMT programme, fine-tuning operations aiming to sterilise the liquidity generated by the debt securities purchase will continue.

With the adoption of the decision to implement the OMT programme, the Securities Markets Programme*, i.e.* the previous bond-purchase scheme, operative since May 2010[11], was phased out. At the end of the programme, the value of assets purchased under SMP stood at EUR 208.8 billion. Securities purchased under the SMP will be held to maturity.

Bank of England: Funding for Lending Scheme (FLS)

On 13 June 2012, the Bank of England announced the launch of its Funding for Lending Scheme (FLS) Programme to complement the Asset Purchase Programme[12] which had been operating since 2009. The FLS programme was launched at the beginning of August 2012. It is aimed at stimulating the real sector of British economy through providing the financial sector with easier and cheaper access to medium-term funding, thus seeking to encourage more extensive lending to households and private non-financial corporates.

[9] This concerns the macroeconomic adjustment programme and the precautionary programme, including Enhanced Conditions Credit Line. If the country participates in an IMF adjustment programme at the same time, it is required to meet country-specific conditions.

[10] Failure to meet the requirements of the assistance programmes is to result in the country's dropping out of the OMT. The OMT may also be discontinued if the country ceased to participate in the assistance programme.

[11] With a break between April and August 2011.

[12] As at the date of the *Report's* publication, no data were available on the volume of current transactions. They will be released on the first Monday of the third month following the quarter to which the data relate. Thus, the data on 2012 Q3 operations will be available on 3 December 2012.

Under the FLS programme, financial institutions will be offered the opportunity to acquire additional liquidity through exchange of assets with the Bank of England, i.e. a purchase of UK Treasury bills for a four-year period, in exchange for securities on hand. Both the ceiling for the amount of liquidity that a given financial institution can obtain and its cost will depend on the total amount of loans granted by this institution[13]. According to the Bank of England, such a link may additionally boost lending to the British economy.

Bank of Japan: Stimulating Bank Lending Facility (SBLF)

On 30 October 2012 r. Bank of Japan announced the SBLF (Stimulating Bank Lending Facility) programme, whose design resembles that of the Bank of England's FLS. The aim of the new programme is to support lending in Japan. Under this programme, Japanese depository institutions will be able to draw a long-term credit line against eligible collateral at the Bank of Japan, at its reference rate. Similarly to the Bank of England's programme, the limit of the credit line will depend on net lending of the particular institution to the non-financial private sector. The size of the programme is unlimited and the Bank of Japan did not determine its termination date.

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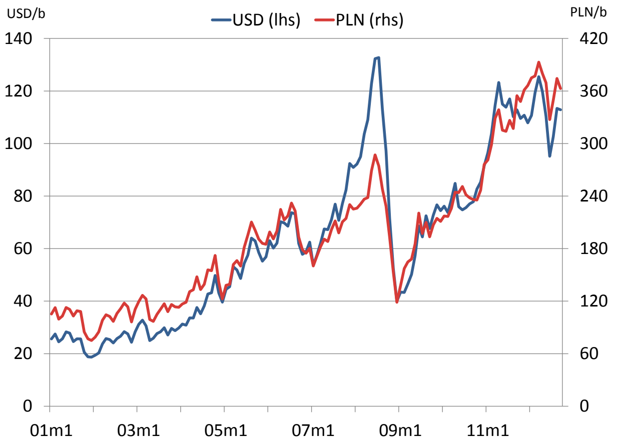
1.4. Global commodity markets

Despite low economic activity across the world, most prices in the global commodity markets rose again in 2012 Q3 (after a marked fall in 2012 Q2). In particular, with respect to oil and agricultural commodities, price growth resulted largely from the adverse impact of supply factors.

Following the declines in 2012 Q2, oil prices rose in 2012 Q3 primarily on the back of disruptions in oil supplies from non-OPEC countries in July and August (including disruptions caused by the Isaac hurricane in the United States) and rising concerns about the security of future supplies after the implementation of the EU embargo on

Figure 1.21

Brent oil prices in USD and PLN.



Source: US Energy Department data, NBP calculations.

[13] Under the programme, each financial institution will be entitled to swap the assets, equivalent to 5% of the total loans granted to the real sector as at the end of June 2012, increased by the amount of newly extended loans to the real sector between end of June 2012 and the end of 2013. There are no prescribed limits on either the total amount of the programme or the extent to which any particular bank may be financed. The cost of asset swap will amount to 0.25% of their value, if the magnitude of lending by the participating entity remains stable or grows between the end of June 2012 and the end of the year 2013. Should the volume of relevant loans decline, the cost involved will be higher.

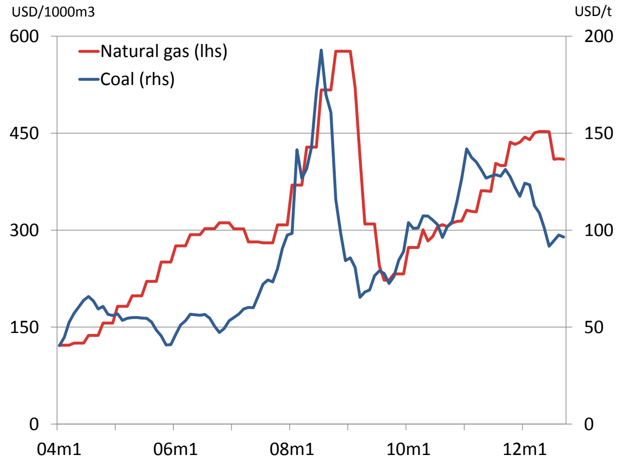
imports of oil from Iran (Figure 1.21). Moreover, oil price growth in 2012 Q3 was fuelled by rising investor expectations of subsequent quantitative easing programmes by the ECB and the Fed (which were launched in September) and the structural investment programme announced by China.

In 2012 Q3, the decline in coal prices decelerated (Figure 1.22). At the same time, natural gas prices – following two years of steep growth – have sank considerably, although they remained high. The fall in natural gas prices was related to the previously observed decrease in oil prices, which have a lagged impact on gas prices.

In 2012 Q3, food prices in global agricultural markets were subject to considerable fluctuations, although in September they fell back to the level seen in 2012 Q2 (Figure 1.23). Their initial hike in July was related to higher prices of wheat, soya beans and maize as a result of the drought in the mid-western part of the United States. In turn, a significant decline in pork prices in September led to a drop in the agricultural commodity price index at the end of the analysed period.

Figure 1.22

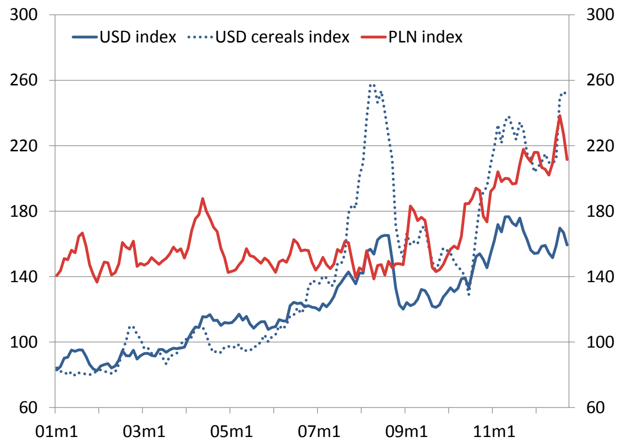
Gas and coal prices in the global markets.



Source: IMF data.

Figure 1.23

Index of agricultural commodity prices in the global markets in USD and PLN and the cereals index (1995 Q1=100).



Source: IMF data, NBP calculations.

The index comprises wheat, beef, pork, poultry, fish, sugar, bananas, oranges, rape seed oil and beverages.

The cereals index comprises wheat, barley, rice and maize.

Chapter 2

DOMESTIC ECONOMY

2.1. Inflation developments

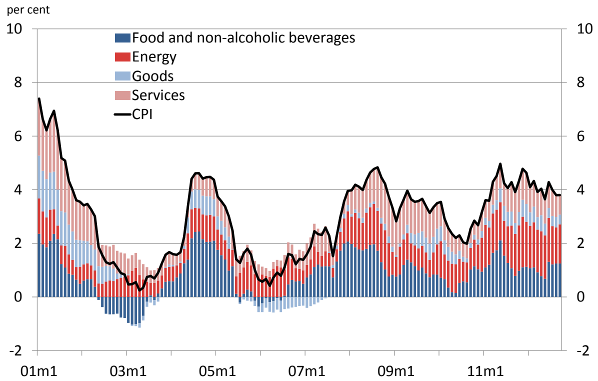
2.1.1. Consumer prices

In recent months the annual consumer price growth in Poland has been gradually decreasing (to 3.8% in September 2012), remaining, however, above the upper limit for deviations from the NBP inflation target (Figure 2.1, Table 2.1).

The decline in the annual inflation index was driven by slower growth in administered prices and in prices of some categories of non-administered services. The lower growth of those prices was attributable to waning adverse base effects, which in the last year fuelled heightened inflation[14]. Declining inflation was also supported by the appreciation of the zloty observed since May 2012. In particular, the appreciating zloty mitigated the impact of the rise in agricultural and energy commodities in global markets – dating back to July 2012 – on domestic prices, as well as reduced the growth in prices of certain goods (see chapter 1.4. *Global commodity markets and chapter 2.1.2. Core inflation)*. Additionally, the increase in prices was curbed by slowing demand in the

Figure 2.1

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



Source: GUS data, NBP calculations.

Table 2.1

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

	2012								
	Jan	**Feb**	**Mar**	**Apr**	**May**	**Jun**	**Jul**	**Aug**	**Sep**
CPI (%)	4.1	4.3	3.9	4.0	3.6	4.3	4.0	3.8	3.8
Food and non-alcohol. beverages (pp)	1.1	1.1	0.9	0.8	0.7	1.3	1.2	1.3	1.2
Energy (pp)	1.6	1.7	1.6	1.7	1.6	1.6	1.4	1.3	1.5
Goods (pp)	0.5	0.6	0.5	0.6	0.4	0.4	0.4	0.4	0.4
Services (pp)	0.9	1.0	0.9	1.0	0.9	1.0	1.0	0.8	0.7

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

[14] July and August 2011 saw significant rises in gas prices, prices of sewerage services and passenger urban transport charges. In August 2011 there was a rise in prices of telecommunication services (phone service fees), and in September 2011 a rise in prices of entertainment services (cable TV fees) and education services (preschool tuition fees).

economy, as indicated by declining growth of both consumption and retail sales.

2.1.2. Core inflation

Since the July *Report,* the decline in CPI inflation has been accompanied by a decrease in the majority of core inflation measures (Figure 2.4). Inflation net of food and energy prices had followed a downward trend since the beginning of 2012. In May-July 2012 it stabilized at 2.3%, while in September 2012 it slipped to 1.9%, hitting the lowest point since February 2011.

The decline of core inflation in the analysed period was driven – apart from the weakening demand growth – by lower than in 2011 growth in prices of excise products, mainly tobacco products, as well as by the above-mentioned waning of adverse base effects, which influenced prices of some categories of services. Also the appreciation of the zloty since May 2012, curbing the growth of prices of imported goods, had – similarly as in the case of the CPI index – been conducive to a drop in core inflation.

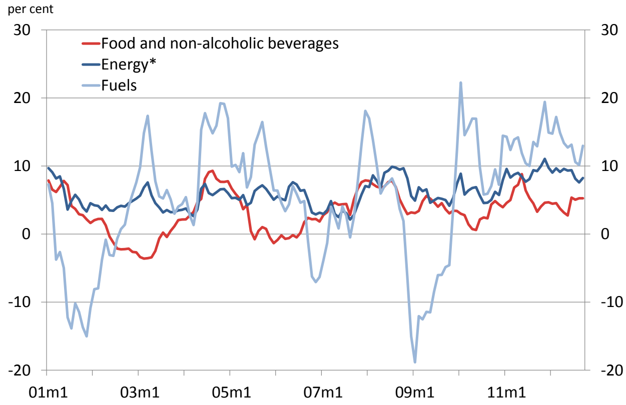
2.1.3. Producer prices in industry

Producer prices in industry (PPI) rose by 2.8% in 2012 Q3 as against an increase of 4.7% in the previous quarter (Figure 2.6). The drop in the annual PPI growth resulted mainly from dwindling growth of prices in manufacturing and was related to a slower pace of zloty depreciation in annual terms in 2012 Q3 as compared to 2012 Q2.

The annual growth of producer prices in the domestic market decreased in July-August 2012 to 3.3% on the average (against 4.2% in 2012 Q2), and in the export market – to 2.9% (as against 5.3% in 2012 Q2). A more pronounced decline in the growth of prices in the more import-intensive export sector was related to

Figure 2.2

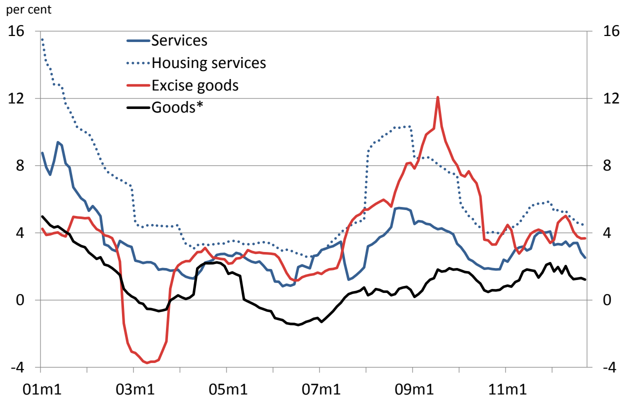
Changes in food and energy prices (y/y).



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

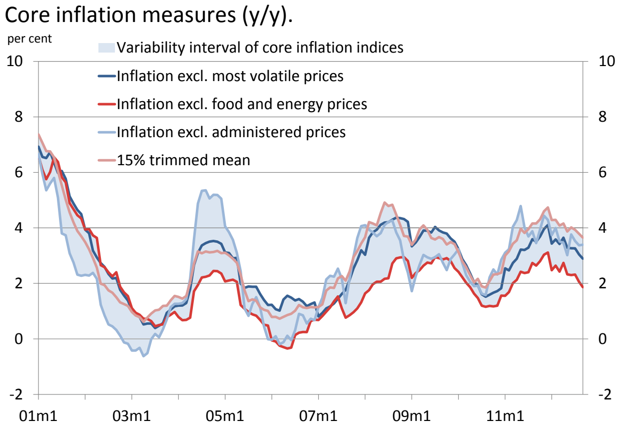
Changes in the prices of services and goods (y/y).



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.

the higher sensitivity of prices in this sector to changes in the zloty exchange rate, and the zloty depreciating less in the analysed period than in 2012 Q2.

2.1.4. Import prices

Following a sharp rise in 2011 Q4 (up to 14.6%), the annual growth in import prices as expressed in zloty decreased gradually over the first half of 2012 - down to 12.1% in the first quarter, and to 9.8% in the second quarter (Figure 2.7). This was driven by a marked deceleration of growth in world trade prices during the first half of 2012 amidst slowing global demand (Figure 2.8). However, as this was accompanied by weaker than a year ago exchange rate of the zloty, a relatively high annual growth in import prices as expressed in PLN continued.

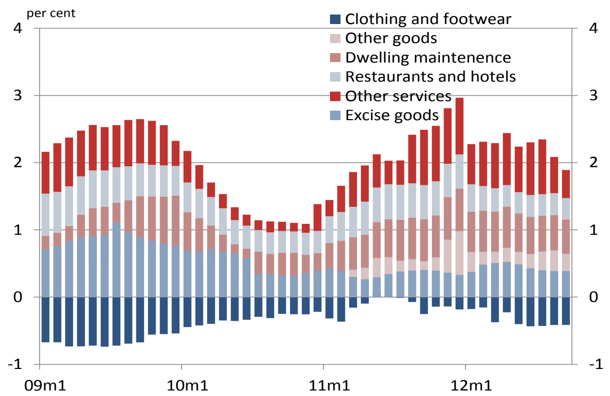
2.1.5. Inflation expectations

Since the previous *Report*, 12-month inflation forecasts by financial sector analysts had remained at 2.7% (except for September 2012 when they rose to 2.8%; Figure 2.9). At the same time, the average annual inflation forecasts for 2012 and 2013 were revised downwards (from 3.9% to 3.8% and from 2.9% to 2.6% respectively), while forecasts for 2014 remained at 2.8%.

Similar average annual inflation expectations for the years 2012-2014 were posted by the September 2012 NBP Macroeconomic Survey.[15] The median of central point forecasts by the responding experts stands at 3.8% for 2012, 2.8% for 2013 and 2.7% for 2014. The reduced deviation of inflation from the NBP's target (2.5%) in 2013 and 2014 is also suggested

Figure 2.5

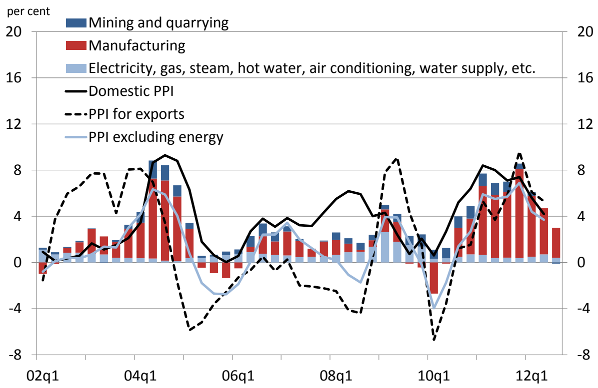
Composition of core inflation (y/y).



Source: GUS data, NBP calculations.

Figure 2.6

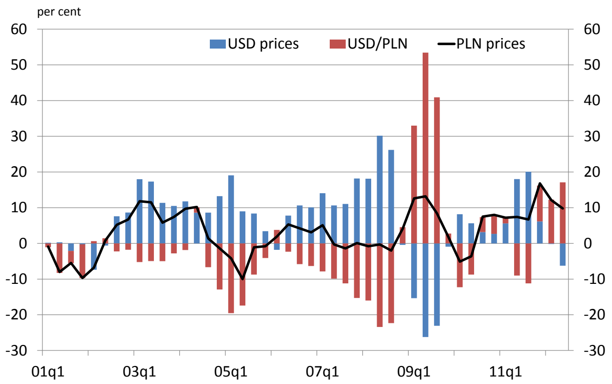
Composition of annual growth of total PPI by sections of industry, domestic PPI, PPI for exports and PPI excluding energy.



Source: GUS data.

Figure 2.7

Composition of annual growth of import prices in PLN terms.



Source: GUS and CPB data, NBP calculations.

[15] *NBP Survey* of *Professional Forecasters* is conducted once in a quarter. It involves experts from financial institutions, research centers as well as employee and employer organisations. Their forecasts are formulated in probabilistic terms, which allows to take account of various economic development scenarios and assess the compatibility of forecasts. Detailed presentation of the survey results – see http://amakro.nbp.pl.

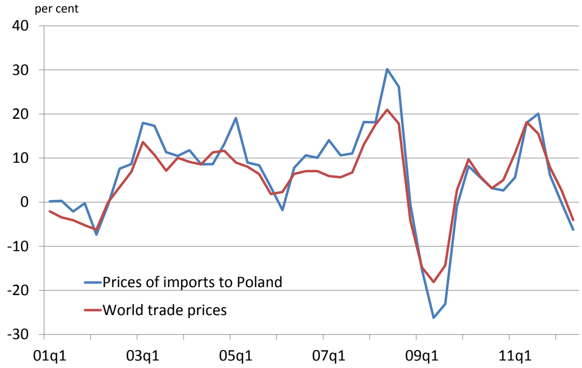
by the aggregated probabilistic forecast (calculated by aggregating individual interval forecasts). According to that forecast, the probability of the annual average inflation remaining within the band for deviations from the inflation target, i.e. 1.5%-3.5%, in 2013 amounts to approx. 80%, and in 2014 to approx. 70% (as compared with approx. 70% in both these years according to the survey from June 2012; Table 2.2).

12-month inflation expectations of enterprises kept decreasing and in 2012 Q3 they amounted to 3.2% (as against 3.3% in 2012 Q2 and 3.6% in 2012 Q1, objectified measure). In the previous quarters of 2012 the decrease in expectations resulted to a larger degree from changes in the structure of answers to the survey question than from changes in current inflation. In 2012 Q3 the improvement of results was entirely due to the favourable changes in the structure of answers[16].

The continued drop of inflation expectations of individuals taking place since the beginning of 2012 was temporarily halted in August, mainly on account of an increase in current inflation, which was known to the respondents at the time of the survey. Data from September and October 2012 indicate a renewed drop in inflation expectations of individuals, which presently stand at 3.8%. While the decline of September 2012 resulted only from a change in current inflation, in October it was also due to the favourable change in the structure of answers to the survey question. Still relatively high inflation expectations of individuals are probably linked with persistently high prices of certain categories of frequently purchased goods and services (food, fuel and energy) considered as important by individuals.

Figure 2.8

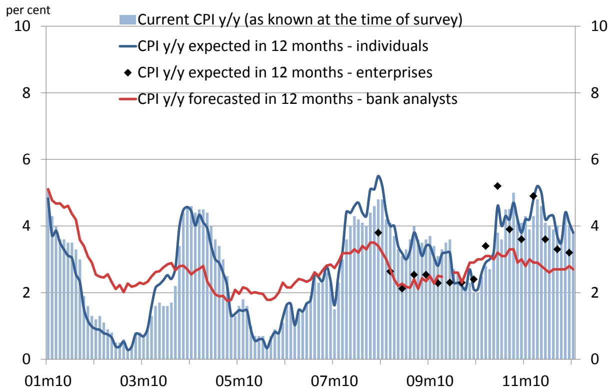
World trade prices and prices of imports to Poland (in USD).



Source: GUS and CPB data, NBP calculations.

Figure 2.9

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.

Table 2.2

CPI forecast derived from individual interval forecasts (in %).

Horizon	Median	50% probability	90% probability	Probability of 1.5-3.5% range
2012	3.8	3.6-3.9	3.1-4.3	12%
2013	2.8	2.3-3.2	1.3-4.2	79%
2014	2.8	2.3-3.3	1.0-4.8	69%

Source: NBP Survey of Professional Forecasters, September 2012.

[16] The survey question addressed to enterprises is formulated in relation to current inflation. In the last survey its wording was as follows: "In July 2012, the CPI indicator (inflation) stood at 4.0% in annual terms. According to your enterprise, in the coming 12 months the prices: (1) will rise at a faster pace than before, (2) will rise at the same pace, (3) will rise at a slower pace, (4) will remain unchanged, (5) will fall, (6) I don't know".

2.2. Demand and output

In 2012 Q2 GDP growth weakened again. Updated GUS estimates put 2012 Q2 GDP growth at 2.3% y/y, as compared with 3.6% in 2012 Q1. (Figure 2.10, Table 2.3). According to NBP estimates, quarter-on-quarter GDP growth in 2012 Q2 remained slow and stood at 0.2% q/q as compared to 0.3% q/q in 2012 Q1 (seasonally adjusted).

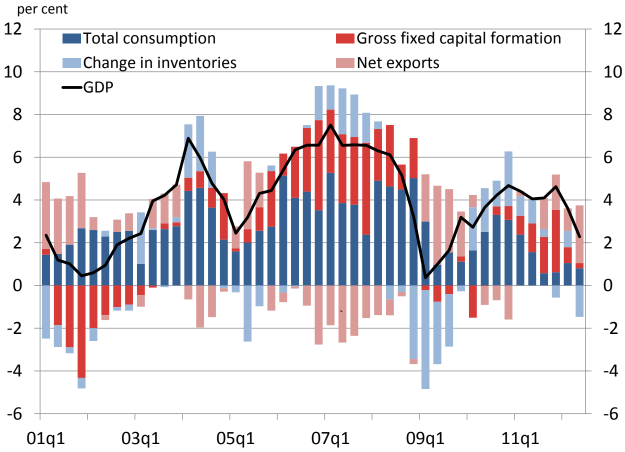
Lower annual GDP growth was accounted for by a sharp drop in domestic demand growth (to -0.4% y/y in 2012 Q2, as against 2.5% in 2012 Q1), primarily resulting from a decline in gross capital formation. On the other hand, the 2012 Q2 GDP growth was supported by a high contribution of net exports.

Consumer demand slackened again in 2012 Q2. Slower private consumption growth was related to further decline in households' disposable income resulting from deteriorating labour market conditions, decelerating credit for households and persistently weak consumer confidence. Moreover, in 2012 Q2 public consumption increased only slightly (by 0.5% y/y as against a 1.3% y/y fall in 2012 Q1) as a consequence of measures implemented to curb the general government deficit. In effect, total consumption growth declined to 1.0% y/y in 2012 Q2 (as compared to 1.2% y/y in 2010 Q4).

Investment growth also lost momentum in 2012 Q2 on the back of slowing corporate and household investment, as well as persistently sluggish public investment. At the same time, there was a substantial drop in the contribution of change in inventories to GDP growth, which is typical of periods of economic slowdown and indicates weaker outlook for growth.

Figure 2.10

Contribution of aggregate demand components to GDP growth.



Source: GUS data.

Table 2.3

GDP growth (y/y).

	2008	2009	2010	2011	2011 q1	2011 q2	2011 q3	2011 q4	2012 q1	2012 q2
GDP (%)	5.1	1.6	3.9	4.3	4.4	4.1	4.1	4.6	3.6	2.3
Consump-tion (%)	6.1	2.0	3.4	1.5	2.7	1.9	0.7	0.9	1.2	1.0
Gross fixed capital formation (%)	9.6	-1.2	-0.4	9.0	7.3	7.5	9.0	10.4	6.0	1.3
Changes in inventories (pp)	-1.1	-2.4	2.0	0.4	0.9	1.1	0.4	-0.5	0.8	-1.5
Net exports (pp)	-0.6	2.7	-0.7	0.9	0.2	0.0	1.4	1.6	1.1	2.7

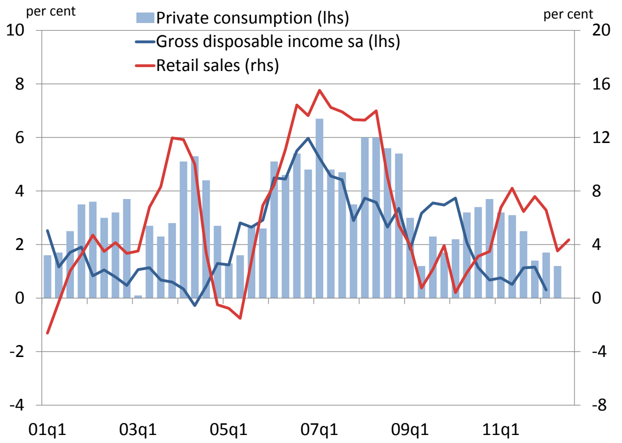
Source: GUS data.

In 2012 Q2, this contribution amounted to -1.5 percentage points as against a positive contribution of 0.8 percentage points in 2012 Q1.

In 2012 Q2, export growth continued to weaken, although it remained positive (2.6% y/y as against 3.9% y/y in 2012 Q1), while import growth contracted (to -3.1% y/y in 2012 Q2 as compared with 1.6% y/y in 2012 Q1)[17]. Imports slid faster than exports due to high sensitivity of imports to changes in domestic demand, in particular, changes in inventory growth. This was also driven by effective exchange rate depreciation in year-on-year terms, which improved price competitiveness of domestic production relative to imported goods. As a result, in 2012 Q2, the contribution of net exports to GDP growth increased to 2.7 percentage points (from 1.1 percentage points in 2012 Q1).

Figure 2.11

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



Source: GUS data, NBP calculations.

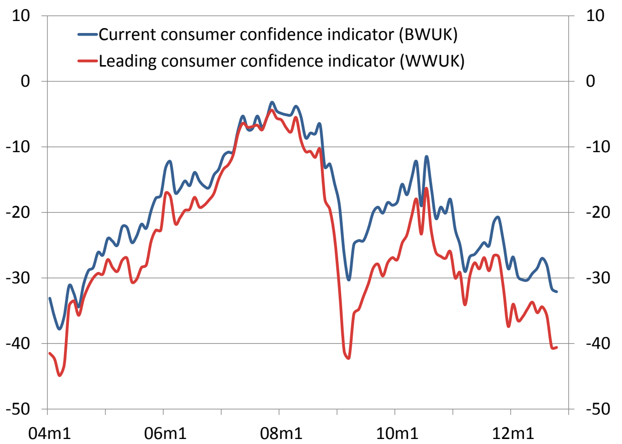
2.2.1. Consumption demand

In 2012 Q2 consumption demand growth declined. Private consumption growth slipped to 1.2% y/y in 2012 Q2 (against 1.7% y/y in 2012 Q1; Figure 2.11). However, according to NBP estimates in quarter-on-quarter terms private consumption growth accelerated slightly (to 0.5% q/q in 2012 Q2 against 0.0% q/q in 2012 Q1; seasonally adjusted data).

Furthermore, households' saving rate dropped to zero and remained significantly lower than their investment rate (Figure 2.13)[18]. The persistently low saving rate in this sector limits households' capacity to smooth the private consumption path.

Figure 2.12

Consumer confidence indicators.



Source: GUS and NBP data.

[17] The presented growth rates are based on the GUS national accounts (in PLN terms) and may differ from those presented in Chapter 2.2.4 *Exports and imports*, based on seasonally adjusted GUS data on external trade (in EUR).

[18] Saving rate is the relation of households' savings to their disposable income and investment rate is the relation of households' investment to their disposable income.

Flagging consumption demand in 2012 Q2 was accompanied by a significant decrease in the annual retail sales growth in comparison with the previous quarters.[19] In turn, retail sales data in 2012 Q3 indicate possible further reduction of consumption demand in 2012 Q3.

Sluggish consumption growth in 2012 Q2, and probably also in 2012 Q3, was related to low real wage growth combined with slowing employment growth (see chapter 2.4 *Labour market*), decline in household lending (see chapter 2.6 *Credit and money*) and persisting pessimistic assessment of economic situation reflected in low consumer confidence indicators (Figure 2.12).

2.2.2. Investment demand

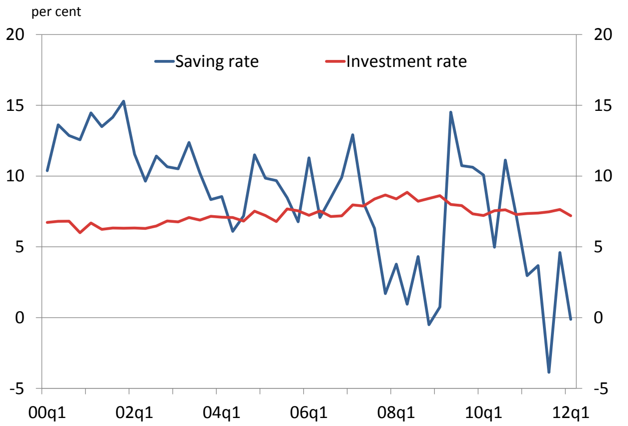
In 2012 Q2, investment growth in the economy slowed down markedly, which can be ascribed to the deteriorating outlook for activity abroad and at home. In annual terms growth in gross fixed capital formation stood at 1.3% y/y (as compared to 6.0% y/y in 2012 Q1), and in quarterly terms – according to NBP estimates – it amounted to -0.4% q/q as against 0.0% q/q in 2012 Q1 (seasonally adjusted).

According to NBP estimates, growth in investment outlays decelerated in the general government sector and slowed down considerably in the enterprise sector in 2012 Q2. At the same time, growth in housing investment of the household sector decreased slightly (Figure 2.14).

In 2012 Q2, the structure of investment growth of large and medium-sized enterprises changed considerably (Figure 2.15). Above all, investment in machinery, equipment and tools

Figure 2.13

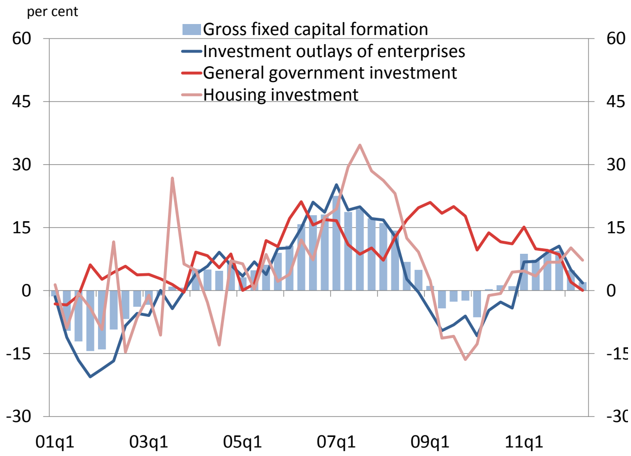
Saving rate and investment rate in households' sector



Source: GUS data, NBP calculations.

Figure 2.14

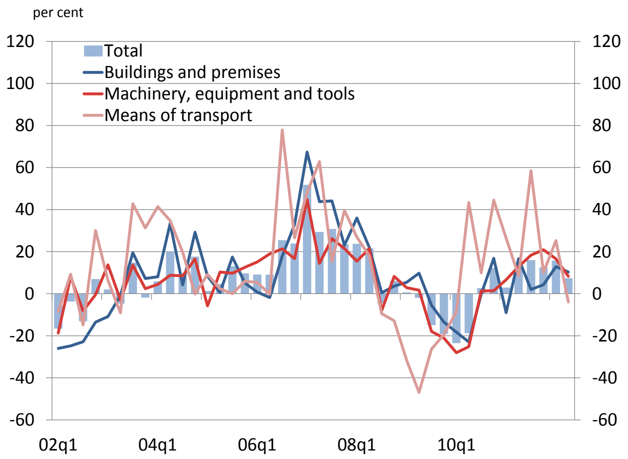
Investment spending in the economy (y/y, NBP estimates for the benefit of the NECMOD model; data seasonally adjusted).



Source: NBP estimates.

Figure 2.15

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



Source: GUS data, NBP calculations.

[19] The monthly releases of retail sales data refer to sales in enterprises employing more than 9 persons. The aggregate retail sales data (including also enterprises with workforce of 9 or fewer employees), in turn, are published in annual reports only. Also retail sales data referring to the whole enterprise sector are published in monthly intervals. Yet, these data are less related to the consumption volume than retail sales data. Therefore, the *Report* focuses on monthly retail sales data.

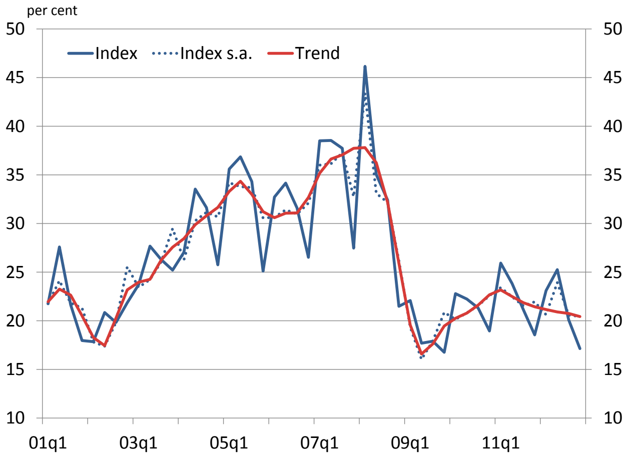
rose at a markedly slower pace (8.3% y/y in 2012 Q2 as against 16.6% y/y in 2012 Q1), amidst a decline – following a very sharp rise – in corporate outlays on means of transport (-3.9% y/y in 2012 Q2 as against 25.2% y/y in 2012 Q1). In effect, the contribution of these categories to total investment growth decreased considerably, while the contribution of corporate expenditure on buildings and premises remained stable.

According to the NBP business conditions surveys, enterprises expected the economy to slow down noticeably in 2012 Q3 and Q4; as was signalled by the markedly weaker demand, order and production forecast indices [20]. Flagging corporate investment is indicated by the index of new investment, running below its long-term average (in seasonally adjusted terms, Figure 2.16). In 2012 Q4, this index fell again for the SME sector, while it rose for the large corporations. Continued investment slowdown is confirmed by lower corporate estimates of total quarterly investment spending as well as moderate capacity utilisation index which, according to the latest GUS and NBP surveys, has declined (in seasonally adjusted terms, Figure 2.17). Moreover, according to GUS data on the estimated cost value in 2012 Q2 enterprises embarked on smaller-scale investments than in the corresponding period of the previous year.

Expected further decline in investment outlays in the second half of 2012 may be somewhat mitigated by investment activity of the largest enterprises (those employing more than 1999 people), whose index of new investment, despite a certain decline, remained high.

Figure 2.16

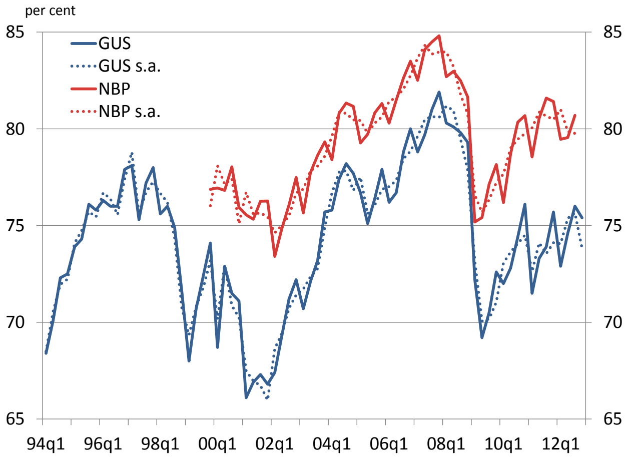
Index of new investment (percentage of enterprises planning to start new investment within the coming quarter).



Source: NBP business conditions survey.

Figure 2.17

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



Source: GUS data, NBP survey of business conditions

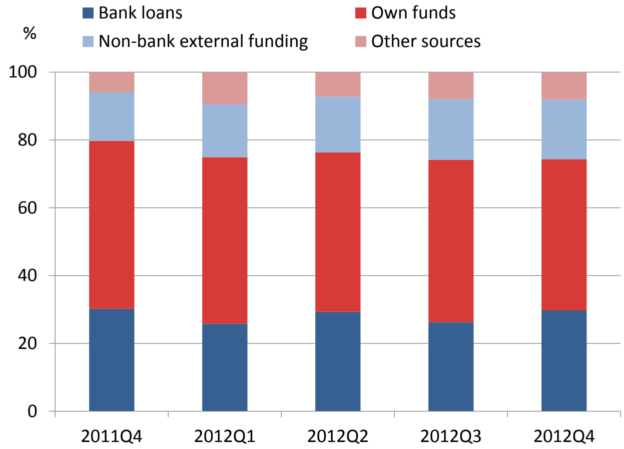
The degree of capacity utilisation based on GUS business tendency survey is significantly lower than the one quoted by NBP surveys. However, trends in both indicators are similar in both surveys. The difference in the values results from the difference in the enterprise sample each survey is based on.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

[20] *Information on the condition of the enterprise sector with a particular focus on business conditions in 2012 Q2 and the forecast of business conditions in 2012 Q3*, NBP; *Information on the condition of the enterprise sector with a particular focus on business conditions in 2012 Q3 and the forecast of business conditions in Q4 2012*, NBP.

At the same time, in 2012 Q4 the share of enterprises planning to finance their new investment mainly out of their own funds decreased, but remained at a level close to its long-term average. On the other hand, the role of bank loans in corporate investment financing increased slightly (Figure 2.18).

Figure 2.18

Main sources of new investment financing (% of enterprises).



Source: NBP business conditions survey.

2.2.3. Government demand

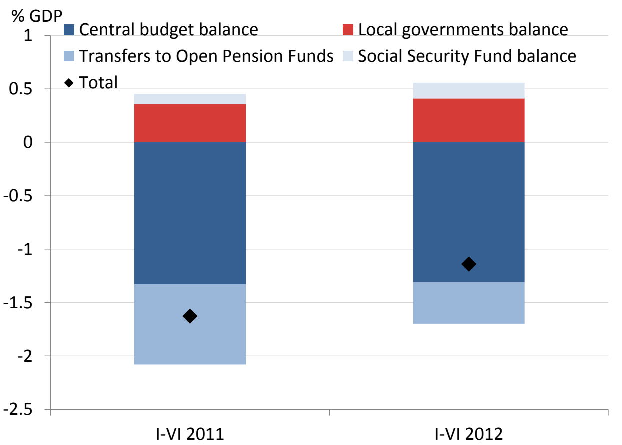
In January-September 2012, the central budget deficit stood at approx. PLN 21.1 billion, i.e. at 60.3% of the annual plan[21].

Total budget revenue in January-September 2012 was 4.3% higher than in the corresponding period of 2011, with a tax revenue increase of 2.7% y/y. The most important factor dragging on total tax revenue growth was a decline in VAT revenue (by 1.6% y/y) related to high VAT refunds, as well as sluggish real growth in private consumption observed in the first half of the year (amounting to 1.8%).

In the same period, government expenditure rose by 3.6% y/y, i.e. much slower than provided for in the *Budget Act* for the whole year (8.6%). Lower than planned expenditure growth resulted from low actual current spending, investment spending by budgetary units and spending on projects co-financed from EU funds. On the other hand, spending growth was fuelled by a markedly higher, than a year ago, debt service expenditure (by 19.9% y/y) and contribution to the EU budget (by 29.4% y/y).

Figure 2.19

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



Source: Ministry of Finance and ZUS data.

Local government units recorded a budget surplus of PLN 6.6 billion in the first half of 2012, i.e. PLN 1.1 billion higher than in 2011 (Figure 2.19). This was primarily related to continued efforts aimed at curbing local government expenditure. During the first half of the year, it grew by 4.2% y/y, with the 2012 Q2

[21] In January-September 2011, the central budget deficit stood at 87.1% of the annual plan.

growth at a 1.3% y/y. Local government units reduced capital expenditure – in the first half of 2012 by 5.3% y/y. At the same time, their current expenditure rose by 5.6% y/y.

In the first half of 2012, the Social Security Fund recorded a surplus of PLN 2.4 billion, i.e. PLN 1 billion more than in 2011. This was particularly the effect of a 0.9% fall in the average number of old age and disability pensioners combined with a higher, as of February 2012, disability pension contribution. The financial position of other main special purpose funds in the same period was similar to that observed in the previous year[22].

According to the forecast by the Ministry of Finance, included in the autumn fiscal notification, published by Eurostat on 22 October 2012, in 2012 the deficit of central and local government units (in ESA95 terms) in relation to GDP will be 1.6 percentage points lower than in 2011 and will amount to 3.4% of GDP. A further deficit reduction is planned for 2013 down to the level close to 3% of GDP[23]. However, in view of a deeper than previously expected economic slowdown, leading in particular to lower than assumed VAT receipts, it will probably take longer to reduce public sector imbalance than envisaged by the *Convergence Programme. 2012 Update*. According to the *Programme*, the ESA95-terms deficit was to be brought down to 2.9% of GDP in 2012 and to 2.2% of GDP in 2013. The situation of the general government sector in 2013 will be discussed in detail in the *Monetary Policy Council Opinion on the 2013 Budget Bill*.

[22] Even though the Labour Fund recorded a higher surplus in the first half of 2012 than in 2011, the difference was primarily the effect of the amount of PLN 952 million, unused by the Guaranteed Employee Benefits Fund, being returned to the Labour Fund. This one-off transfer between the general government sector units has had no impact on the balance of the sector.

[23] In accordance to the statement made by the Minister of Finance on 10 October 2012.

2.2.4. Exports and imports

In 2012 Q2 Poland's foreign trade growth continued to slow down[24]. Export growth stabilised at a low level (2.2% y/y in 2012 Q2 against 2.4% y/y in 2012 Q1), while the value of import declined by 3.2% y/y following a slight increase in 2012 Q1 (by 1.3% y/y; Figure 2.20).

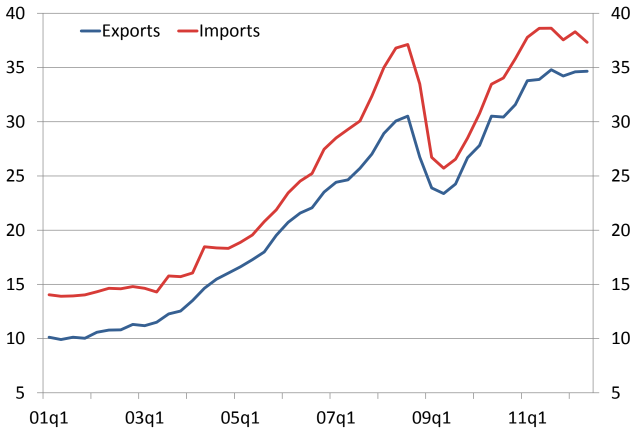
Persistently low level of export growth in 2012 Q2 was primarily driven by further drop in the sales to the euro area recorded in the majority of main categories of goods (a 1.2% y/y drop as against a 0.9% y/y drop in 2012 Q1; Figure 2.21). The decrease in the sales of final goods was due to the continued decline in consumer demand in the euro area. In turn, falling exports of intermediate goods were primarily attributable to the plunge in their sales to Germany, which saw total imports of intermediate goods decline in 2012 Q2.

At the same time, the increase in sales to non-euro countries remained similar to the 2012 Q1 level (6.3% y/y against 6.6% y/y), supported by persistently high growth of exports to the former USSR countries (mainly Russia and Ukraine).

In 2012 Q2, the value of imports decreased in all main categories of goods, including commodities and fuels (following a strong increase in 2012 Q1), which was attributable to both the decline in the volume of sales of these goods and a significant fall in their prices in the global market in 2012 Q2. The negative growth of imports was also driven by a decline in internal demand, including a considerable drop in inventories, as well as weakening activity of exporters. Moreover, the drop in imports might have also been triggered by uncertainty concerning the future path of the zloty exchange rate, which favoured the substitution of imported intermediate goods by domestic

Figure 2.20

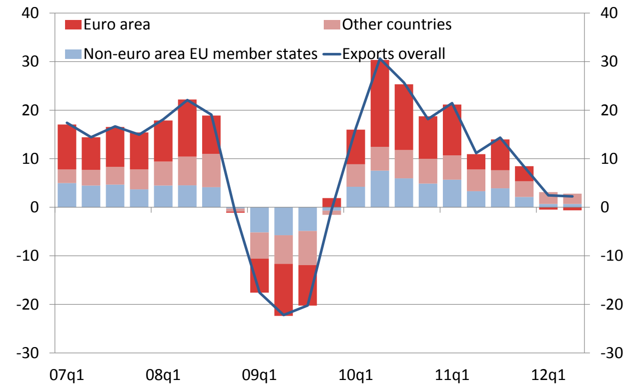
Value of Polish exports and imports.



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

Figure 2.21

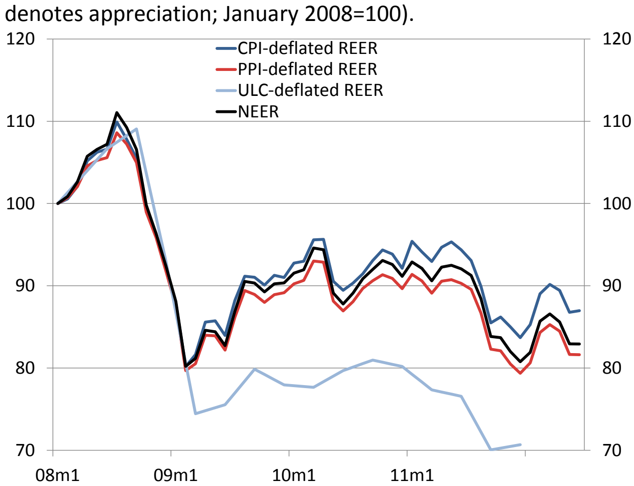
Geographic composition of Polish export growth (in EUR billion).



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

Figure 2.22

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



Source: NBP and the European Commission data.

[24] The analysis of the value of Polish exports and imports in this subsection is based on the seasonally adjusted GUS data on external trade (expressed in EUR).

ones. That could be suggested by a marked decline in the costs of imported commodities and materials coupled with a strong increase in the costs of commodities and materials purchased in the domestic market.

In 2012 Q2 the nominal and real exchange rate of the zloty depreciated as against 2011 Q2 (Figure 2.22). This weakening of the zloty helped to ensure continued competitiveness of Polish exports and contributed to a certain increase in margins on export sales of enterprises. The NBP's business condition survey indicate, however, that zloty depreciation in 2012 Q2 was accompanied by further weakening of the threshold exchange rate of exports profitability as declared by enterprises, a trend dating back to 2011 Q3 (Figure 2.23). In turn, in 2012 Q3 some appreciation of the zloty was accompanied by strengthening of the threshold exchange rate of exports profitability.

2.2.5. Output

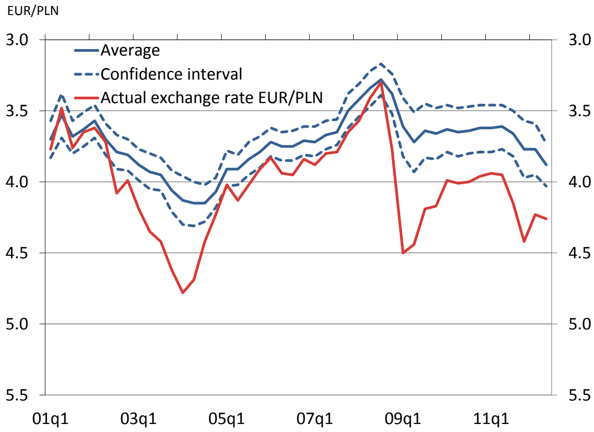
In 2012 Q2, the growth of gross value added continued to slacken (down to 2.1% from 3.4% registered in 2012 Q1) as a result of weaker value-added growth in all key components of this category[25] (Figure 2.24).

In 2012 Q3, the growth of sold production in industry again decelerated considerably, accompanied by a further weakening in orders and a decline in the PMI index, which suggests a marked slump in the sector's business confidence (Figure 2.25).

Construction sector data may also signal a sharp downturn. Both output and orders in the sector have been on a downward trend in the recent months, with their growth rates falling considerably over 2012 Q3 (Figure 2.26).

Figure 2.23

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

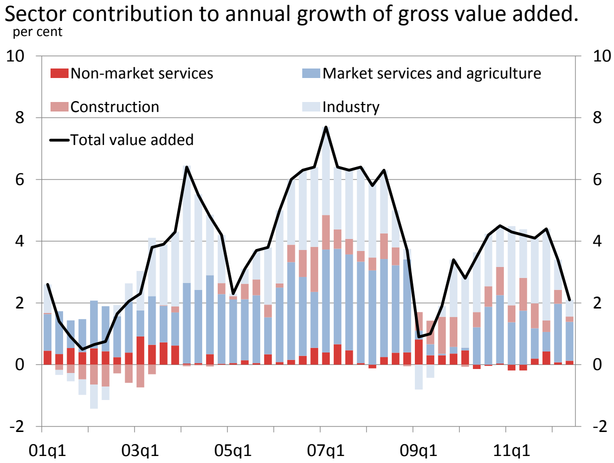


Source: NBP data and estimates.

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

Figure 2.24

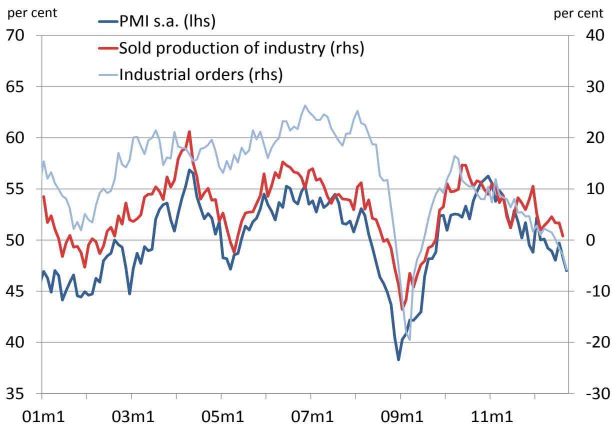
Sector contribution to annual growth of gross value added.



Source: GUS data, NBP calculations.

Figure 2.25

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



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

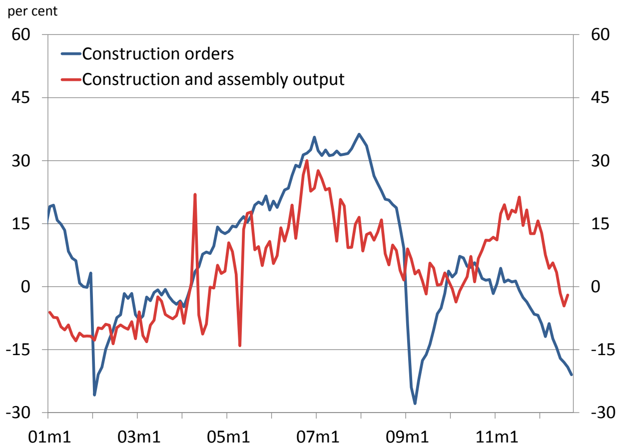
[25] Figures on industrial output, order portfolio, the PMI index, construction and assembly output and orders quote seasonally adjusted data (as calculated by NBP).

Signs of a slowdown may also be observed in the service sector. In 2012 Q3, wholesale sales posted a nominal growth of 1.8% y/y, as against 2.3% in 2012 Q2. At the same time, the growth of retail sales by enterprises employing more than 9 persons decelerated significantly (see Chapter 2.2.1 *Consumption demand*)[26]. Similarly, transportation businesses saw weaker total sales growth in 2012 Q3, amounting to 10.0% (in real terms) as against 12.1% y/y in 2012 Q2.

The GUS forward-looking business climate indicators suggested persistently negative assessment of economic outlook by enterprises in recent months (Figure 2.27). Most indicators of future business conditions across individual sections are running below their long-term averages.

Figure 2.26

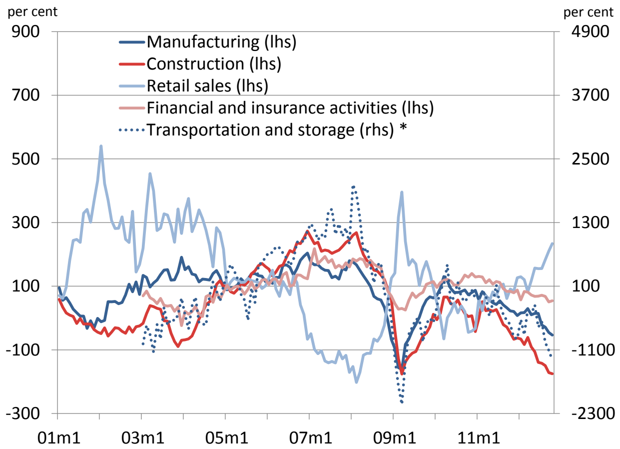
Annual growth of construction and assembly output and construction orders.



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

Figure 2.27

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



Source: GUS business tendency survey, NBP calculations.

2.3. Financial situation in the enterprise sector

In 2012 Q2 the financial situation of enterprises deteriorated as compared to 2012 Q1. At the same time, in the face of falling demand on their products in 2012 Q3 as declared by enterprises and expected decline in orders and production in 2012 Q4, it might be presumed that in the second half of 2012 financial results on core activity of enterprises will keep deteriorating[27].

2012 Q2 total revenue growth slowed down significantly (Figure 2.28). This deceleration was driven primarily by a decrease in domestic sales revenues related to the decline in domestic demand, as well as significantly lower revenue from foreign exchange differences than in 2011 Q2. In turn, a certain acceleration in external sales revenues, propped up by the depreciation

[26] Monthly data on retail sales do not fully reflect changes in total retail sales. See footnote 18.

[27] On the basis of *Information on the condition of the enterprise sector with a particular focus on business conditions in 2012 Q3 and the forecast for business conditions in 2012 Q4*, NBP.

of the zloty as compared to 2011 Q2, was conducive to curbing the scale of total revenue slowdown[28].

At the same time, growth of total costs ebbed down, which was attributable to slower growth in all the main cost categories (Figure 2.28). However, the slowdown in costs growth was less pronounced than that observed in revenues, as the increase in the cost of commodities and domestic goods was still relatively strong.

In 2012 Q2 the net turnover profitability in the enterprise sector declined, although it remained above the multi-year average. The decline in profitability was due to the deterioration of financial results in all types of activity, particularly strong one in the case of financial operations. Lower results on financial operations were related to the decrease in the value of dividend received and to losses on sales and revaluation of investments (Figure 2.29). Profitability of enterprises declined in the overwhelming majority of sectors, yet the financial results of enterprises remained highly diversified. Particularly difficult situation prevailed in the construction sector, where amidst a strong rise in sales costs, the enterprises posted losses for the second consecutive quarter. In turn, profitability in mining and the energy sector remained very high, despite a marked decline in profits related to lower dividend received[29]. The deterioration of results on financial operations also contributed to a certain fall in the profitability of exporters. The latter, however, being supported by the depreciation of the zloty as compared to 2011 Q2, remained higher than the profitability of non-exporters (Figure 2.30). At the same time, net turnover profitability ratios of both

Table 2.4

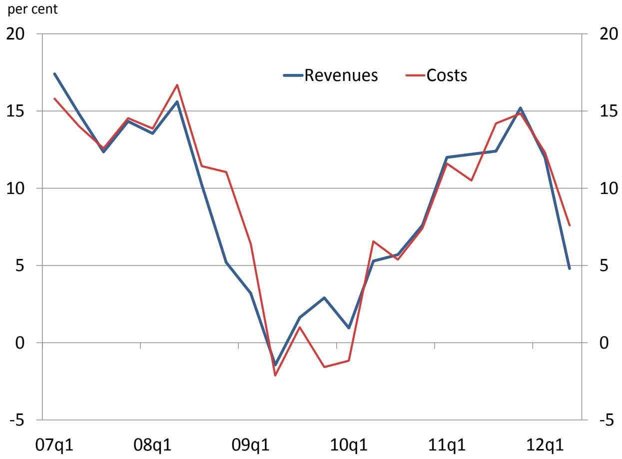
Selected financial efficiency ratios in the enterprise sector.

per cent	2008	2009	2010	2011 q1	2011 q2	2011 q3	2011 q4	2012 q1	2012 q2
Sales profitability ratio	5.0	5.0	5.2	5.3	5.5	5.6	4.7	4.4	4.3
Net turnover profitability ratio	3.3	4.1	4.4	4.3	6.1	3.7	4.1	4.1	3.9
Total debt ratio (s.a.)	47.5	46.9	47.1	47.5	47.5	48.2	48.8	48.5	48.6
Gross profit to interest ratio (s.a.)	5.9	7.1	7.8	8.0	8.3	7.3	7.4	6.9	5.8
	End of period data								
Liquidity ratio of the first degree	0.34	0.39	0.40	0.39	0.38	0.37	0.38	0.34	0.32

Source: GUS data.

Figure 2.28

Rates of growth of revenues and costs.



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

[28] The weakening of nominal effective exchange rate of the zloty in 2012 Q2 as against 2011 Q2 was slightly stronger than that in 2012 Q1 as against 2011 Q1.

[29] And in mining there was also a strong decline in sales result.

exporters and non-exporters remained above the multi-year average.

In 2012 Q2, the liquidity ratio of the first degree in the enterprise sector dropped once again. The fall in liquidity was driven by a significant decrease in the value of securities held by enterprises, amidst a slightly weaker growth of their short-term liabilities (Table 2.4). At present, the cash ratio remains close to the level recorded before 2009, when there was a sudden increase in liquidity held by enterprises. Thus the liquidity condition of enterprises remains good. At the same time, the liquidity of enterprises did not decline uniformly across the whole sector: while liquidity in the SME sector did not change significantly on its 2012 Q1 levels, the liquidity in big companies – particularly the biggest enterprises (i.e. employing more than 1999 employees) – dropped markedly. The latter might have been due to lowering propensity of these companies to accumulate short-term, highly-liquid assets. In 2012 Q3, according to the NBP business climate survey, the liquidity condition in the enterprise sector remained good and the share of firms facing problems with liquidity declined as against 2011 Q3[30].

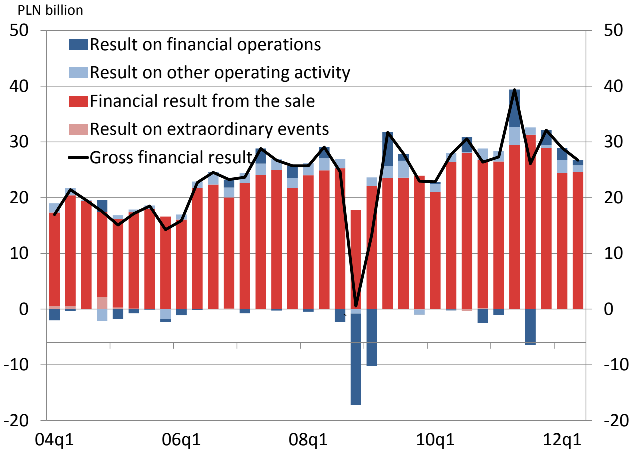
2.4. Labour market

2.4.1. Employment and unemployment

In 2012 Q2, with the decreasing GDP growth, the growth in the number of persons working in both the entire economy and the enterprise sector decelerated (Figure 2.31). At the same time, owing to the further increase in the number of the economically active, the unemployment rate was higher than a year before.

Figure 2.29

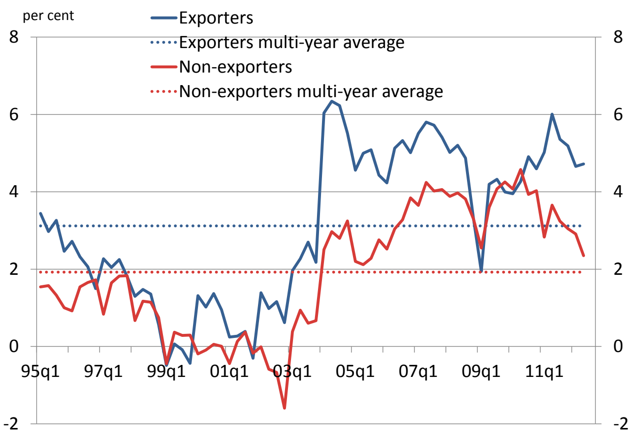
Enterprises' gross financial result and its components**.**



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

Figure 2.30

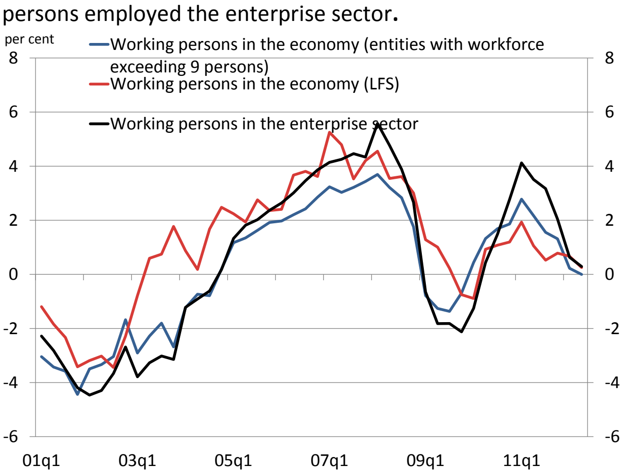
Net turnover profitability ratios in exporting and non-exporting enterprises**.**



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

Figure 2.31

Year-on-year growth in the number of persons working in the economy according to the LFS data and reports of entities whose workforce exceeds 9 employees and in the number of persons employed the enterprise sector**.**



Source: NBP calculations based on GUS data.

[30] On the basis of *Information on the condition of the enterprise sector with a particular focus on business conditions in 2012 Q3 and the forecast for business conditions in 2012 Q4*, NBP.

According to the Labour Force Survey (LFS) data, in 2012 Q2 the number of working persons increased by 0.3% y/y and by 0.1% q/q (as compared to 0.7% y/y and 0.3% q/q in 2012 Q1; Figure 2.32). The number of persons working in industry fell significantly (by -2.0% y/y; against 0.0% y/y in 2012 Q1), which may have been related to the declining growth of gross value added in this sector. Also the growth of the number of persons working in services dropped, though it remained positive (0.6% y/y compared to 1.7% y/y in the previous quarter). In line with the long-term trend, in 2012 Q2 the number of persons working in agriculture continued to fall (-1.4% y/y against -2.3% y/y in 2012 Q1).

Annual employment growth in the enterprise sector also decelerated and stood at 0.3% y/y in 2012 Q2 (against 0.6% y/y in 2012 Q1). Monthly data indicate that since the beginning of 2012 the employment in this sector had been decreasing. Consequently, the annual growth of employment in each month of 2012 3Q levelled off to zero.

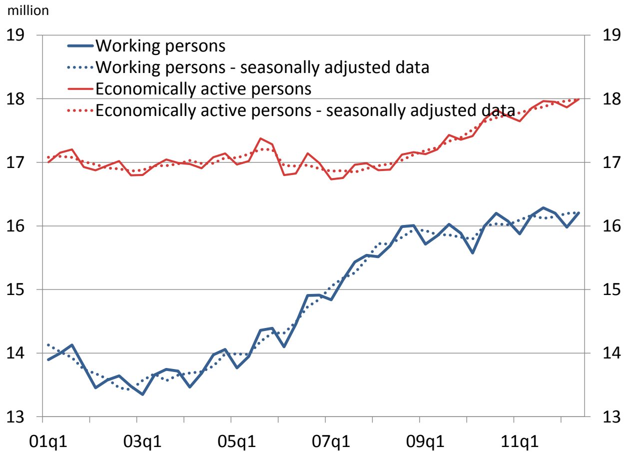
NBP economic climate surveys show that employment forecast indicator for 2012 Q4 has deteriorated in comparison with 2012 Q3 and still suggests that more enterprises intend to reduce employment rather than increase it[31] .

In 2012 Q2, the rise in the number of the economically active persons observed since 2007, continued, although it slowed down slightly. The rise was mainly driven by higher activity of persons of pre-retirement age (seasonally adjusted data; Figure 2.32). The number of economically active persons increased by 0.8% y/y in 2012 Q2 (against 1.1% y/y in 2012 Q1).

Together with a slowing rise in employment and further increase in labour supply, the LFS unemployment rate climbed to 10.1% in 2012

Figure 2.32

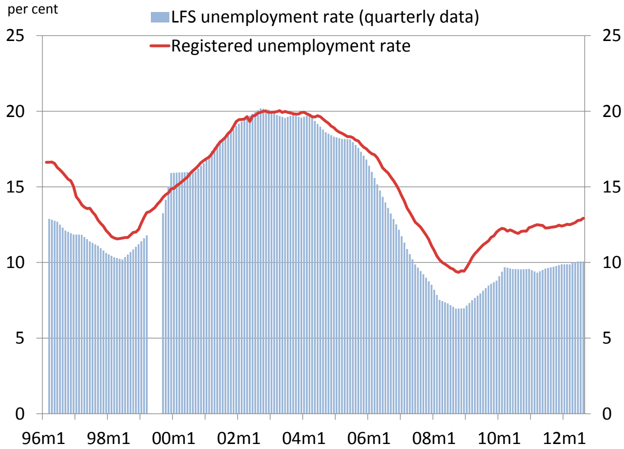
Number of working persons and the economically active in the economy according to the Labour Force Survey.



Source: NBP calculations based on GUS data.

Figure 2.33

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



Source: GUS data (adjusted for seasonal variations).

The LFS data have not yet been adjusted for the results of the 2011 National Census. There are two reasons for the differences between the unemployment rate according to the Labour Force Survey and the registered unemployment rate: (1) different definition of an unemployed person, (2) different definition of the population to which the number of the unemployed is referred.

[31] *Information on the condition of the enterprise sector with a particular focus on business conditions in 2012 Q3 and forecasts for 2012 Q4, NBP.*

Q2 (against 9.9% in 2012 Q1 and 9.7% in 2011 Q2; seasonally adjusted data; Figure 2.33). The year-on-year rise in unemployment rate was mainly fuelled by growing labour supply, resulting primarily from the higher activity rate (Figure 2.34). Simultaneously, growth in the unemployment rate was curbed by a rising number of working persons, though to a lesser degree than in the previous quarters.

Data released by employment offices also indicate a gradual rise in the unemployment rate in recent months. In September 2012 the unemployment rate stood at 12.4%, against 11.8% in September 2011 (Figure 2.33). At the same time, according to NBP estimates, the probability of finding a job continued to decrease, while the probability of losing it increased steadily.

2.4.2. Wages and labour productivity

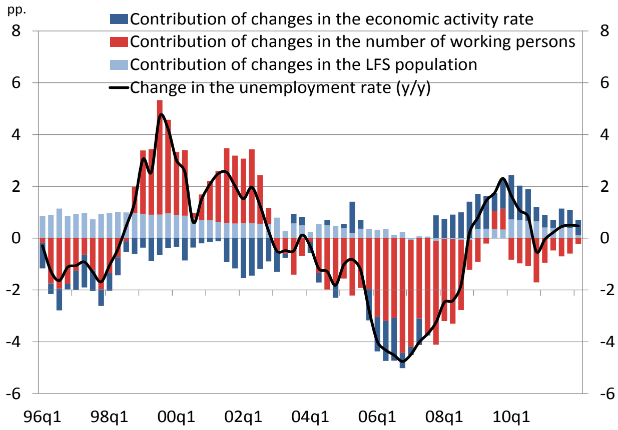
The incoming data indicate lack of wage pressure in the economy. Both the nominal wage growth and the nominal growth in unit labour costs in 2012 Q2 decreased comparing to 2012 Q1.

Along with the weakening demand for labour, in 2012 Q2 the nominal wage growth in the economy and in the enterprise sector decreased and stood respectively at 3.9% y/y and 3.0% y/y (against 5.2% y/y and 5.3% y/y in the previous quarter; Figure 2.35). The enterprise sector also posted a drop in the wage growth in the subsequent months of 2012 3Q.

Lack of wage pressure is also revealed by NBP economic climate surveys. According to them, in 2012 Q3 the share of enterprises declaring lack of such pressure on part of their employees increased comparing to previous quarters (more than half of the enterprises did not experience wage pressure, while the overwhelming majority of others reported that such pressure

Figure2.34

Breakdown of changes in the unemployment rate in year-on-year terms according to the LFS data*.

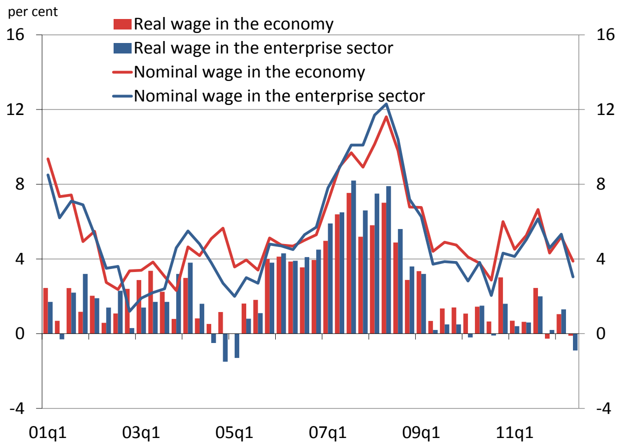


Source: GUS data, NBP calculations.

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

Figure 2.35

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



Source: NBP calculations based on GUS data.

Figure 2.36

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

Source: NBP calculations based on GUS data.

was moderate)[32]. Moreover, the market tensions index (number of job offers per one unemployed person) remained at the level close to its long-term average (Figure 2.36).

Labour productivity growth in the economy in 2012 Q2 slowed down, which resulted from a more pronounced decline in GDP growth than in the case of employment growth (Figure 2.37). Nonetheless, a more significant weakening of wage increase than that of productivity contributed to the moderation of unit labour cost growth to 1.7% in 2012 Q2 (against 2.3% in 2012 Q1), which indicates that wage pressure in the economy decreased. In turn, growth of unit labour costs in industry accelerated in recent months, which was due to a significant decrease in labour productivity, coupled with a slightly lower fall in wage growth in this sector (Figure 2.38).

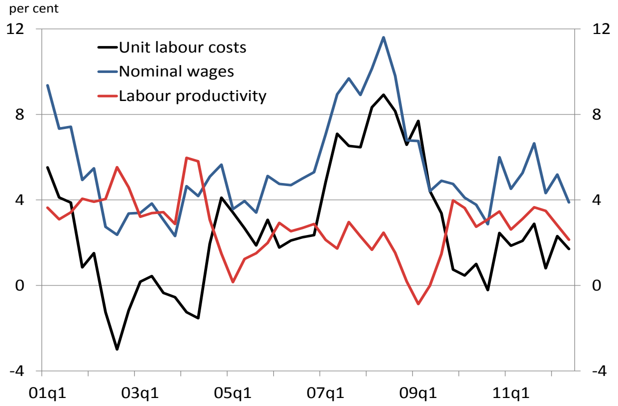
2.5. Financial markets and asset prices

2.5.1. Financial asset prices and interest rates

Since the July *Report*, the Monetary Policy Council has left the NBP reference rate unchanged at 4.75% (Figure 2.39)[33]. However, data releases on economic activity pointing to economic slowdown being stronger than expected, (see Chapter 2.2 *Demand and output*) improved the prospects of inflation returning to the target. This resulted in market participants changing their expectations with regard to the decisions of the Council in the coming months.

Figure 2.37

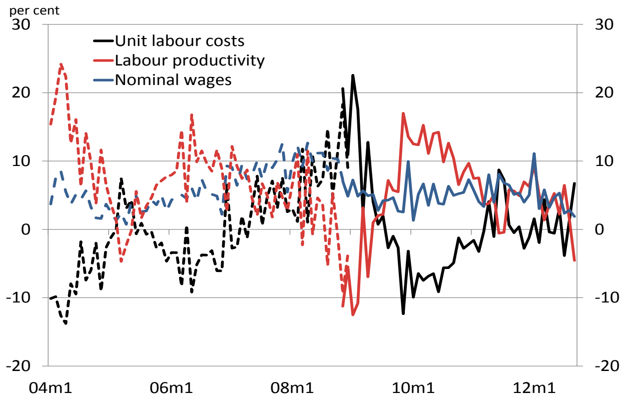
Annual growth in labour productivity, wages and unit labour costs in the economy.



Source: NBP calculations based on GUS data.

Figure 2.38

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

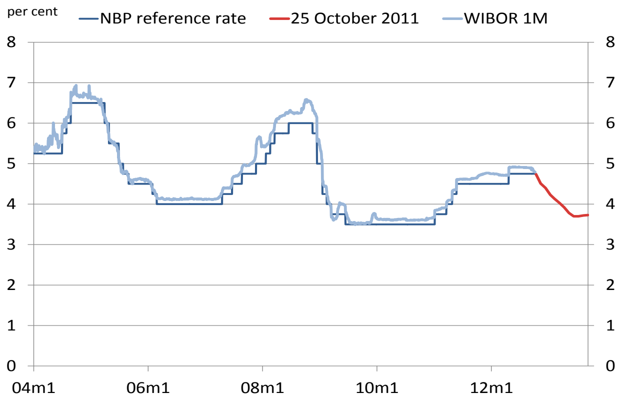


Source: NBP calculations based on GUS data.

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

Figure 2.39

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



Source: NBP calculations based on Reuters data.

[32] *Information on the condition of the enterprise sector with a particular focus on business conditions in 2012 Q3 and forecasts for 2012 Q4, NBP.*

[33] The cut-off date for the data in November *Report* was 25 October 2012. At the meeting held on 7 November 2012, the Monetary Policy Council decided to decrease the reference rate by 0.25 percentage points to 4.50%. Information about this decision is included in Chapter 3 of the *Report.*

The emergence of expectations about the NBP reference rate cut in the subsequent months was reflected in a decline in short-term interest rates. Since the previous *Report*, the WIBOR 3M fell by 0.38 percentage points, while WIBOR 1M decreased by 0.12 percentage points. Similarly, the FRAs fell considerably, indicating on 25 October 2012 that the short-term interest rates could be reduced by around 1 percentage point in a one-year horizon (Figure 2.39).

At the same time, the WIBOR-OIS 3M spread, a proxy for credit risk in the interbank market, decreased slightly.

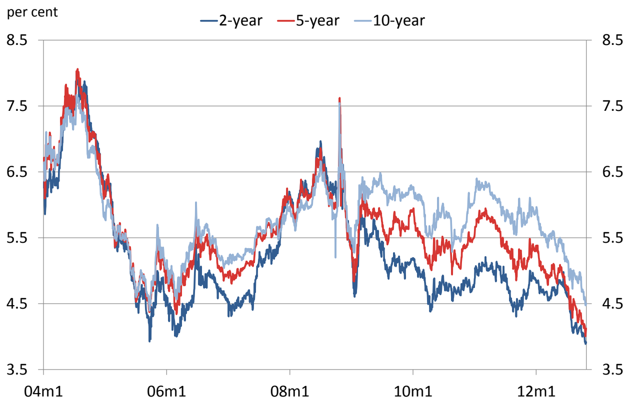
Since the July *Report*, yields on Polish sovereign bonds declined, temporarily reaching the lowest levels on record (Figure 2.40). This was mainly driven by foreign investors searching for yield in the emerging markets (see chapter 1.3 *Monetary policy abroad and international financial markets*) amidst steadily decreasing credit risk perceived by investors. Since the previous *Report*, CDS rates for Poland have fallen and remain below the average recorded in the emerging economies (Figure 2.41). According to the National Depository for Securities data, non-resident exposure to sovereign bonds in the domestic market reached its historic maximum in the first half of August 2012, and then declined slightly (Figure 2.42).

Factors conducive to lower yields on Polish sovereign bonds also included more severe than expected economic slowdown and related surge in expectations of interest rate cuts as well as a lower number of tenders in summer amidst persistently high investor demand.

Stock prices at the Warsaw Stock Exchange were influenced by global financial market sentiment. Having been on the rise till mid-September 2012, stock indices stabilized

Figure 2.40

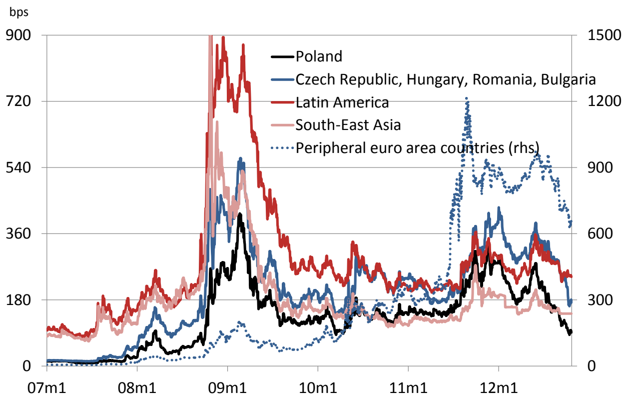
Yields on Polish Treasury bonds.



Source: Reuters data.

Figure 2.41

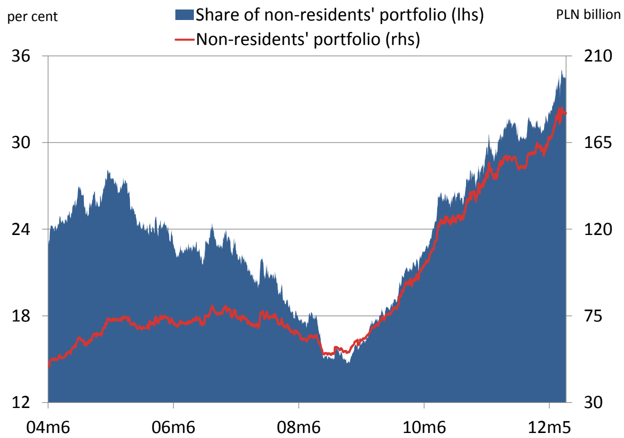
CDS rates for Polish bonds vs. emerging and peripheral euro area economies.



Source: Bloomberg data.
The indices are GDP-weighted aggregates.

Figure 2.42

Non-resident exposure in the Polish Treasury bond market.



Source: National Depository for Securities (KDPW) data.

afterwards. Since July *Report*, the WIG stock exchange index has gained 7.5%, and the WIG 20 index 3.9% (Figure 2.43).

2.5.2. Exchange rate

Since the July *Report*, the zloty appreciated due to improving sentiment in the international financial markets. This notwithstanding, the analysed period saw the episodes of temporary depreciation of the zloty, triggered by incoming data pointing to a deeper than expected economic slowdown and related surge in expectations of a more accommodative monetary policy in Poland, as well as interest rate cuts in the Central and Eastern Europe.

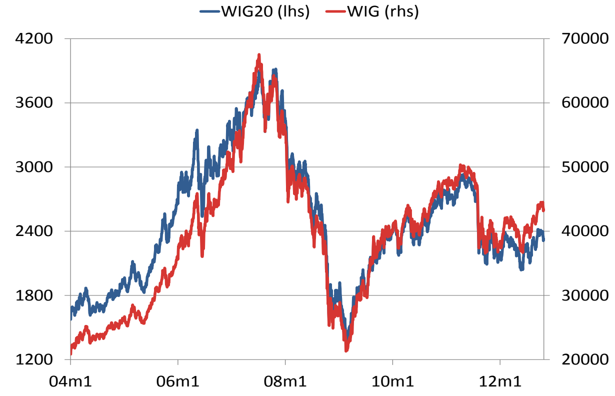
Between the publication of the previous *Report* and 25 October 2012 the nominal exchange rate of the zloty appreciated by 2.3% against the euro, by 3.1% against the Swiss franc and by 8.4% in relation to the US dollar (Figure 2.44).

2.5.3. Housing prices

2012 Q2 and Q3 saw the continuation of trends in the housing market initiated in previous years[34]. Both asking and sale prices in the primary and secondary markets kept decreasing (Figure 2.45).

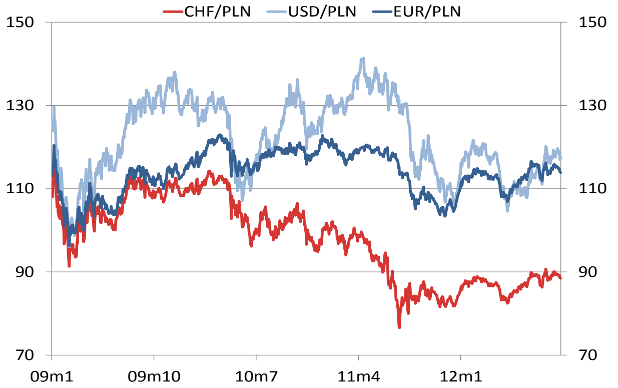
Despite falling real estate prices, profit margins in the housing construction sector remained relatively high, particularly in comparison with other branches in the construction sector. Similarly as in the previous quarters, this encouraged developers to launch new investment projects. This applies in particular to 2012 Q2, when some investments could have been brought forward to as new provisions were coming into force[35]. In 2012 Q3

Figure 2.43
WIG and WIG 20 stock exchange indices.



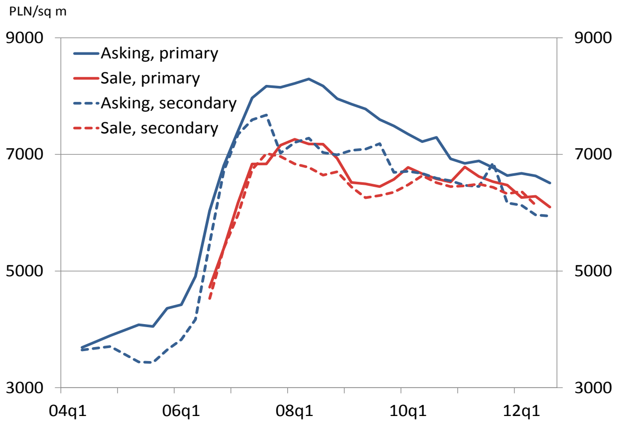
Source: Reuters data.

Figure 2.44
Nominal exchange rate of the Polish zloty against the euro, the Swiss franc and the US dollar (January 2004-100; increase denotes appreciation).



Source: Reuters data.

Figure 2.45
Average* prices of flats in Poland's 7 big cities (Gdansk, Gdynia, Krakow, Lodz, Poznan, Warszawa, Wroclaw).



Source: NBP calculations on the basis of sale price data from the NBP survey and PONT info Nieruchomości asking price data.
* 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.

[34] More information on the condition of the Polish housing market may be found in NBP publications entitled: *Report on the prices of flats and the situation on the residential market in Poland in 2012 Q2,* and *Report on the situation in the Polish residential and commercial real estate market in 2011,* available on the NBP website (www.nbp.pl, in Polish only).

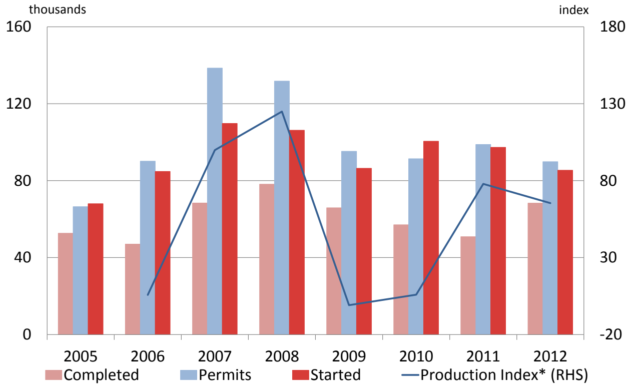
[35] The act of 16 September 2011 on the Protection of Rights of the Buyer of Housing Units or Single-Family Homes, which entered into force on

investment in housing sector declined, yet the flat stock remained sizable due to a considerable number of flats introduced to the market in previous quarters (Figure 2.46).

Large supply of flats in the market was still accompanied by declining demand related to a slowdown in mortgage lending, reflected in particular in a decrease in the value of loans denominated in foreign currency, and deteriorating household sentiment amid ongoing economic slowdown. The number of flats introduced to the market continued to exceed the number of flats sold, which may be conducive to further fall in their prices.

Figure 2.46

Housing construction in Poland in the second and third quarters.



Source: NBP calculations on the basis of GUS data.

* Production index is a synthetic measure reflecting the condition of construction companies in the housing sector; it is a twelve-month moving value of work in progress, i.e. the number of flats whose production was commenced net of completed flats introduced to the market. Increase in work in progress assets may point to future problems for the construction sector, when investors will not be able to meet commitments with regard to the already completed facilities. This may translate into investment freeze and irregular payments.

Box 3. How fixing the nominal exchange rate of the zloty to the euro prior to the crisis would have fected the business cycle in Poland ?

According to many economists, ability to conduct an independent monetary policy and flexible exchange rate were among the factors which have contributed to the sustained stability of the Polish economy throughout the global financial crisis. Economists at the National Bank of Poland attempted to verify this claim[36]. In particular, it was examined whether fixing the nominal exchange rate, and thus giving up an independent monetary policy, would have influenced the business cycle in Poland in the recent years. Thus, two important channels were investigated through which Poland's hypothetical accession to the euro area might have affected business activity and inflation in Poland in the last few years.

To answer the above question, a dynamic stochastic general equilibrium (DGSE) model of the Polish economy and the euro area was used. The applied model is of a New Keynesian type, with heterogeneous economic agents, nominal rigidities, multi-stage production processes, fiscal and monetary policy, a banking sector and financial frictions related to credit constraints. Both the parameters and shocks in the model were estimated on the basis of the Polish and the euro area data. In order to evaluate the impact of fixing the zloty to the euro, and hence of abandoning an independent interest rate, so-called counterfactual simulations were run, i.e. historical data were re-written on the assumption of Poland having fixed its nominal exchange rate against the euro in 2007 and the domestic interest rate changes having mirrored the changes in the European Central Bank interest rates.

Figure R.3.1. shows GDP growth and CPI inflation in Poland in 2001-2011 and the behaviour of the two variables in two variants of the counterfactual scenario of nominal exchange rate fixing. Under the first variant, it was envisaged that interest rates changes in the Polish interbank market would have reflected interest rate changes in the euro area[37], with an added effect of risk premium fluctuations. The second variant assumed the disappearance of the risk premium with the exchange rate fixing. Thus, the difference between the two variants lies in the manner the risk premium relative to the euro area is considered. Poland, which remains outside the euro area, has so far

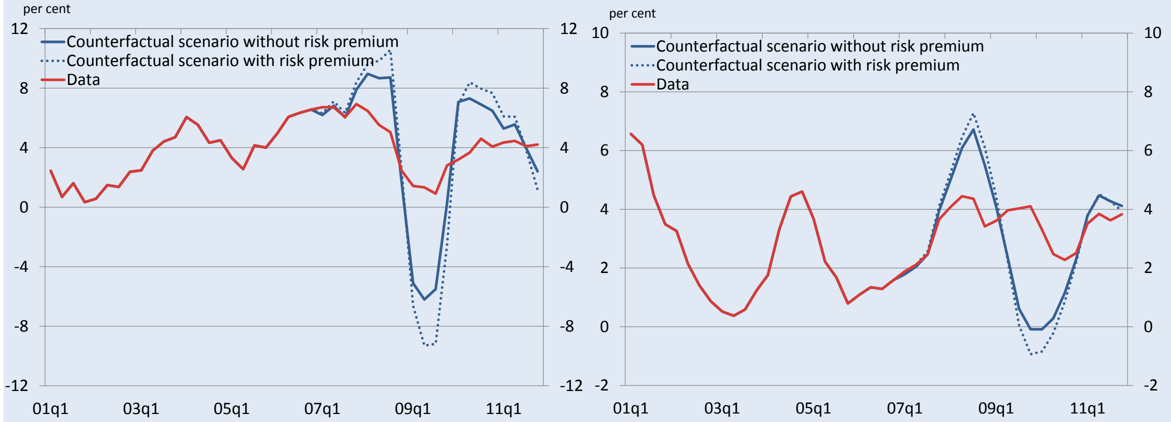
28 April 2012, imposes an obligation on developers to conclude agreements with banks on opening housing trust accounts This implies that developers will receive the funds paid by buyers with a delay.

[36] M. Brzoza-Brzezina, K. Makarski, G. Wesołowski "Would it have paid to be in the euro-zone?", NBP Working Paper No. 128, 2012.

[37] Technically, the model takes into account interest rate deviations from the steady state (the natural interest rate), which reflect the cyclical component of the interest rates.

been perceived as a country with a relatively higher risk; this has been reflected in a positive and volatile risk premium on investment in Polish assets versus the euro area assets. Since it is unclear whether Poland's accession to the euro area would have entirely eliminated the risk premium or not, both variants were considered. The experience of the first – pre-crisis – years of Europe's monetary union pointed to the disappearance of the risk premium, as domestic factors were only marginally taken into account in the assessment of the country risk of euro area member states. Hence, yields on those countries' bonds were similar. On the other hand, the post-2007 experience of numerous euro area countries suggests that amidst mounting public finance tensions in the particular countries and the ensuing risk aversion in the financial markets, the risk premium may again be included by investors in their assessments, exerting a substantial upward pressure on interest rates in those countries. Therefore, one scenario assumes the disappearance of the premium, and the other its persistence (albeit at levels varying over time).

Figure R.3.1
GDP (left panel) and inflation (right panel) in Poland in 2001-2011 – actual data and the two counterfactual scenarios assuming Poland's accession to the euro area in 2007.



Source: M. Brzoza-Brzezina, K. Makarski, G. Wesołowski "Would it have paid to be in the euro-zone?", NBP Working Paper No. 128.

Basing on the simulation results it can be assessed that under both counterfactual scenarios, GDP and inflation variability would have been greater had the zloty-euro exchange rate been fixed since 2007. The difference is particularly pronounced with respect to the years 2008-2009, i.e. the period of the largest fluctuations in the global economic climate and greatest exchange rate volatility. GDP growth in Poland, which ranged from 1% to 7% in the years 2007-2011 with a standard deviation of 2 percentage points, would have varied between -6% to +9%, with a standard deviation of 5 percentage points (from -9% to +11% with a standard deviation of 6 percentage points under the scenario with the risk premium). Increased volatility can also be observed with respect to inflation. Its fluctuations varied between 2% and 4.5%, with a standard deviation of 1 percentage point. If Poland had joined the euro area, though, inflation would have oscillated between 0% and over 6% (-1% to 7.5% under the scenario assuming the risk premium; standard deviation in both cases would have risen by 2 percentage points). However, it should be pointed out that greater fluctuations in business conditions and inflation would have been accompanied by a more stable effective exchange rate. It is also worth noting that the increase in the risk premium during the crisis added to the scale of zloty depreciation. This, in turn, reduced interest rate volatility, and thereby also changes in GDP and inflation.

Simulation results confirm that flexible exchange rate and independent interest rate policy have greatly contributed to stabilizing business conditions and inflation in Poland in the recent years. It should be remembered, though, that the study did not consider all possible costs and benefits involved in adopting the euro. Hence, simulation findings should not be interpreted as an overall assessment of all costs and benefits of Poland's accession to the euro area. The study was solely an attempt to address the question of the impact of fixing the exchange rate and abandoning an independent interest rate policy on business activity and inflation volatility in Poland in a given historical context (i.e. since 2007)[38]. It also needs to be borne in mind that the study referred to a period of great turmoil in the global economy, which probably made the difference between the actual levels of the analysed macroeconomic data and their counterfactual behaviour larger than would have been the case in the times of a greater global stability.

2.6. Credit and money

2.6.1. Loans

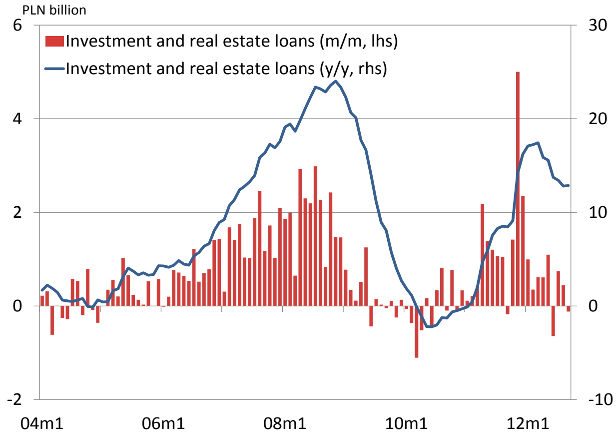
Since the July *Inflation Report*, lending growth has remained moderate[39]. In 2012 Q3 the average monthly increase in debt stood at PLN 3.9 billion as against PLN 3.3 billion in the first half of 2012[40]. The annual average lending growth decreased to 6.5% y/y in 2012 Q3 from 8.5% y/y in the first half of 2012.

The recent months have seen corporate lending growth continue at a moderate pace. The average monthly growth of corporate debt in domestic banks amounted to PLN 1.8 billion in 2012 Q3 as compared with PLN 1.7 billion in the first half of 2012. The average annual lending growth in that segment decreased slightly – to 9.9% y/y in 2012 Q3 from 12.6% y/y in the first half of 2012 (Figure 2.47,Figure 2.48).

The analysed period saw a strong deceleration in the growth of investment loans while short-term lending remained moderate. Slowing growth of investment loans may have resulted from a likely further drop in the growth of corporate investment demand in 2012 Q3 (see chapter 2.2.3. *Investment demand*). Also the tightening of lending conditions and criteria in 2012 Q3 – as declared by banks – contributed to only moderate growth of lending.[41] Moreover, average monthly interest rate on corporate

Figure 2.47

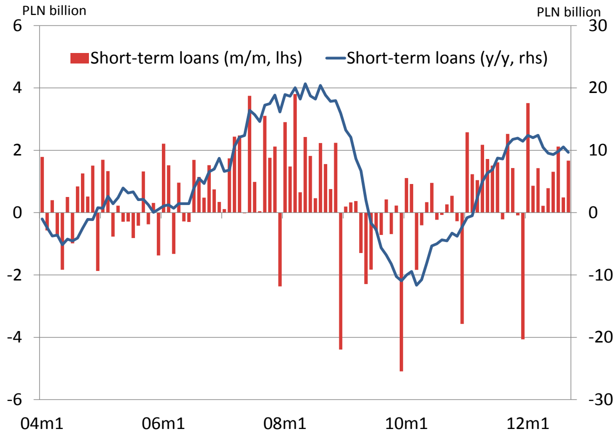
Investment and real estate loans to enterprises.



Source: NBP data.

Figure 2.48

Short-term loans to enterprises.



Source: NBP data.

[38] In particular, it should be emphasized that consequences of the euro adoption on the steady state of Polish economy are not considered.

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

[40] These data refer to lending to the non-financial sector, non-monetary financial institutions, local government units and social insurance funds.

[41] *Senior Loan Officer Opinion Survey on Bank Lending Practices and Credit Conditions, 2012 Q4, NBP.*

loans was on average 0.1 percentage point higher than the average interest rate in the first half of 2012 (Figure 2.49).

Loans to small and medium-sized companies continue to grow faster than that to large enterprises, which are less dependent on external sources of financing.[42]

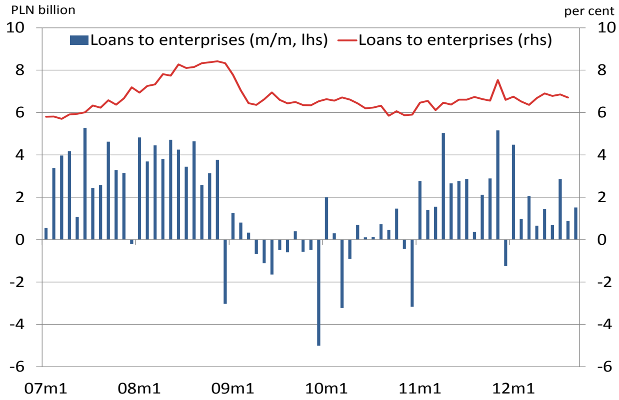
2012 Q2 saw the total foreign debt of enterprises rise (by EUR 3.5 billion on the 2011 Q2 figure), yet its growth declined to 3.4% y/y (against 3.7% y/y in 2012 Q1)[43].

Since the previous *Report*, the monthly increases in housing loans have remained moderate and their average in 2012 Q3 stood at the same level as in the first half of 2012, i.e. PLN 1.4 billion (Figure 2.48). At the same time, the annual growth of these loans dropped (to 6.4% y/y in 2012 Q3 from 8.3% y/y in the first half of 2012). Growth in housing loans was noted only in PLN-denominated loans, while the volume of loans in foreign currencies declined in the analysed period[44]. A modest increase in housing loans is hampering demand in the housing market, which is conducive to falling prices in this market (see chapter 2.4.2 *Housing prices*).

Growth in housing loans is being curbed by a significant reduction of price limits in the housing programme *Family on Their Own*[45] (see chapter 2.5 *Financial markets and asset markets*), and by the tightening in lending conditions and criteria in this market segment in 2012 Q3 as declared by banks, coupled with deteriorating economic situation of households (see chapter 2.2.1 *Consumer* demand). At the

Figure 2.49

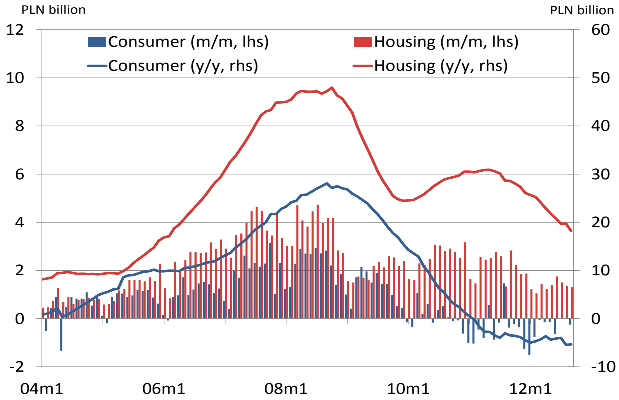
Monthly increases and average interest charged on newly granted loans to enterprises.



Source: NBP data.

Figure 2.50

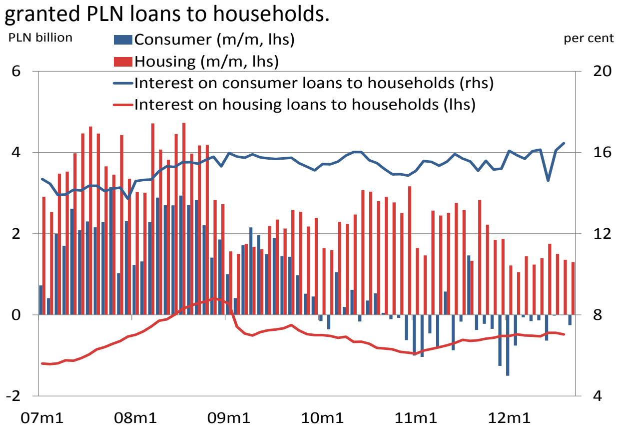
Loans to households.



Source: NBP data.

Figure 2.51

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



Source: NBP data.

[42] Data on loans to large enterprises and SMEs are derived from the NBP's statistics *Bank sector loans and advances*.

[43] The total foreign debt of enterprises covering – apart from banking loans – trade loans and debt securities held by foreign investors, reached EUR 107 billion in 2012 Q2, while the total debt of Polish enterprises with domestic banks amounted to PLN 247 billion in June 2012.

[44] Average growth in housing loans in PLN and in foreign currency in 2012 Q3 amounted to 18.6% y/y and -1.0% y/y respectively (against 20.4 % y/y and 1.3% y/y respectively in the first half of 2012).

[45] At the same time, the phasing out of this program may stimulate shifting of demand for housing loans from future quarters to the present one.

same time, in July and August 2012, the average monthly interest rate on these loans increased by 0.1 percentage point as compared to its average level in the first half of 2012 (Figure 2.51).

Since the previous *Report,* the decline in household debt resulting from consumer loans has flattened (with the average decline of less than PLN 0.1 billion in 2012 Q3 as against PLN 0.5 billion in the first half of 2012). At the same time the interest rate on consumer loans increased significantly in the discussed period and was 0.5 percentage point higher in July and August 2012 than the average for the first half of 2012.[46] The average growth in consumer loans in July and August 2012 amounted to -3.5% y/y as against -3.2% y/y in the first half of 2012 (Figure 2.50).

2.6.2. Deposits and monetary aggregates

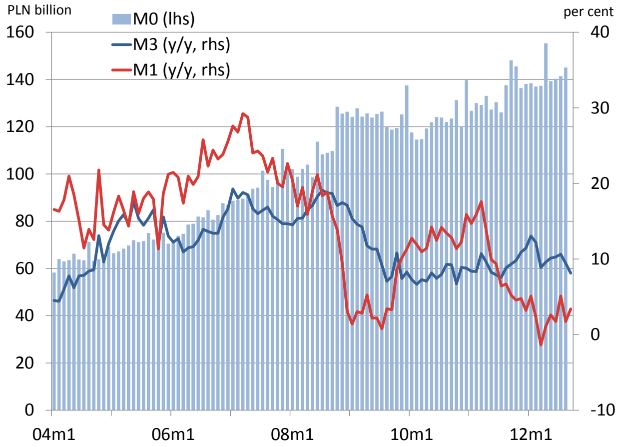
In 2012 Q3 the growth of broad money remained moderate and its average stood at 9.4% y/y, a figure that nonetheless remained higher than the growth of nominal GDP (Figure 2.52)[47].

Since the previous *Report,* corporate deposits have kept shrinking, though less visibly than previously (a monthly average of PLN 1.3 billion in 2012 Q3 as compared with PLN 3.4 billion in the first half of 2012), while the average growth of these deposits sank to 1.3 % y/y in 2012 Q3 from 6.3% y/y in the first half of 2012 (Figure 2.53,Figure 2.55).

Recent months have seen a moderate growth in the total value of households' financial assets, and its growth in July and August 2012 stood at 6.7% y/y as against the average of 5.4% y/y in

Figure 2.52

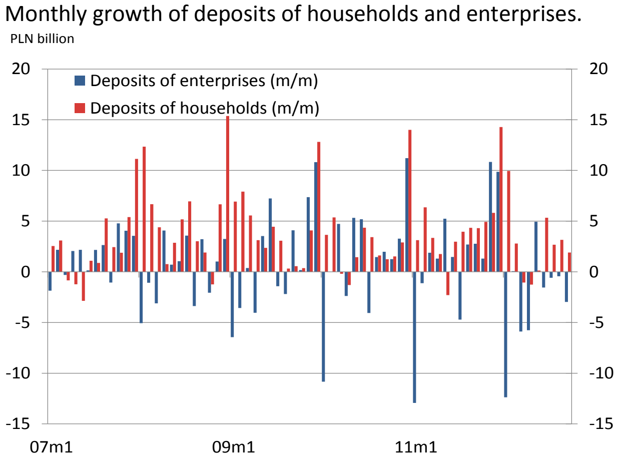
Currency in circulation and annual growth rate of M1 and M3.



Source: NBP data.

Figure 2.53

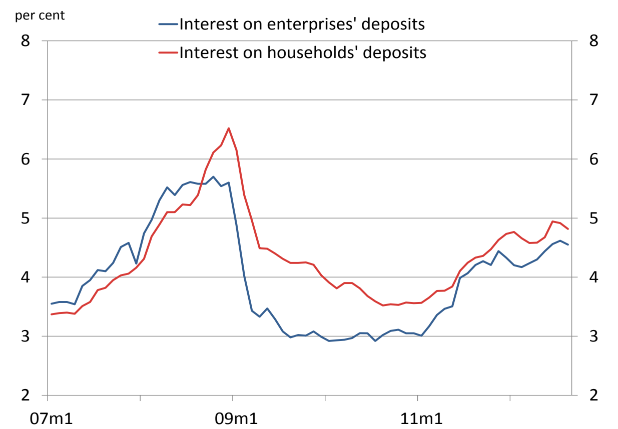
Monthly growth of deposits of households and enterprises.



Source: NBP data.

Figure 2.54

Average interest charged on deposits of households and enterprises.



Source: NBP data.

[46] Falling interest on consumer loans in June 2012 was due to a one-off factor.

[47] According to updated GUS estimates, the nominal GDP growth in 2012 Q2 stood at 5.3% y/y.

the first half of 2012.[48] The increase in the value of households' financial assets was fuelled mainly by rising value of household deposits, whose annual growth stood at 11.3% y/y in 2012 Q3 (against 12.3% y/y in the first half of 2012; Figure 2.53,Figure 2.55)[49]. At the same time, the share of deposits in the total value of financial assets was 0.1 percentage points higher in July and August 2012 than their average share in the first half of 2012 which might have been related to the increase in average interest rate on household deposits by 0.2 percentage points in July and August 2012 in comparison with average interest rate in the first half of 2012 (Figure 2.54).

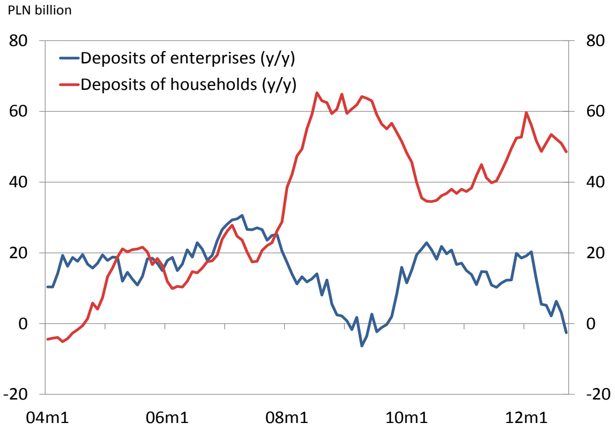
2.7. Balance of payments

Further slowdown in economic activity at home and abroad in 2012 Q2 was accompanied by a marked reduction of current account deficit (to EUR 2.2 billion against EUR 4.1 billion in 2011 Q2). The improvement in the current account – despite lower surplus of current transfers due to the increase in the contribution paid to the EU budget and a drop in the inflow of EU funds – was driven mainly by narrowing deficit on goods, as well as reduction of negative balance on income (Figure 2.56)[50].

The deficit on goods dropped significantly in 2012 Q2 against 2011 Q2 (to EUR 1.6 billion as compared to EUR 3.2 billion), reflecting both a reduced value of imports amidst weakening domestic demand and a slowing export growth driven mainly by falling demand in the euro area countries. The imbalance on goods was additionally mitigated by the zloty being weaker

Figure 2.55

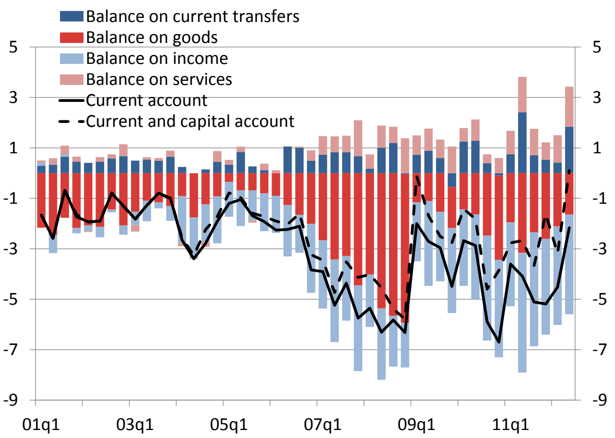
Annual growth of bank deposits of households and enterprises.



Source: NBP data.

Figure 2.56

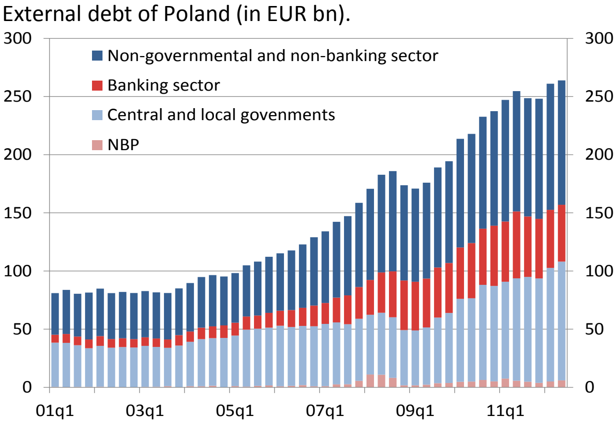
Current account balance (in EUR bn).



Source: NBP data and estimates.

Figure 2.57

External debt of Poland (in EUR bn).



Source: NBP data.

[48] The total of financial assets referred to above takes into account both deposits with maturity of up to 2 years included in the M3 aggregate and deposits with maturity over 2 years not included in this aggregate.

[49] This refers to deposits with maturity of up to 2 years. Household deposits are subject to strong seasonal fluctuations, posting a particularly strong growth in December; thus, the average monthly increases in household deposits are compared between the corresponding periods of subsequent years.

[50] Lower inflow of EU funds to the current transfers account was due mainly from lower inflow of funds coming from the European Social Fund.

than a year before (both in nominal and real terms) which propped up price competitiveness of Polish goods in comparison with foreign ones (see also chapter 2.2.4 *Exports and imports*).

A slight increase in positive balance on services (to 1.6 billion EUR as against 1.4 billion EUR in 2011 Q2) – attributable mainly to higher surplus on transportation – was also conducive to narrowing current account deficit.

The deficit on income declined in 2012 Q2 as against 2012 Q2 (to EUR 4.0 billion against EUR 4.7 billion EUR). However, the scale of decline was modest owing to still good financial performance of Polish enterprises, which translated into high income of foreign direct investors.

2012 Q2 brought a positive balance on current and capital account, driven both by a drop in imbalance on the current account and a significant increase in surplus on the capital account. The improvement in the capital account balance was related to higher inflow of funds from the settlement of payments related to implemented investment projects co-financed by the EU (Figure 2.56)[51].

Financial account surplus in 2012 Q2 decreased as compared with 2011 Q2 (to EUR 3.5 billion against EUR 4.5 billion), which was attributable mainly to the decline in non-residents' deposits with Polish banks. At the same time portfolio investment, mainly investment in debt securities, remained – despite a certain decrease – the most important source of inflows to the financial account.

Following a slight deterioration of certain external imbalance indicators in 2012 Q1, in 2012 Q2 some of them showed improvement (Table 2.5). In particular, the deficit on current and capital account relative to GDP decreased

Table 2.5
Selected indicators of external imbalances.

	2008	2009	2010	2011				2012	
				q1	q2	q3	q4	q1	q2
Current account balance/GDP(%)	-6.6	-3.9	-5.1	-5.3	-5.5	-5.2	-4.9	-5.0	-4.5
Current and capital account balance/GDP (%)	-5.4	-2.3	-3.3	-3.6	-3.8	-3.5	-2.9	-3.0	-2.2
Trade balance/GDP(%)	-5.8	-1.7	-2.5	-2.6	-3.0	-2.9	-2.7	-2.7	-2.3
Gross foreign direct investment/ current account deficit (%)	43	77	58	61	70	83	76	34	38
Gross foreign direct investment/ current and capital account balance (%)	51	132	90	89	102	125	127	58	76
Official reserve assets in terms of monthly imports of goods and services	3.3	5.3	5.4	5.5	5.4	5.2	5.2	5.1	5.6
Foreign debt/GDP (%)	48	62	67	68	69	67	67	70	71
Short-term foreign debt/official reserve assets (%)	106	88	82	89	87	79	73	75	70
(Foreign debt with maturity up to 1 year+ current accunt deficit)/official reserve assets (%)*	167	152	123		121		119		145
Net international investment position/GDP (%)	-48	-62	-66	-65	-66	-60	-59	-65	-64

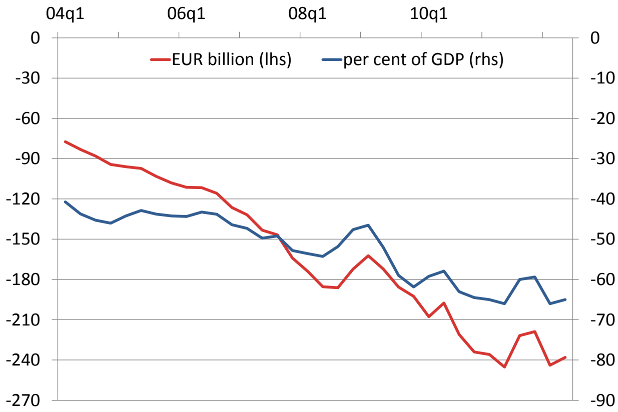
Source: NBP data.
*Data available on 6 month basis.

[51] Higher inflow of funds due to the settlement of implemented investment projects co-financed by the EU resulted mainly from higher inflow of funds within the Regional Development Fund.

markedly and the coverage ratio of current and capital account deficit by FDI increased. The increase in official reserve assets contributed to the rise in the coverage of short-term external debt by currency reserves. In turn, the increase in public sector indebtedness due to the issuance of bonds led to a slight increase in Polish foreign debt (Figure 2.57). Poland's international investment position, following a deterioration in 2012 Q1 in the wake of large-scale foreign capital inflow (mainly in the form of foreign direct and portfolio investment), improved in 2012 Q2 (Figure 2.58).

Figure 2.58

Net international investment position of Poland.



Source: NBP data.

Chapter 3

MONETARY POLICY IN JULY – NOVEMBER 2012

At the meetings in July, September and October 2012 the Monetary Policy Council decided to keep the NBP interest rates unchanged. At the meeting in November the Council decided to decrease the NBP interest rates by 0.25 percentage points: reference rate to 4.50% on an annual basis; lombard rate to 6.00% on an annual basis; deposit rate to 3.00% on an annual basis; rediscount rate to 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 2012 as well as the *Information from the meeting of the Monetary Policy Council* in November 2012. *Minutes of the MPC decision-making meeting* in November will be published on 22 November, and after that included in the next *Report*.

Minutes of the Monetary Policy Council decision-making meeting held on 4 July 2012

At its meeting, the Monetary Policy Council discussed current and future monetary policy decisions against the background of external and domestic macroeconomic developments, including inflationary processes and also the results of the July 2012 inflation projection.

While analysing the external conditions of macroeconomic developments in Poland, the Council members pointed to the recently observed signs of weakening of the global economic activity. When addressing the economic developments in the United States, the Council members highlighted that the US GDP growth was moderate and might slow down in the subsequent quarters. When discussing the situation in the euro area, attention was drawn to the stagnation in this economy and the persisting uncertainty related to resolving the sovereign debt crisis faced by some euro area member states. Council members stressed that economic activity weakening – apparent in the euro area – was also observed in Germany, driven by economic slowdown in the largest emerging economies, which are major recipients of German exports.

During the discussion, the Council pointed out that weakening of external economic activity, in particular in Germany, translated into a pronounced deceleration in Polish exports growth. At this point, few Council members argued that the situation of Polish exporters was diversified, as some exporting companies reported increasing sales.

When discussing the situation in the financial markets, it was pointed out that growing concerns about the global economic activity had boosted investor expectations of further monetary policy easing by major central banks. At the same time, some Council members assessed that as a result of uncertainty about the scale and consequences of increased monetary expansion in major economies, improvement in sentiment observed recently in the global financial markets might be short-lived. Attention was also drawn to the continuing decline in commodity prices in the global markets.

While analysing the situation in Poland, some Council members pointed out that the current data on economic activity as well as business climate indicators pointed to further slowdown in domestic economic growth. Those Council members stressed that growth in both industrial output and retail sales in 2012 Q2 had been significantly slower than in the previous quarters, and the above-expectations retail sales results in May could have been partly driven by the Euro 2012 football championship. According to those members of the Council, weaker business climate indicators about the expected economic conditions, in particular regarding outlook for demand, orders and production, were a sign of adverse prospects for domestic economic activity. Yet, few members of the Council expressed an opinion that the recently incoming data indicated rather a slight economic downturn. Those Council members pointed to some strengthening of industrial output and retail sales growth in May (that could be driven not only by one-off factors), a sustained strong financial standing of firms and an improvement in liquidity indicators in the corporate sector in 2012 Q2 – as showed by the NBP surveys. Few Council members argued that the relatively sound business conditions in Poland were reflected in further growth in lending, although credit supply might be adversely affected by worsening situation in the euro area.

While assessing the GDP growth outlook in the subsequent quarters against the NBP July projection, some Council members emphasised that the projection envisaged further economic slowdown – deeper than forecast in the March projection. Growth is supposed to be dampened by further weakening in domestic and external demand. In the opinion of some Council members, weaker domestic demand will result from slower investment and private consumption growth, driven by the lack of improvement in the labour market, tighter lending conditions and earlier sharp fall in savings rate. Fiscal tightening and lower inflow of EU funds, the latter related primarily to cuts in public investment, may also contribute to weaker growth. At the same time, few Council members deemed economic growth in the coming years likely to run markedly below the levels assumed in the NBP projection.

Other members of the Council assessed, however, that the impact of lower inflow of EU funds on GDP growth in 2013 would be relatively small. In their opinion, the effect of further fiscal tightening is also likely to be limited. At the same time, a simultaneous decline in inflation may – by increasing real disposable income – support consumption growth. As a consequence, following a marked slowdown this year, GDP growth may gradually pick up in the course of 2013. In this context, few Council members noted that the majority of currently available forecasts of external institutions suggested – in contrast to the NBP July projection – that the 2013 GDP growth might be higher than that observed in 2012.

While discussing the risk of an increase in wage pressures, some Council members pointed out that the risk was limited, as evidenced by still moderate wage growth in the enterprise sector. The continued high unemployment rate was also highlighted as a factor preventing potential escalation of wage pressure. Yet, few Council members were of the opinion that amidst elevated inflation and the resulting growth in living costs, there was a risk of a rise in wage demands.

While discussing inflationary developments, it was pointed out that CPI inflation in May was running substantially below the forecasts and approached the upper limit for deviations from the NBP target. Decline in core inflation was also highlighted. Yet, few Council members stressed that as compared with other EU countries – where inflation is influenced by similar external factors – inflation in Poland remained relatively high.

While discussing short-term outlook for inflation, the members of the Council pointed to a likely rise in the CPI in the nearest months, resulting from the statistical base effect in food prices. In the immediate future, inflation may be also heightened by steeply rising administered prices, partially due to increases in charges and prices set by general government units. At the same time, it was noted that considerable uncertainty was related to the zloty exchange rate changes and its impact on inflationary processes.

While discussing long-run inflation trends, some Council members pointed out that the July inflation projection was lower than the March projection, which means a faster than expected return of inflation to the target. According to the July projection, at the end of 2012 CPI inflation will be running below the upper limit for deviations from target, and may come close to the inflation target of 2.5% in the first half of 2013. Few Council members noted that towards the end of the inflation projection horizon, CPI inflation may even fall below 2.5%, though remaining within the limit for deviations from the target. Moreover, those Council members pointed that external forecasts are also suggesting a decline in inflation in 2013, down to a level close to the inflation target.

Few Council members argued that in line with the July projection, however under the assumption that VAT rates are not reduced in 2014, core inflation will remain at a relatively high level, which might impede the return of CPI inflation to the target. Besides, in the opinion of these Council members, the economic slowdown is likely to be moderate and therefore no substantial decrease in inflationary pressures should be expected.

While considering monetary policy decisions, the majority of Council members presented the opinion that – given the economic slowdown and the return of inflation to the target within a few quarters, as assumed in the July projection – the current level of the NBP interest rates is appropriate. Those Council members also argued that the interest rates adjustment implemented in May 2012 – being conducive to lower inflation – contributed to sustained macroeconomic stability of the domestic economy. In the opinion of those Council members, data and forecasts which had been released since the previous meeting of the Council did not provide grounds for further NBP interest rate increases, though they did not completely rule out the possibility of raising the NBP interest rates. According to those Council members, current or forecast macroeconomic situation did not justify interest rate cuts. In turn, few Council members assessed that the current level of the NBP interest rates – given the signs of a possible significant economic downturn and the risk of inflation falling below the target in the medium term – is too high and thus may lead to excessive deceleration of economic growth. These Council members also argued that interest rate reduction, by mitigating the slowdown in GDP growth, would support the currently implemented fiscal policy tightening.

At the meeting, a motion to lower the NBP interest rates by 0.50 percentage point was put forward. The motion did not pass. Also a motion to lower the NBP interest rates by 0.25 percentage point was put forward. The motion did not pass. The Council decided to keep the NBP interest rates unchanged at the following levels: reference rate at 4.75%, lombard rate at 6.25%, deposit rate at 3.25%, rediscount rate at 5.00%.

Minutes of the Monetary Policy Council decision-making meeting held on 5 September 2012

At its meeting, the Monetary Policy Council discussed the current and future monetary policy decisions against the background of the external and domestic macroeconomic conditions, especially including inflation developments.

While analysing external conditions for economic activity in Poland, Council members pointed out that the global activity remained low. In this context, it was indicated that economic growth in the United States was moderate and conditions in the euro area had weakened significantly, with continued recession and adverse outlook for this economic region. At the same time, it was pointed out that – despite the on-going recession in many euro area countries – the German economy, Poland's key trading partner, continued to grow, albeit at a slower pace. Economic slowdown in major emerging economies, which were hitherto relatively resilient to deteriorating economic growth outlook in advanced economies, was also emphasised.

With regard to the situation in the global markets, Council members pointed to a sharp rise in energy and agricultural commodity prices, caused by disruptions on the supply side, and a further improvement in investor sentiment resulting from expectations for further monetary policy easing by the major central banks.

Referring to the situation in Poland, Council members emphasised that recent data on economic activity, including GDP, as well as economic conditions indicators, pointed to a sharper deceleration in domestic economic growth this year than was assumed in the July projection and anticipated by external forecasters. Addressing the national accounts data for 2012 Q2, it was highlighted that economic slowdown was mainly attributable to a decline in domestic demand. Demand contraction was driven by both slower consumption growth as well as a sharp deceleration in investment spending growth in private sector and a decrease in general government investments. It was emphasised that the positive contribution of net exports to economic growth resulted from a fall in imports – on the back of a decrease in domestic demand – rather than a rise in exports.

While discussing current conditions indicators, few Council members pointed out that retail sales growth in July was faster than in 2012 Q2 on average. Yet, other Council members highlighted that the monthly retail sales indicators, based solely on data from larger companies, i.e. with more than 9 employees, are not a good indicator for total household consumption expenditure. It was pointed out that also industrial production rose faster in July than in 2012 Q2 on average. However, at the same time construction and assembly production declined and downward trend in most leading indicators continued. Attention was also drawn to increasingly sluggish growth in lending, including investment loans, a rise in the number of entities lacking creditworthiness as well as deteriorating financial performance of companies, including falling revenues and deteriorating liquidity indicators.

With reference to economic growth outlook in the subsequent quarters, some Council members emphasised that the structure of GDP growth in 2012 Q2 pointed to a possible further slowdown ahead. Downward revisions of external forecasts for economic growth also point to a higher probability of slower GDP growth next year. In the opinion of few Council members, there is a risk that economic growth in Poland in the second half of 2012 and 2013 may be substantially lower than forecast in the July projection and by the external forecasters. Yet, few Council members assessed that the observed slowdown may be only temporary and its scale will depend, to a large extent, on the situation in the external environment, which according to most forecasts will improve in 2013.

In the opinion of Council members, economic growth will be particularly dampened by further weakening in domestic demand, which was the key driver of economic growth over recent years. Weaker domestic demand will probably result not only from a reduction in investment but also from a slowdown in private consumption growth. Investment will be reduced in the public sector amidst the fiscal tightening in place and – most likely – in the private sector due to weaker corporate expectations of future economic conditions. Consumption growth may be affected by lower disposable income growth triggered by deteriorating labour market conditions. In this context, it was pointed out that in 2012 Q2 and in July the unemployment rate was higher than a year before, and employment growth continued to slow down. With further reference to consumption outlook, it was observed that private consumption may also be adversely affected by deteriorating consumer confidence, decelerating household lending as well as the saving rate running close to zero. Few Council members pointed to an unfavourable phenomenon of a decrease in household deposits growth in the banking sector.

While discussing inflation developments and short term inflation outlook, few Council members pointed out that – following a temporary rise in June – the CPI inflation in July had decreased more steeply than had been expected. Council members highlighted that the annual CPI may decline further in the coming months, in part due to a statistical base effect. At the same time, limited wage pressure reflected in moderate wage growth will drag on inflation. In the opinion of some Council members, towards the end of 2012, CPI inflation will run below the upper limit for deviations from the target. Yet, few Council members pointed out that despite a decrease expected by the end of 2012, inflation would probably remain elevated, while the pace at which the inflation would decrease in 2013 remained uncertain.

In the opinion of some Council members, the increase in food commodity and oil prices observed over the past few months may pose an upside risk to inflation. At the same time, it was highlighted that the future levels of the zloty exchange rate and consequently its impact on inflation developments were highly uncertain. Few Council members pointed to a reduction in lending by foreign parent banks from their Polish subsidiaries.

With regard to inflation trends in longer run, some Council members pointed out that the inflation could return to the target sooner than had been previously expected, which may be supported by deeper than envisaged economic slowdown. In the opinion of few Council members, despite a recent oil price increase, the annual CPI may be reduced in 2013, owing to a statistical base effect relating to a relatively high level of fuel prices in the first half of 2012. In the opinion of some Council members, in the first half of 2013, inflation will be probably close to the NBP inflation target (2.5%). Yet, other Council members pointed to substantial uncertainty regarding the magnitude of the impact of the economic slowdown on inflation, as well as the fact that despite the downward revision of the economic growth forecasts many external forecasts continue to expect inflation to stay above 2.5% in 2013.

While considering monetary policy decisions, the majority of Council members judged that the NBP interest rates should be kept unchanged at the current meeting. In their opinion, this decision was justified by the uncertainty about the scale and duration of the economic slowdown, which would determine inflation developments over the monetary policy horizon. It was also highlighted that there was a risk of inflation persisting at heightened level in the subsequent months, which would be attributable to the observed rise in commodity prices in the global markets.

At the same time, most Council members concluded that the information received since the previous meeting, i.e. about the deteriorating growth outlook in the euro area and sharper than expected deceleration in Polish GDP growth in 2012 Q2, had changed the view on the economic conditions, including the assessment of whether inflation would be above or below the target over the medium term.

In the opinion of few Council members, data received since the previous meeting do not indicate that the NBP interest rates should be increased. However, they do not warrant their reduction either, as the real interest rate is tailored to the expectations of inflation returning to the target and expected moderate economic growth. However, in the opinion of some Council members, the risk of a deeper and longer than expected economic slowdown, along with the prospect of inflation returning to the target in 2013, may provide an argument in favour of lower interest rates in the subsequent months.

Few Council members, in turn, were of the opinion that amidst the probably further substantial weakening business conditions and the resulting risk of inflation dropping below the target within the monetary policy horizon, and given a limited room for fiscal policy easing and persisting uncertainty about the situation in the euro area, monetary policy easing was justified already at the current meeting.

As a result, the Council decided to consider a monetary policy adjustment, should the incoming data confirm a further slowdown and the risk for inflationary pressure mounting remain limited. The assessment of whether any interest rate adjustment was justified should take into account the data incoming in the coming period, as well as – in the opinion of some Council members – the results of the November NBP projection.

A motion to decrease the basic NBP interest rates by 0.50 percentage point was submitted at the meeting. The motion was rejected. A motion was also submitted to decrease the basic NBP interest rates by 0.25 percentage point. The motion was rejected. The Council left the basic interest rates unchanged at the following levels: reference rate at 4.75%, lombard rate at 6.25%, deposit rate at 3.25%, rediscount rate at 5.00%.

Minutes of the Monetary Policy Council decision-making meeting held on 3 October 2012

At its meeting, the Monetary Policy Council discussed the current and future monetary policy decisions against the background of the external and domestic macroeconomic conditions, including inflation developments.

While analysing external conditions for economic activity in Poland, the Council members pointed out that data released since the September meeting confirm a slowdown in global economic activity, including ongoing recession in the euro area, merely moderate growth in the United States and economic slowdown in emerging economies. In this context, attention was drawn to the fact that the unfavourable outlook for economic growth had prompted the central banks of the largest developed economies to further ease their monetary policy, which improved sentiment in the global financial markets. However, according to some Council members, the improvement may prove to be temporary. In particular, the European Central Bank announced the launch of new programme of purchasing government bonds issued by countries most severely affected by the sovereign debt crisis, withdrawing its previous bond purchase programme at the same time. In turn, the Federal Reserve shifted the declared date of the first interest rates increases from the end of 2014 to mid-2015, and implemented a new MBS purchase programme. Some Council members were of the opinion that measures undertaken by major central banks should support revival of economic activity in Poland's external environment, in particular, in the euro area, where improvement in consumer and investor confidence about the prospects for overcoming the crisis may be expected.

While analysing economic situation in Poland, the Council members pointed out that the deceleration of industrial production, a further decline in construction output and weaker retail sales growth indicate that Poland's GDP growth continues to decrease. This is also signalled by worsening of business sentiment indicators, including deteriorating forecasts of demand and orders. At the same time, some Council members pointed to the data that could indicate a limited scale of further economic slowdown. These include some improvement of liquidity position of enterprises in 2012 Q3 and only slightly weaker growth in lending to the private sector (visible in data adjusted for exchange rate changes).

When discussing the current business conditions in Poland and their outlook, some Council members highlighted that the situation in the labour market was deteriorating faster than expected. They pointed to a decrease in employment and slow wage growth in the corporate sector, as well as to the gradually rising unemployment. In their opinion, weak growth in households' real disposable income will constrain consumption, especially since there is no room for further significant reduction in savings rate and availability of consumer loans is limited. Considering that at the initial stage of the global financial crisis, consumption was one of the factors spurring domestic economic activity, the currently observed deceleration in consumption – according to those Council members – points to the risk of a significant economic slowdown in the coming quarters. At the same time, deteriorating outlook for demand dampens investment prospects, already undermined by rising spare capacity utilisation. Those Council members also argued that the coming quarters might be expected to see lower net exports contribution to GDP and further fiscal tightening. The impact of the above mentioned factors is reflected in the downward revision of the 2013 economic growth forecasts for Poland released by external institutions.

Some Council members deemed however, that at present it is difficult to assess the scale of further economic slowdown, which – according to few of them – may prove moderate and relatively short-lived. Consequently, GDP growth is likely to run only slightly below the potential output growth. Furthermore, few Council members pointed out that consumption and investment may be expected to pick up gradually as early as 2013, boosting GDP growth. In their opinion, this scenario will be supported by the improvement of business conditions in Poland's external environment, that may be larger than had been expected before the announcement of additional expansionary monetary policy measures by major central banks. Few Council members also pointed out that the intended relaxation by the Polish Financial Supervision Authority of recommendations related to household loans will positively influence domestic activity. Moreover, the reduction of fiscal deficit may be lower than anticipated for in the *Convergence Programme, 2012 Update*.

While discussing inflation developments, it was emphasised that price growth is decelerating while inflation still remains above the NBP inflation target as well as above the upper limit of deviations from the target. It was pointed out that the elevated inflation level results largely from supply-side factors which are beyond the direct influence of domestic monetary policy, amidst gradually declining core inflation. Some Council members stressed that weakening economic activity accompanied with decline in wage pressure and employment, significantly limits the risk of second-round effects, and thus, should support inflation decline over the next few quarters.

Some Council members assessed however, that inflation returning to the target is subject to risk posed by global commodity prices, whose further growth may be supported by strongly expansionary monetary policy conducted by major central banks. These Council members argued that this factor may limit the scale of inflation decline, as inflation is expected to decrease largely on account of slower growth in food and energy prices, i.e. price categories closely related to developments in global commodity prices. This was reflected in some upward revision of some short-term inflation forecasts prepared by the NBP. These Council members also pointed out that short-term forecasts (with horizon of 12 months) do not point to the risk of inflation falling significantly below the target within their horizon.

Other members of the Council argued that global commodity price growth should decelerate, as growth in demand for commodities from the largest emerging economies is weakening. Gradually slowing down economic growth in those countries makes commodity prices, which are already high, unlikely to continue to rise at the present pace. Therefore, according to these Council members, the developments in global commodity prices will support inflation decline in 2013. Moreover, it was pointed out that all the available macroeconomic forecasts, including the NBP July projection, suggest that inflation is to decline. The July NBP projection expects inflation to reach a level close to 2.5% in the first half of 2013, and subsequently fall below the target. Those Council members emphasised that the risk of inflation falling significantly below 2.5% is at the moment greater than assessed in July, due to a more severe than anticipated worsening of economic outlook and labour market conditions.

During the discussion, Council members also highlighted exchange rate developments. Some members argued that the zloty exchange rate is currently determined mainly by investors' assessments of the outlook for domestic economic growth. Other Council members pointed out that exchange rate movements may be also affected by interest rate disparity between Poland and the euro area.

While considering monetary policy decisions, some Council members argued that the NBP interest rates should be lowered at the current meeting. In the opinion of those Council members, the anticipated slowing of economic growth to levels significantly below potential output growth poses a risk of inflation falling below the target in the longer term, which justifies monetary policy easing. Moreover, the forecast decline in inflation to level consistent with the inflation target in the coming quarters will keep real interest rates deflated by the expected inflation – even if NBP rates are lowered – clearly positive, while at the moment real interest rates in Poland are high relative to other countries. In the assessment of these Council members, monetary policy easing is also justified by the likely persistence of low economic activity abroad and further fiscal tightening in Poland in 2013. Few Council members additionally observed that a serious economic slowdown might impede the process of reducing the general government deficit, which could, in turn, weaken the zloty and increase inflation. Hence, in their opinion, monetary policy should be eased relatively fast to limit the risk of strong economic downturn.

Other members of the Council concluded that a potential interest rate cuts should take into account the outlook for medium-term economic growth and inflation that will be presented in the November projection of the NBP. Some Council members pointed out that the current interest rates level might be appropriate to enable inflation returning to the target over the next few quarters, while interest rate cuts amidst continuing weak economic climate abroad might have limited impact on the domestic economic activity. Few Council members assessed that one should still take into consideration a risk of strong negative shock in the external environment of the Polish economy, whose accommodation through increase in private consumption or expansionary fiscal policy depends on the amount of savings in the economy. Given the currently observed very low household savings rate and still excessive fiscal deficit, interest rate cuts would further undermine propensity to save. This would, in turn, weaken the economy’s ability to accommodate any negative shock in the future.

The majority of Council members were of the opinion that the NBP interest rates should be kept unchanged at the current meeting. Yet, should the incoming data, including the November inflation projection of the NBP, confirm that economic slowdown would become protracted, while the risk of increase in inflationary pressure be limited, the Council will ease monetary policy.

A motion to lower the basic NBP interest rates by 0.50 percentage point was submitted at the meeting. The motion did not pass. A motion was also submitted to lower the basic NBP interest rates by 0.25 percentage point. The motion did not pass. The Council left the basic interest rates unchanged at the following levels: reference rate at 4.75%, lombard rate at 6.25%, deposit rate at 3.25%, rediscount rate at 5.00%.

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

The Council decided to decrease the NBP interest rates by 0.25 percentage points: reference rate to 4.50% on an annual basis; lombard rate to 6.00% on an annual basis; deposit rate to 3.00% on an annual basis; rediscount rate to 4.75% on an annual basis.

Incoming data indicate that global economic activity remained subdued in 2012 Q3. In the euro area, economic growth was probably close to zero, and in the United States, despite some rebound, remained moderate. At the same time, following several quarters of economic slowdown, growth in the largest emerging economies probably stabilised at a relatively low level. Even though weak economic activity across the world contributes to a decline in inflation, still relatively high commodity prices are conducive to inflation remaining elevated in many countries.

Following the earlier improvement, the international financial market sentiment has deteriorated slightly. At the same time, some central banks have lowered their policy rates.

In Poland, both industrial output and retail sales (in real terms) declined in September, while the fall in construction and assembly output deepened. Economic activity data were worse than expected and reflected further economic slowdown in 2012 Q3. Furthermore, labour market figures, including continued decline in employment, slower wage growth in the enterprise sector and gradually rising unemployment rate, point to a lack of wage pressure and likely further weakening in private demand. This is also confirmed by deteriorating of most business indicators.

The economic slowdown is accompanied by a gradual deceleration in lending to households, including a further decrease in the consumer loans, as well as slower growth in corporate lending.

In September, CPI inflation was 3.8%, remaining above the NBP's inflation target of 2.5%. At the same time, both core inflation and producer price growth continued to decline, which confirms that demand pressure is weakening. Household and corporate inflation expectations also declined in the recent months.

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

In line with the November projection based on the NECMOD model – assuming unchanged NBP interest rates – there is a 50-percent probability of inflation running in the range of 3.7-3.9% in 2012 (as compared to 3.6-4.2% in the July projection), within 1.8-3.1% in 2013 (as against 2.0-3.4%) and between 0.7-2.4% in 2014 (as against 1.0-2.7%). The annual GDP growth – in line with the November projection – will be, with a 50-percent probability, contained within 2.0-2.6% in 2012 (as compared to 2.2-3.6% in the July projection), within 0.5-2.5% in 2013 (as against 1.0-3.2%) and within 1.1-3.5% in 2014 (as against 1.7-4.2%).

In the opinion of the Council, incoming data confirm a considerable economic slowdown in Poland, which contains wage and inflationary pressure. At the same time, in line with the November projection prepared under the assumption of constant NBP interest rates, GDP growth will remain below potential in the coming years. According to the projection, inflation will return to the target in the coming quarters, and might fall below the target in the medium term.

Therefore, the Council decided to lower the NBP interest rates. The decrease in the interest rates should support economic activity and thus reduces the risk of inflation falling below the target in the medium term.

Should the incoming information confirm a protracted economic slowdown, and should the risk of increase in inflationary pressure remain limited, the Council will further ease monetary policy.

The Council adopted the *Inflation Report - November 2012.*

Chapter 4

PROJECTION OF INFLATION AND GDP

This inflation and GDP projection was prepared by the Economic Institute of the National Bank of Poland and presents a forecast of economic developments under the assumption of constant NBP interest rates. In terms of the contents, work relating to the creation of this projection was supervised by Andrzej Sławiński, General Director of the Economic Institute. The process was coordinated by the Bureau of Macroeconomic Forecasts of the Economic Institute. Using the macroeconomic model NECMOD[52], the projection was prepared as the outcome of an iterative process, in the course of which the paths of some variables were adjusted if they diverged from NBP experts' economic intuition based on their knowledge of economic processes. The Management Board of the NBP approved the projection to be submitted to the Monetary Policy Council. The projection constitutes 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 covers the period from 2012 Q4 to 2014 Q4. The starting point for the projection is 2012 Q3. The projection does not take into account the MPC decision of decreasing interest rates by 0.25 percentage points on 7 November 2012.

[52] Current version of the documentation of the model is available at the NBP website.

4.1. Summary

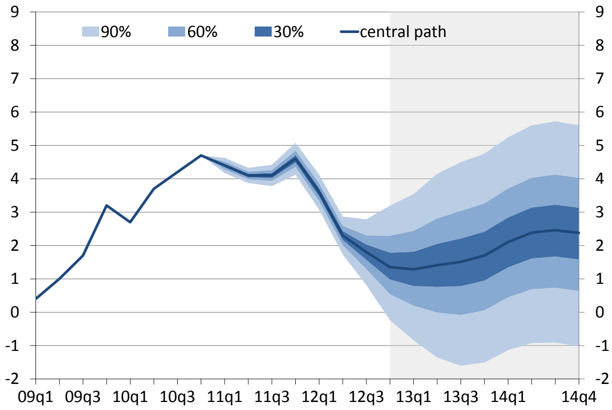
According to the current GUS estimate, GDP growth in Poland slowed down to 2.3% y/y in 2012 Q2, from 3.6% y/y in 2012 Q1, which suggests earlier than expected onset of the economic slowdown scenario outlined in the previous *Projection of inflation and GDP*. This downturn results, to a significant degree, from unfavourable developments in the external environment of the Polish economy. Having again slipped into recession in 2011 Q4, the euro area has remained depressed, as the debt problems of some euro area countries have weighed on the economy.

The economic slowdown observed in the euro area over the past few quarters is having a lagged (by approx. 2 quarters) adverse effect upon economic activity in Poland. Up to now, the impact of weak conditions abroad has been mitigated by high absorption of EU funds (estimated at over 4% of GDP) and the related rise in public investment, relatively strong conditions in German economy – the main recipient of Polish exports, zloty depreciation in 2011 Q4 which boosted price competitiveness of domestic production, as well as relatively low (on the back of heightened inflation) domestic real interest rates.

Incoming data suggest that the positive impact of the majority of the above factors is wearing away. Economic growth in Germany is assumed to continue at a slow pace of approx. 1% y/y. In the short- and medium-term of the projection horizon, growth is also expected to suffer from the impact of the 2012-2013 fiscal tightening. In 2013, growth of spending financed with absorption of the EU funds and the government co-financing will weaken, and is expected to be followed by a decline in 2014.

Figure 4.1

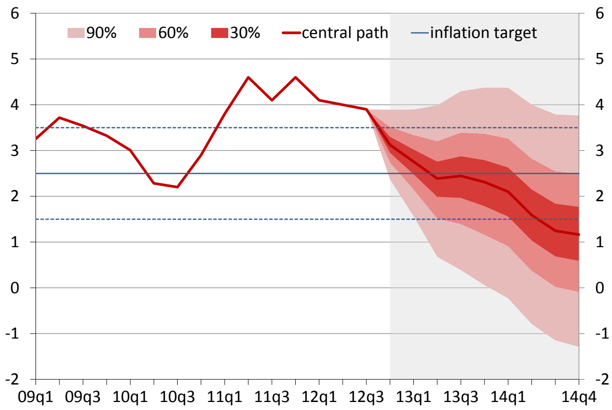
GDP (y/y, %).



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

Figure 4.2

CPI inflation (y/y, %).



As the labour market deteriorates, households' capacity to finance consumption by further decline in savings rate can be expected to remain limited over the projection horizon.

Real interest rate is assumed to rise due to the anticipated decrease in inflation and assumption of constant NBP reference rate. Consequently, economic growth in Poland will weaken considerably (down to 1.5% in 2013). Further on in the projection horizon, as conditions abroad improve and the fiscal tightening process is phased out, GDP growth will pick up, yet remain below the potential output growth.

Over the entire projection horizon, CPI inflation will be on a steady decline, to return to levels close to the inflation target in 2013 Q2 (Figure 4.2) and fall well below 2.5% in 2014. Weaker inflation pressure will be related to slower domestic growth which will ease demand pressure, depress the labour market and in turn curb unit labour cost growth. Other factors conducive to lower CPI growth will include the dying out of unfavourable price shocks, which are currently holding up domestic energy and food prices. Over the medium-term projection horizon, inflation will also subside on the back of falling oil and agricultural commodity prices in the global markets, a trend which will be supported by the global slowdown and the expected increase in the supply of these commodities. The downward trend in 2013 inflation will be partially offset by the introduction of CO_2 emission charges being a result of Poland's implementation of the Energy and Climate Package. In 2014 inflation will be additionally stemmed by reduction of the VAT basic rate back to its lower, 2010 level.

Uncertainty surrounding inflation and GDP forecast is mainly related to possible developments in the euro area and the ensuing trends in the zloty exchange rate. In our assessment, the likelihood of outlook for abroad deteriorating more acutely than assumed in the central projection (a scenario which might materialise if the sovereign debt crisis in the euro area aggravated) is on a par with the probability that conditions in Poland's external environment will be more favourable (in terms of stronger GDP growth) than the central projection assumes. This means that uncertainty distribution reflected in the fan charts of inflation and GDP projections is symmetrical (Figures 4.1 and 4.2).

4.2. External environment

2012 Q2 data have confirmed further recession in the euro area and indicate longer – than previously expected – period of unfavourable growth outlook for the United States and the United Kingdom (Figure 4.3). Forward-looking indicator readings presage persistence of tight economic conditions also in the coming quarters. In the euro area, the sentiment of businesses and consumers has deteriorated, and the unemployment rate is running at a heightened level, amidst widening gap between the labour markets of the peripheral and core countries of the region. In Germany, Poland's main trading partner, economic activity is losing momentum. The number of new orders in industry has fallen, and capacity utilisation is below its multi-annual average. In the United States, economic growth is expected to run above the forecasts for the euro area in the subsequent years, but the fiscal tightening envisaged for 2013 is still a serious source of uncertainty. The overall growth forecasts for the foreign economy over the entire projection horizon have been revised downwards from the previous forecasting round, in particular, with regard to the next year.

Weaker global economic conditions result in a slightly lower forecast of price growth both in the euro area and in the United States (Figure 4.4). Given the receding inflationary pressure, bleak outlook for economic growth and persistent uncertainty related to the sovereign debt crisis in the euro area, it is assumed that the EBC will

Figure 4.3
GDP abroad (y/y %).

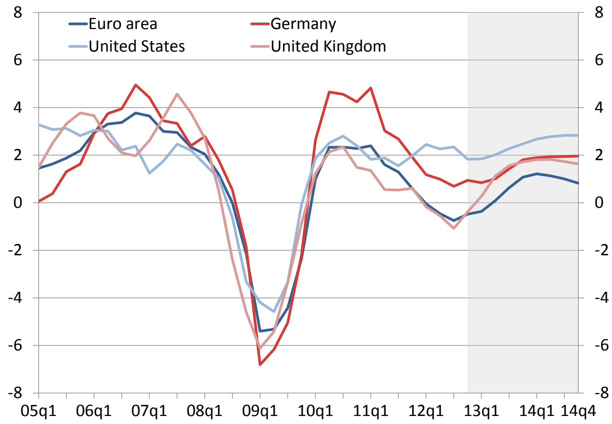
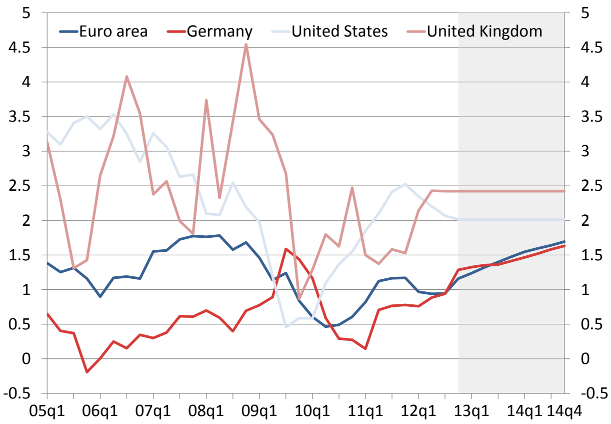


Figure 4.4
Inflation abroad (y/y, %).



uphold its interest rates at low levels over a longer period of time, with interest rate hikes unlikely until the latter half of 2014 (Figure 4.5). Thus, the euro area interest rate path has shifted downwards as compared to the previous projection. The interest rate path in the United States has also shifted down due to a merely moderate recovery in the US labour market. The Federal Reserve System is not expected to increase its interest rates until 2015. Weaker economic growth outlook in the euro area contributed to the projected weakening of the euro against the U.S. dollar to an average of 1.25 in 2013-2014.

Following a period of considerable volatility in mid-2012, in 2012 Q3 oil prices soared above the levels anticipated in the July projection. Rising prices were fuelled by concerns about disruptions in the oil supply related to, among others, the Isaac hurricane in the United States, and by seasonal factors. In the subsequent quarters, as demand for crude oil rises only moderately (amidst the slowdown in the global economy) and supply conditions stabilise, the prices are expected to come down. Coal and, to a lesser degree, natural gas prices will be rising - following a decline in 2012 Q3 - at a moderate pace due to relatively slow growth of global demand amidst stable supply. Overall, the energy commodity price index will remain relatively stable over the projection horizon.

Contrary to the expectations voiced in the previous forecasting round, agricultural commodity prices rose markedly in 2012 Q3, due to the decline in crops in the current season driven by adverse weather conditions. Over the longer term, however, the prices are expected to decline gradually (Figure 4.6) owing to the expected stabilization of agro-meteorological conditions (return to the long-term average after a period of unfavourable conditions in the previous years).

Figure 4.5

Interest rate abroad (%).

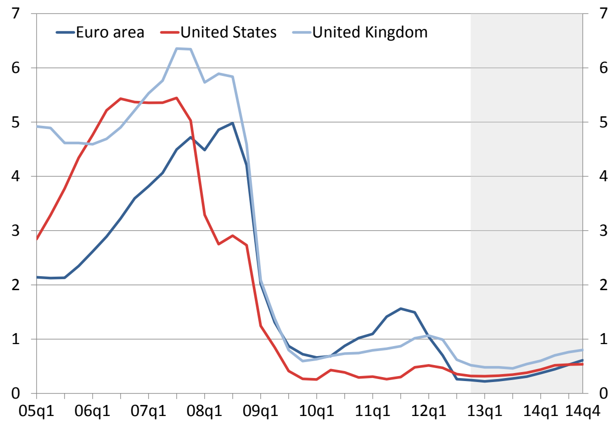
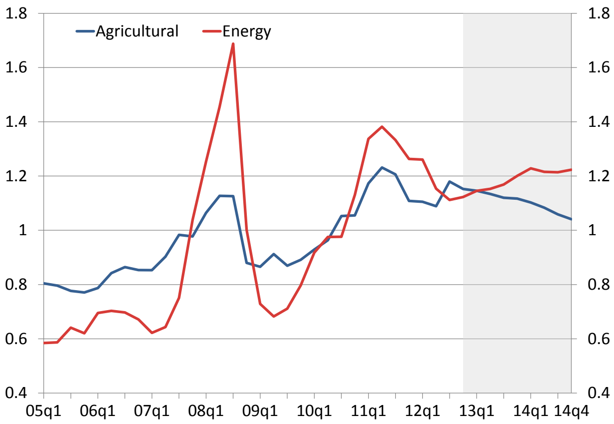


Figure 4.6

Index of commodity prices in the global markets (USD, 2010=1).



4.3. Polish economy in the years 2012-2014

Aggregate demand

Polish economy is passing through a harsh downturn phase, as indicated by current data from the real economy, including GUS estimates of GDP for 2012 Q2 (Figure 4.7). In the short- and medium-term horizon, the observed negative trends will be aggravated, and domestic growth will plummet from 4.3% in 2011 to 2.3% in 2012 and to 1.5% in 2013.

The main factors behind slowing GDP growth in Poland in the years 2012-2013 include: unfavourable economic conditions in countries being Poland's major trading partners, policy aimed at reducing the public sector deficit and hampered growth in the absorption of EU transfers (in particular structural funds). Along with falling household consumption and corporate investment as well as negative contribution of changes in inventories to GDP growth, the only factor mitigating the scale of decline in GDP growth will be positive contribution of net exports in 2012-2013.

In 2014, amidst moderate improvement in economic conditions abroad, growth in domestic demand will slightly accelerate. It will be supported by a rebound in consumption and private investment (although growth in these categories will continue below the long-term average) and the alleviation of fiscal policy tightening along with slow rebuild of inventories. On the other hand, growth rates will be restrained by low absorption of EU transfers and rising real interest rate (due to the constant NBP reference rate assumed in the projection). As a result, GDP growth will increase to 2.3% y/y in 2014 with persistently positive contribution of net exports.

Figure 4.7

Economic growth.

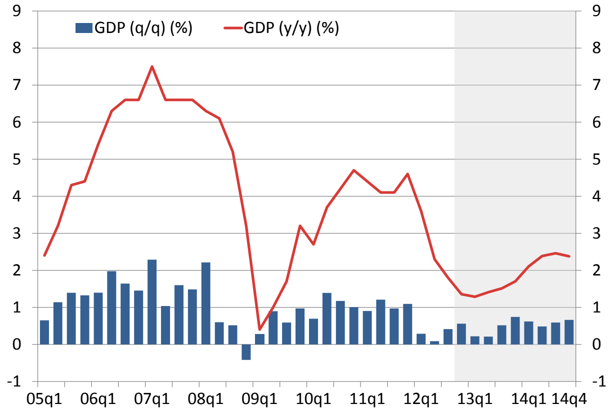
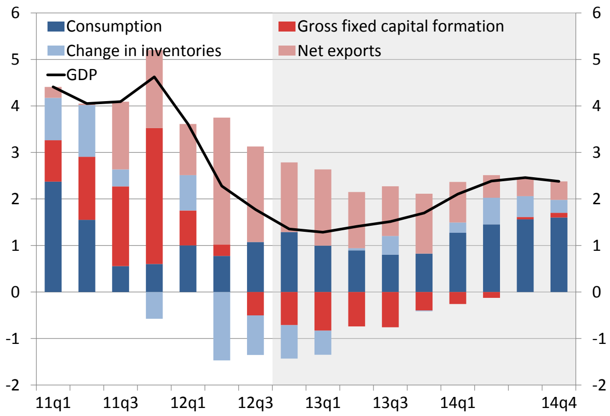


Figure 4.8

GDP growth (y/y, %) – breakdown.



In the short- and medium-term horizon of projection, private consumption growth will continue at approx. 1.5% y/y, which is close to the long-term historical low for the Polish economy (Figure 4.9). Unfavourable outlook for consumer demand in the years 2012-2013 is the result of slower growth in household real income, which, in turn, is driven by deteriorating situation in the labour market and weak growth in income from self-employment (the effect of the economic downturn). At the same time, households' capacity to smooth consumption will be limited by the historically low levels of current savings rate. Public consumption, after a decline in the first half of 2012, will follow an upward trend in the subsequent quarters; yet, public consumption growth will remain weak as a result of consolidation measures in the public finance sector (involving, inter alia, wage freeze in the government administration in the years 2012-2013 and fiscal rules currently in effect).

2014 is expected to bring moderate acceleration in private consumption growth as a result of diminishing negative trends in the labour market and falling inflation, both with a boosting effect on income growth in real terms. When the previously implemented government sector wage freeze is lifted, as assumed in the projection, public consumption will grow moderately in the long-term horizon.

Growth in gross fixed capital formation remains negative almost in the entire projection horizon, with the deepest slump in 2013 (Figure 4.10). This will be driven by a slowdown in all components of the aggregate: corporate and public investment as well as housing investment.

According to the current projection, persistently unfavourable situation in the euro area, slowdown in the domestic economy and growing real interest rate will bring about corporate investment decline in the short- and medium-tem horizon. The realisation of this scenario is supported by deteriorating financial situation of

Figure 4.9

Private and public consumption.

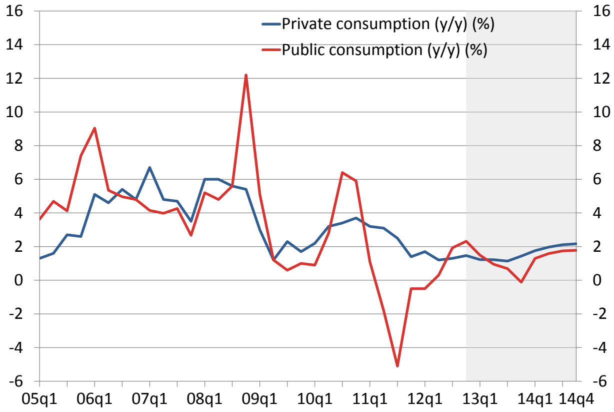
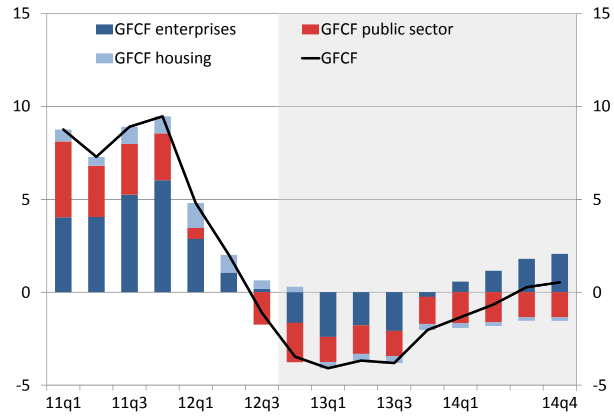


Figure 4.10

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



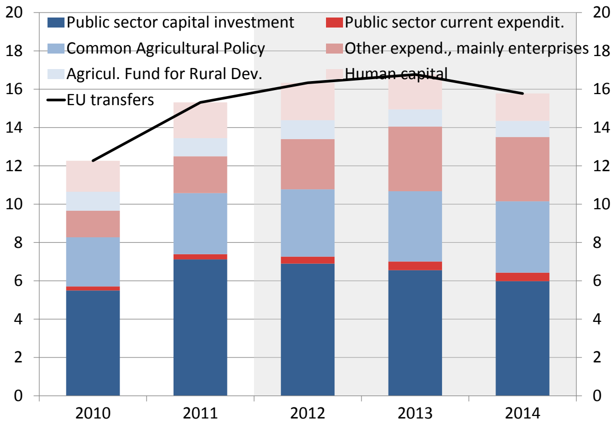
the entities in this sector and the observed cuts in new and replacement investment[53]. The impact of negative factors will be partially mitigated by anticipated growth in EU transfers intended to finance private sector's capital expenditure which will reduce its cost. Along with improving domestic and external economic conditions, corporate investment growth in the Polish economy will accelerate in 2014.

Over the projection horizon the ratio of public investment to GDP will decline. This is caused by, inter alia, falling absorption of EU structural funds for investments of the public finance sector under *the National Cohesion Strategy 2007-2013*, which ends in 2015 (Figure 4.11). Moreover, the years 2013-2015 will see considerable cuts in spending on road infrastructure within the National Road Fund. This will be accompanied by declining local investment spending in the coming years which is a result of fiscal tightening undertaken at local government level.

Over the projection horizon, a decline can also be observed in housing investment, driven by the expectations regarding banks' more restrictive lending policy[54]. Another factor contributing to this fall is deteriorating – amidst weak economic conditions – sentiment of households, which limits their propensity to incur long-term financial obligations. This is reflected, inter alia, in oversupply in the residential market[55]. Developers' investment will be additionally restrained, following its previous acceleration before the entry into force of *the Act on the protection of home buyer's rights* in April 2012. On the other hand, impact of decreasing demand on the real estate investment will be alleviated by ratio of property prices to construction costs which reflects developers' high rate of return[56].

Figure 4.11

EU transfers (in bn. EUR) – breakdown.



[53] See: Financial situation of the corporate sector – 2012 Q2, NBP.

[54] See *Senior Loan Officer Opinion Survey on Bank Lending Practices and Credit Conditions*, 2012 Q3, NBP.

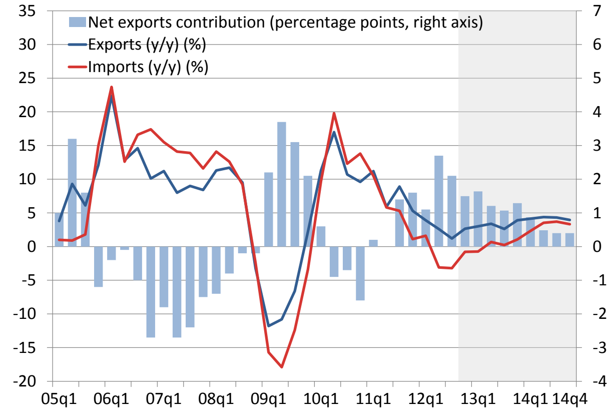
[55] See *Information on home prices and situation in the residential and commercial real estate market in Poland,2012 Q1*, NBP.

[56] Ibidem.

As a result of lower growth in external economies and weakening domestic demand, the volume of foreign trade will significantly decline in the years 2012-2013 as compared to 2011 (Figure 4.12). Yet, the decrease in import growth will be more pronounced than the fall in export growth. This is attributed to higher sensitivity of the former category to changes in the global and domestic economic conditions and a relatively good situation of German economy in comparison with other euro area countries. As a result, in the short- and medium-term horizon, contribution of net exports to GDP growth will remain positive. However in the long-term, it will gradually go down to zero, with growing domestic demand and stable exchange rate of the zloty.

Figure 4.12

Foreign trade.

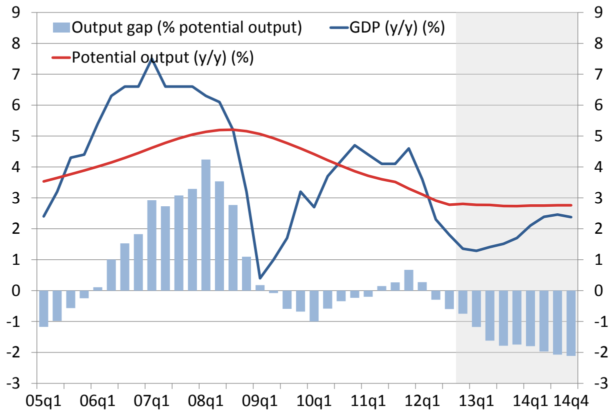


Macroeconomic equilibrium

Potential GDP growth, which fell in the aftermath of the global financial crisis, will remain close to 3% y/y over the projection horizon and below its long-term average. Due to the slowdown in economic activity (reflected in a drop of GDP below its potential level), the output gap, negative since 2012 Q2, will continue to widen throughout the projection horizon, reaching -2.1% of GDP in 2014 Q4 (Figure 4.13).

Figure 4.13

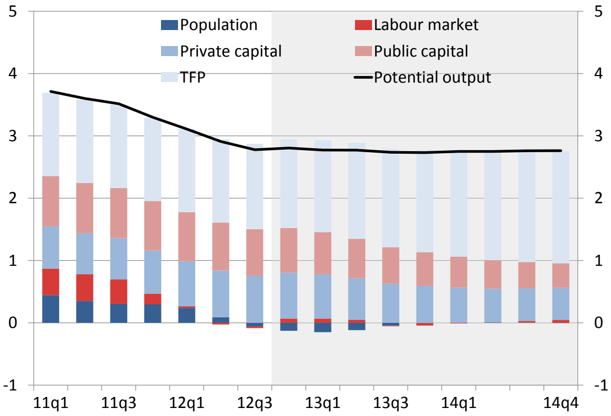
Output gap.



Potential output growth remains stable over the projection horizon as a result of the positive impact of total factor productivity (TFP) growth returning to the level observed before the global financial crisis and the concurrent decline in productive capital reflected in both public and corporate investment growth (Figure 4.14). The relatively stable – over the projection horizon – equilibrium labour supply is neutral with respect to potential output growth due to both positive and negative structural changes in the labour market which are offsetting each other. The equilibrium unemployment rate (NAWRU) will be on the rise over the projection horizon as a result of the hysteresis effect. Yet, this rise will only be moderate due to high elasticity of the domestic

Figure 4.14

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



labour market reducing wage pressure[57]. Labour force participation rate will be negatively affected by deteriorating age structure in the coming years driven by growing number of persons at post-working age. Moreover, labour supply will be curbed by higher percentage of persons ready to continue their studies or remain on a childcare leave due to difficulties in finding a job. On the other hand, labour force participation rate will continue to be positively affected by regulations' changes limiting the eligibility for retirement benefits before the attainment of the normal retirement age, (the so-called bridging pensions introduced in 2009) as well as the raise of the retirement age (as of the beginning 2013). It is estimated that these changes increase the number of the economically active population by approx. 130 thousand persons over the projection horizon.

On the other hand, weaker economic activity affects the labour market, whereas, given labour market rigidities, economic slowdown is first seen in the decline in wage growth, and then in fall in the number of working persons (Figure 4.15, Figure 4.16, Figure 4.17). The number of the employed follows a downward trend throughout the projection horizon, which, amidst relatively stable labour force participation rate translates into growing unemployment rate and widening unemployment gap (up to 2 p.p. in 2014 Q4). Widening unemployment gap is indicative of a falling wage pressure - throughout the projection horizon real wage growth will be significantly below labour productivity growth. As a result, until the end of 2014, wage fund contribution to GDP will continue to fall. Growth in unit labour costs will decrease below 1.5% y/y in 2013 Q2, as the impact of the rise in the disability pension contribution on growth in this category fades.

Throughout the projection horizon the continuing current account deficit ,, will be largely offset by the inflow of EU funds. External imbalances as

[57] See *Labour market survey – report 2012*, NBP.

Figure 4.15

Employment and activity in the labour market.

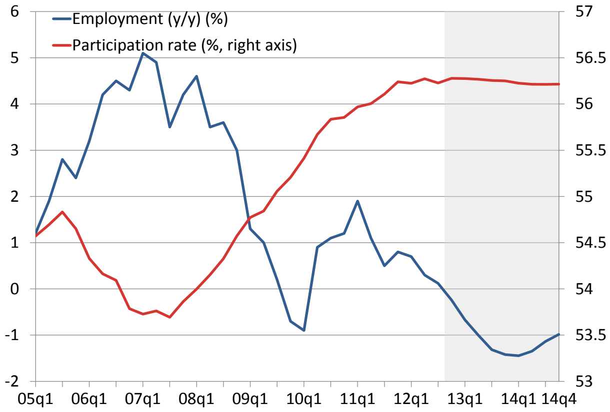


Figure 4.16

Unemployment.

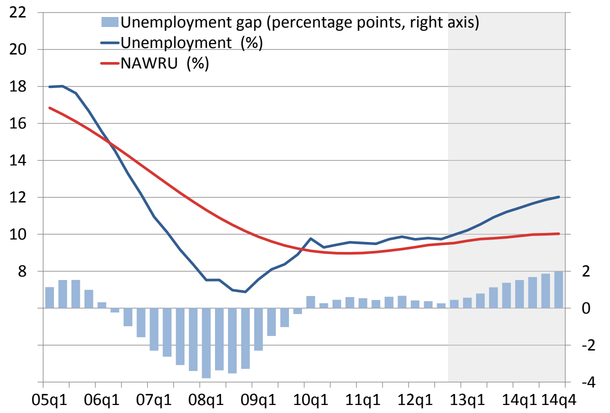
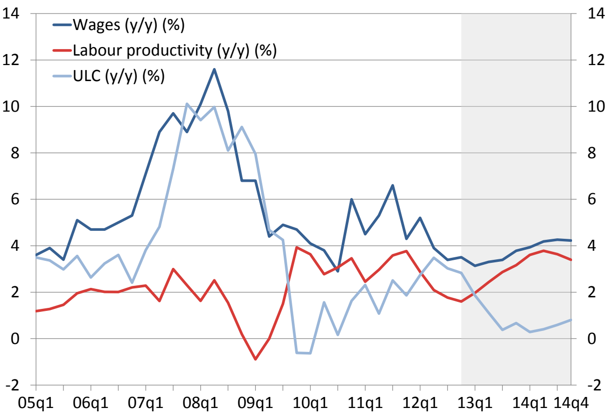


Figure 4.17

Unit labour costs.



measured by the ratio of current and capital account deficit to GDP will further decline over the projection horizon (from 1.4% of GDP in 2012 to 0.6% of GDP in 2014) as a result of improving trade balance (positive contribution of net exports throughout the projection horizon) – despite a deteriorating balance of transfers from the EU (end of the financial perspective) and a relatively stable income balance.

Foreign exchange rate and inflation

Following zloty appreciation in 2012 Q3, the factors strengthening and weakening the Polish currency will be, to a large extent, offset over the projection horizon. As a result, the nominal effective zloty exchange rate will remain relatively stable. On the one hand, the zloty exchange rate continues to run below the level determined by fundamental factors, which will support a gradual appreciation of the currency towards the equilibrium level. Weak economic growth in the domestic and foreign economies will limit the inflow of direct and portfolio investment into the Polish market. Additionally, the narrowing interest rate disparity, resulting from the assumption of a constant NBP reference rate adopted in the projection, will weaken the zloty exchange rate.

Modest economic growth and stable exchange rate will drive core inflation down to 0.9% in 2014 (Figure 4.19). In particular, unit labour cost growth will drop significantly along with declining unemployment and moderate wage growth. In the short term, the decline in core inflation will also be driven by considerably slower growth of import prices (Figure 4.18) resulting, among other things, from the lagged impact of the 2012 Q3 zloty appreciation. In the long term projection horizon, the fall in core inflation will be additionally enhanced by the expected return of the basic VAT rate to 22% in 2014.

Figure 4.18

Terms-of-trade.

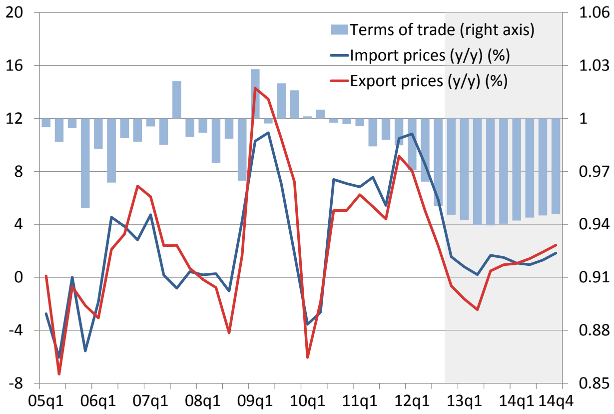
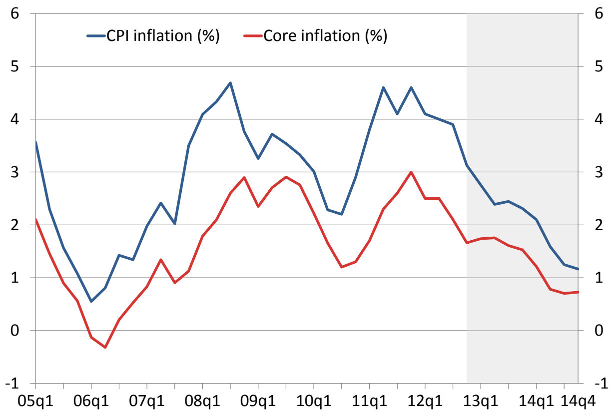


Figure 4.19

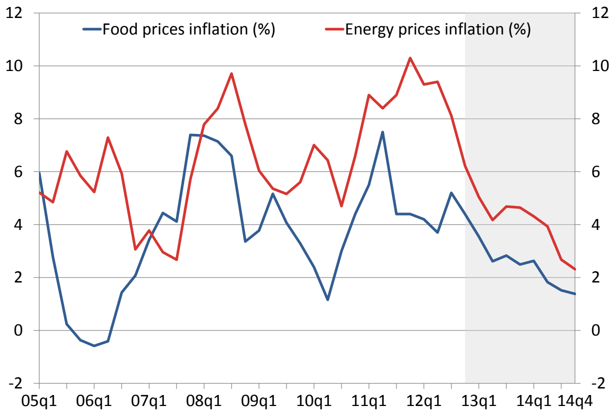
CPI and core inflation (y/y, %).



Due to unfavourable supply conditions in the Polish and the global markets, domestic food price inflation will remain relatively high in the coming quarters. In the medium and long-term projection horizon, the growth rate of domestic food prices will slow down to 1.7% in 2014. (Figure 4.20). Factors limiting food price growth will include, apart from moderate growth in the domestic economy, decline in agricultural commodity prices observed in the global markets throughout the projection horizon. Their disinflationary impact is only partly offset by the appreciation of the US dollar against the euro (and, consequently, against the Polish zloty).

Figure 4.20

Inflation of food and energy carrier prices (y/y, %).



Energy price inflation in the short-term projection horizon will remain high at 8.2% in 2012 as a result of high crude oil prices in the global markets, energy price increases implemented by the Energy Regulatory Office and rises in excise tax on diesel oil as of 2012. Decline in energy price growth in the medium- and long-term projection horizon will be supported by gradually falling crude oil prices in the global markets and a relatively low growth in the prices of other energy commodities. In 2013, factors boosting energy prices may include higher energy costs resulting from the purchase of CO_2 emission allowances being fed through to electricity prices. Yet, due to the economic slowdown in the EU, the anticipated prices of emission allowances have declined recently, thus limiting the expected impact of the implementation of the Energy and Climate Package on energy price growth against previous estimates of the NBP[58]. Yet, lower energy price growth in the last year of the projection should be supported by the expected decrease in the standard VAT rate.

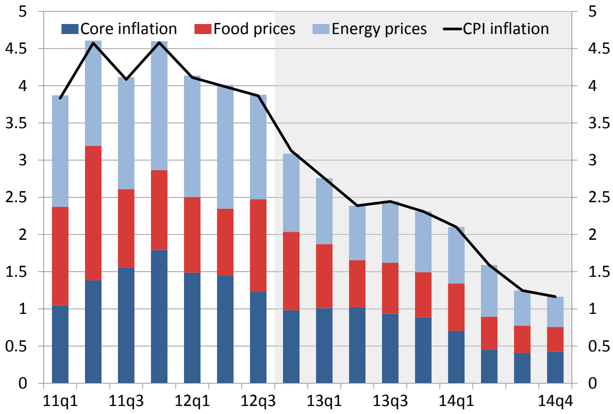
As a result of these developments, CPI growth in 2012 will run slightly below the last year's level (3.8% y/y). The relatively high CPI inflation in 2012 results from both weakening of the zloty in

[58] See *Short-term Macroeconomic Impact of the Energy and Climate Package in the Polish Economy*, NBP, 2012. Since the release of the above report, prices of emission allowances have fallen.

2012 Q2 and regulatory factors (rise in the excise tax on diesel fuel, increased disability pension contributions, the policy of the Energy Regulatory Office), amidst moderate demand pressures. In the medium term, along with the aggravating economic downturn and deteriorating situation in the labour market, inflation will decline to a level close to the NBP inflation target (2.5% in 2013). The implementation of the Energy and Climate Package is a factor likely to delay inflation's return to the target (Figure 4.21). In 2014, the downward trend in inflation will continue (CPI inflation will go down to 1.5%), which will be supported by favourable developments in commodity prices in the global markets (falling agricultural commodity prices and levelling off of energy prices)and reduction of the standard VAT rate. Under the assumption of a constant NBP reference rate throughout the projection horizon, the probability of the average annual inflation ranging from 1.5% to 3.5% in the years 2013-2014 amounts to an average of 54%.

Figure 4.21

CPI inflation (y/y- %) - breakdown.



4.4. Current versus previous projection

The main factors behind the changes in the path of inflation and GDP between the July and November forecasting rounds include: downgraded forecasts for economic growth abroad and worse than expected data on national accounts in 2012 Q2, as published by the Central Statistical Office (CSO). As a result of these changes, the annual CPI inflation in the years 2012-2014 will be lower by an average of 0.2 percentage point than in the previous forecasting round, whereas the forecasted economic growth rate declined by an average of 0.6 percentage point (Table 4.1).

Table 4.1

November projection versus July projection.

	2012	2013	2014
CPI inflation (y/y, %).			
XI 2012	3.8	2.5	1.5
VII 2012	3.9	2.7	1.8
GDP (y/y, %).			
XI 2012	2.3	1.5	2.3
VII 2012	2.9	2.1	3.0

GDP

The downward revision in the forecasted GDP growth in 2012 was mainly driven by lower contribution of change in inventories and slower investment growth, with higher contribution of net exports to growth (Figure 4.23). The change between projections results largely from CSO estimates for 2012 Q2 GDP growth being lower than anticipated (2.3% y/y) and current monthly data (industrial and construction production and retail sales in 2012 Q3) indicating further weakening in the domestic economy. The data suggest that enterprises, amidst deteriorating market sentiment, have considerably reduced inventories and gross fixed capital formation. Furthermore, weaker growth in private consumption growth (as a result of sluggishly rising wage fund), dragged down growth in domestic demand. On the other hand, contribution of net exports to GDP growth in 2012, exceeding the July expectations, results from a marked weakening in imports growth driven by lower domestic demand, amidst relatively lower, albeit substantial, decline in exports growth on the back of lower foreign demand.

The downward revision of GDP growth in the subsequent years of the projection is the result of worse outlook for growth in countries being Poland's main trading partners (growth slower by approx. 0.4 percentage point in the years 2013-2014), which, apart from the negative impact through the foreign trade channel, adds to risk aversion and, consequently, hampers domestic investment. With deteriorating situation in labour market, reflected by higher unemployment rate and lower wage growth than assumed in the previous projection, private consumption growth is expected to be slower. Additionally, weaker wage growth in the public sector, driven, among other things, by assumption in the current projection of no increase in teachers' wages in

Figure 4.22

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

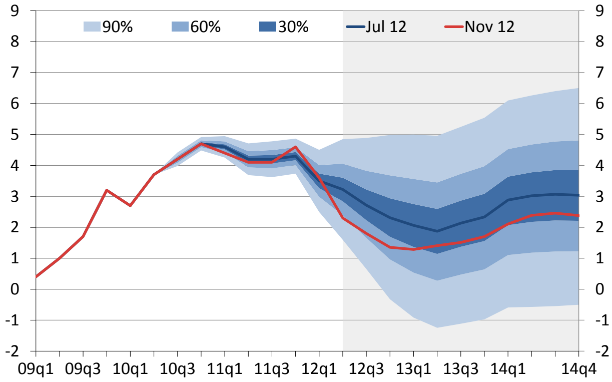
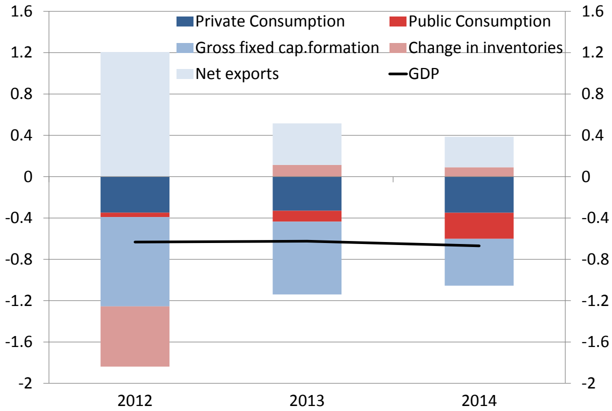


Figure 4.23

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



September 2013 [59], leads to a negative contribution of public consumption to changes in GDP growth in 2014 between the forecasting rounds. On the other hand, the scale of downward GDP revision will be limited by slightly higher contribution of change in inventories. Projection assumes that following a negative, and below expectations, contribution of inventories to GDP growth in 2012, inventories will be gradually rebuilt and net exports will be higher (being the result of lower domestic demand).

Inflation

Data on consumer price growth for 2012 Q2 were consistent with the previous expectations, whereas consumer price data for 2012 Q3 fell slightly short of July projection expectations. Both quarters saw higher food price growth and lower energy price inflation and core inflation.

The breakdown of differences in the path of CPI inflation throughout the whole projection horizon looks similar. Lower forecasts of core inflation and energy price inflation were the key factors behind the decline in inflation projection (by an average of 0.2 percentage point).Yet, this decline is curbed by higher food price inflation in this forecasting round (Figure 4.25).

The decline in the forecasted core inflation is the result of deeper economic downturn reflected in lower demand pressure and deteriorating situation in the labour market, and consequently, weaker unit labour cost growth. Transmission mechanism of these processes affects prices with some lag resulting the largest downward revision in core inflation in 2014.

Energy prices are another factor curbing inflationary pressure in 2012 and 2013. Slower energy price growth in the short- and medium-term is the continuation of the trends observed in

Figure 4.24

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

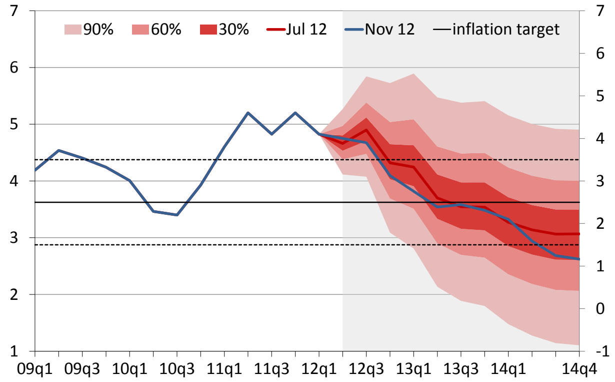
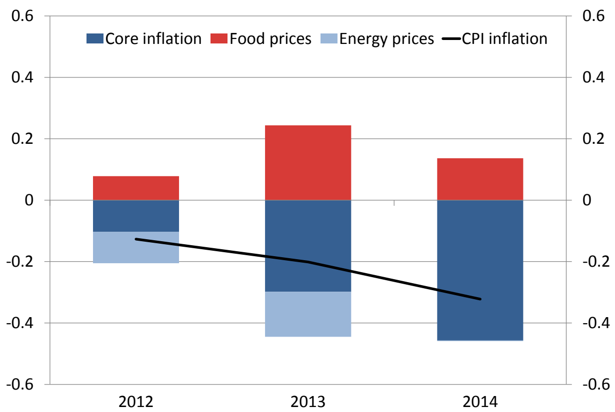


Figure 4.25

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



[59] See Draft *Budget Act for 2013 (art. 13, par. 2).*

2012 Q3 and results from lower wholesale prices of electricity (which are likely to reduce future increase in electricity tariffs for households, approved by the Energy Regulatory Office). In 2013 lower – than assumed in the previous projection – growth in energy prices is also driven by a downward revision in the forecasts for prices of CO2 emission allowances.

On the other hand, the November projection assumes faster growth in food prices. This is largely due to higher prices of agricultural commodities in the global markets (an average growth of approx. 10% over the projection horizon as compared with the July projection, see Figure 4.6) and the expectations that they will feed through to domestic prices (in particular, prices of cereals and oilseed crops), which, with a certain time lag, will be conducive to rising meat and dairy prices.

4.5. Forecast uncertainty sources

It is estimated that the balance of risk factors for both GDP and inflation growth is symmetrical over the projection horizon (Table 4.2). Major sources of projection uncertainty are presented below.

External environment and exchange rate

The external environment, and, in particular, the duration of recession in the euro area as well as the scale of subsequent recovery remain the most important source of uncertainty for the projection of inflation and GDP. Current data on deteriorating situation in Spain and Italy additionally point at the likelihood of debt servicing problems in those countries in the event of higher interest on their bonds. From the perspective of domestic economic growth, zloty depreciation may constitute a factor mitigating unfavourable consequences of deepening recession in the euro area, as was the case during

Table 4.2
Probability of inflation running:

	below 1.5%	below 2.5%	below 3.5%	below the central projection	In the range (1.5-3.5%)
12q4	0.00	0.09	0.79	0.50	0.79
13q1	0.04	0.37	0.86	0.51	0.82
13q2	0.20	0.56	0.88	0.52	0.67
13q3	0.24	0.54	0.83	0.53	0.60
13q4	0.29	0.58	0.84	0.52	0.55
14q1	0.34	0.62	0.85	0.51	0.51
14q2	0.47	0.73	0.90	0.50	0.43
14q3	0.55	0.79	0.93	0.49	0.37
14q4	0.57	0.80	0.93	0.49	0.36

the 2008/2009 global financial crisis. At the same time, weaker domestic currency would limit inflation decline resulting from a deeper negative demand shock. Also, the response of central banks to uncertainty about economic developments in the developed countries is difficult to predict. In particular, it is difficult to assess full consequences of the announcement of the third round of quantitative easing in September 2012 by FED (the so-called QE3 programme).

Domestic demand

An important source of uncertainty for the projection is the reaction of households and the enterprise sector to the developments abroad and to the fiscal tightening. The effects of fiscal tightening reflected in smaller deficit of the public finance sector will probably improve Poland's creditworthiness, yet, at the same time, this assessment is largely determined by short-term prospects of economic growth, undermined by fiscal consolidation. Moreover, the favourable developments in the domestic and foreign markets may contribute to improved perception of Poland by foreign investors and translate into higher inflow of capital, including direct investment. Consequently, growth in consumption and corporate investment in the future may be higher, which may be supported by increased production capacity utilization in the economy and high financial liquidity of enterprises. On the other hand, prolonged recession in the euro area, amidst low savings rate and restricted loan availability, may lead to weak growth in domestic consumption and investment continuing for a long period of time.

Food and energy prices in Poland

Another source of uncertainty for the projection is the difficult to predict impact of regulatory policy and the situation in the global commodity market on domestic energy and food prices. Considerable uncertainty in this respect is the unknown impact of the future EU environmental policy, especially as regards the implemented Energy and Climate Package, aiming to reduce CO2 emissions. There is no information about the price of CO2 emission allowances, which may largely depend on the demand for emission rights, and therefore on economic activity of the EU countries. Uncertainty is also increased by the absence of detailed records regarding the allocation of proceeds from the sale of emission rights and the size of investments in low emission technologies and sources of renewable energy. Regulatory measures in the food and energy markets (energy legislative package of the Ministry of Economy), as well as future tariff policy of the Energy Regulatory Office are an additional source of uncertainty. Unfavourable supply developments in the cereal market, largely due to low crops in Northern America and prospects of limited exports from Russia and the Ukraine add to the probability of food prices running above the central path of the projection in the short-term horizon.

Fiscal and regulatory policy

Fiscal and regulatory policy may represent an important factor of uncertainty for the future inflation and GDP, in particular towards the end of the projection horizon.

The 2011-2012 measures to increase the general government revenues and curb expenditures were aimed, on the one hand, at reducing the 2012 deficit down to the level allowed by EU regulations, thus allowing for the lifting the excessive deficit procedure against Poland, and on the other, maintaining the public debt below the 2nd prudential threshold specified in the *Public Finance Act*. Given the anticipated economic downturn, in order to keep the public deficit at a level compliant with national and European fiscal rules, it may be necessary to take additional adjustment measures in the projection horizon, for instance to abandon the reinstatement of the standard 22% VAT rate in 2014 (which the Projection takes into account). Moreover, the degree of EU fund utilisation in the coming years as well as proposals for regulations and investment projects contained in the Prime Minister's so-called second *Policy Speech* of 15 October 2012 constitute an additional source of uncertainty for GDP projection.

Table 4.3

Central path of inflation and GDP projection

	2010	2011	2012	2013	2014
Consumer Price Index CPI (% y/y)	2.6	4.3	3.8	2.5	1.5
Food prices (% y/y)	2.7	5.4	4.4	2.9	1.8
Energy prices (% y/y)	6.2	9.1	8.2	4.6	3.3
Core inflation net of food and energy prices (% y/y)	1.6	2.4	2.2	1.7	0.9
GDP (% y/y)	3.9	4.3	2.3	1.5	2.3
Domestic demand (% y/y)	4.6	3.6	0.4	0.2	1.9
Individual consumption (% y/y)	3.2	3.1	1.4	1.3	2.0
Public consumption (% y/y)	4.1	-1.1	0.8	0.7	1.6
Gross fixed capital formation (% y/y)	-0.2	8.1	0.5	-3.4	-0.3
Contribution of net exports (percentage point y/y)	-0.7	0.6	1.9	1.3	0.5
Exports(% y/y)	12.1	7.5	3.1	3.2	4.2
Imports (% y/y)	13.9	5.8	-1.2	0.3	3.2
Gross wages (% y/y)	4.0	5.2	4.0	3.4	4.2
Total employment (% y/y)	0.6	1.1	0.2	-1.1	-1.2
Unemployment rate (%)	9.5	9.7	9.8	10.7	11.7
NAWRU (%)	9.0	9.1	9.4	9.8	10.0
Labour force participation rate (%)	55.7	56.1	56.3	56.3	56.2
Labour productivity (% y/y)	3.3	3.2	2.1	2.6	3.6
Unit labour costs (% y/y)	0.7	1.9	3.0	1.0	0.5
Potential output (% y/y)	4.1	3.5	2.9	2.8	2.8
Output gap (% of potential GDP)	-0.5	0.2	-0.3	-1.6	-2.0
Index of agricultural commodity prices (USD; 2010=1.00)	1.00	1.18	1.13	1.13	1.07
Index of energy commodity prices (USD; 2010=1.00)	1.00	1.33	1.16	1.17	1.22
Price level abroad (% y/y)	0.8	1.0	1.4	1.3	1.6
GDP abroad (% y/y)	2.5	1.8	0.0	0.7	1.4
Current and capita account balance (% GDP)	-3.3	-2.9	-1.4	-0.9	-0.6
WIBOR 3M (%)	3.89	4.54	5.05	5.01	4.97

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 2012

- **Date:** 4 July 2012

Subject matter of motion or resolution:
Motion to lower the NBP interest rates by 0.50 percentage point.

MPC decision:
Motion did not pass.

Voting of the MPC members:

For: A. Bratkowski

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

Z. Gilowska was absent.

- **Date:** 4 July 2012

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

MPC decision:
Motion did not pass.

Voting of the MPC members:

For: A. Bratkowski
E. Chojna-Duch

Against: M. Belka
A. Glapiński
J. Hausner
A. Kaźmierczak
A. Rzońca
J. Winiecki
A. Zielińska-Głębocka

Z. Gilowska was absent.

- **Date:** 5 September 2012

Subject matter of motion or resolution:
Motion to lower the NBP interest rates by 0.50 percentage point.

MPC decision:
Motion did not pass.

Voting of the MPC members:

For: A. Bratkowski
E. Chojna-Duch

Against: M. Belka
A. Glapiński
J. Hausner
A. Kaźmierczak
A. Rzońca
A. Zielińska-Głębocka

Z. Gilowska and J. Winiecki were absent.

- **Date:** 5 September 2012

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

MPC decision:
Motion did not pass.

Voting of the MPC members:

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

Z. Gilowska and J. Winiecki were absent.

- **Date:** 18 September 2012

Subject matter of motion or resolution:
Resolution No. 6/2012 on adopting *Monetary Policy Guidelines for 2013*.

Voting of the MPC members:

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

E. Chojna-Duch was absent.

- **Date:** 18 September 2012

Subject matter of motion or resolution:
Resolution No. 7/2012 on setting the ceiling for liabilities arising from loans and credits drawn by the NBP at foreign banking and financial institutions in 2013.

Voting of the MPC members:

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

E. Chojna-Duch was absent.