# Inflation Report
# July 2012

National Bank of Poland
Monetary Policy Council

Warsaw, July 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 20 June 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 2012 Q1, global economic activity stabilised at a low level. Stagnation in the euro area was accompanied by moderate growth in the United States. At the same time, in major emerging economies, economic growth weakened slightly while remaining markedly stronger than in the developed economies. In some advanced economies, GDP growth was curbed by the continuing balance sheet adjustments in the financial and non-financial sector, combined with adverse conditions in the labour and real estate markets, as well as tensions in public finances. Global economic growth has additionally been inhibited by high fuel prices, notwithstanding their marked decrease observed recently.

In recent months, inflation in the advanced economies has been easing. Concurrently, inflation in the emerging economies levelled off after a substantial decline at the turn of 2011 and 2012. Factors curbing global inflation included, above all, slowing growth of energy prices and in some economies also food prices.

Since the publication of the previous *Report,* volatility in the international financial markets has again increased. Financial market sentiment had continued deteriorating until the end of May 2012. This was driven by worse than expected data on global economy and uncertainty about the development of the sovereign debt crisis in some euro area countries, most notably in Spain and Greece. As risk aversion intensified by end-May 2012, yields on safe haven assets (US and German bonds) declined to historical lows. Yet, uncertainty eased in June, following the extension of financial assistance to the Spanish banking sector and the final outcome of parliamentary elections in Greece, which have translated into a slight improvement in the financial markets sentiment. Nevertheless, risk aversion remained elevated.

The major central banks continued strongly expansionary monetary policy, keeping their interest rates at historically low levels, and also continuing or extending the previously announced quantitative easing programmes. At the same time the central banks of emerging economies and small developed economies pursued diversified monetary policy. Many of them continued to ease their monetary policy or kept their interest rates unchanged, while some of them increased their rates. Some central banks of emerging economies, whose currencies have depreciated, intervened in the foreign exchange markets.

In Poland, the annual consumer price growth, having accelerated at the end of 2011 to 4.6%, decreased by May 2012 to 3.6%, i.e. slightly above the upper limit for deviations from the NBP inflation target. The decline in inflation between December 2011 and May 2012 was driven by a slower growth in all main price categories of goods and services, above all food prices. In the subsequent months of the period under review, growth in inflation was hampered by the zloty exchange rate appreciation (in monthly terms) observed in January and February 2012. The appreciating zloty mitigated the impact of heightened global prices of agricultural and energy commodities on domestic prices. This was reflected in weaker food price growth and a stabilisation in energy price growth in 2011 Q1. Since the beginning of the year inflation eased down further as the impact of last year's VAT rate increases on the annual price growth had worn away. On the other hand, heightened inflation in the analysed period was supported by a relatively sharp rise in administered prices - both those of energy carriers and services.

In the period under review, the impact of demand on maintaining elevated inflation was limited, as indicated by weaker total consumption growth in 2012 Q1.

In December 2011 - May 2012, decreasing CPI inflation was accompanied by declines in all core inflation measures. In similarity to the CPI index, core inflation declined mostly as the impact of the 2011 VAT rates increases wore away and the zloty appreciated. On the other hand, the decline in core inflation was limited, in the period under review, by rising prices of excise products, most specifically tobacco products. The growth of producer prices in industry declined in 2012 Q1 which was supported by the zloty appreciation (in monthly terms) and a simultaneous fall in the annual oil price growth. 12-month inflation forecasts by financial sector analysts were revised slightly downward – from 2.9% in January to 2.7% in June 2012. At the same time inflation expectations of enterprises and individuals have declined approaching the upper limit for deviations from the NBP inflation target.

In 2012 Q1, GDP growth eased down. According to GUS preliminary estimates, in 2012 Q1 GDP growth amounted to 3.5% y/y as against 4.3% y/y in 2011 Q4. The decline in GDP annual growth was driven both by slowdown in domestic demand and lower contribution from net exports. Weakening domestic demand growth reflected a slower rise in investment and public consumption amidst moderate growth in private consumption. In 2012 Q1 financial situation of enterprises remained sound, albeit deteriorated slightly as compared to 2011 Q4.

In 2012 Q1, the annual growth in the number of persons working in the economy and the enterprise sector declined further, although still remained positive. At the same time, the number of the economically active was on a steady rise and the unemployment rate was higher than a year before. According to the incoming data, both the nominal wage growth in the economy and the nominal growth in unit labour costs have remained moderate.

Since the publication of the previous *Report,* the Monetary Policy Council raised the NBP interest rates by 0.25 percentage points, increasing the reference rate to 4.75%. This triggered a similar increase in the money market rates, though the WIBOR-OIS 3M spread, which approximates the level of credit risk premium in the interbank market decreased slightly, in line with global trends. Since the publication of the previous *Report* the yield curve has flattened. The NBP interest rate increase of May 2012 translated into a rise in 2-year Treasury bond yields. The yields of Treasury bonds with longer maturities were determined mainly by sentiment in the international financial market. Stock prices at the Warsaw Stock Exchange, under the impact of global sentiments, fell strongly between mid-March and end-May 2012, to unwind partly in the following weeks. In 2012 Q1 both asking and sale housing prices in the primary and secondary markets still followed a declining trend.

Similarly to other currencies of the emerging markets, in the period between the publication of the previous *Report* and the end of May 2012, the zloty depreciated due to deteriorating sentiments in international financial markets, with the scale of depreciation being relatively high in the first half of May. In June 2012 the zloty slightly appreciated.

Since the publication of the previous *Report,* lending growth slowed down somewhat. The growth of corporate lending has declined which may have been supported by lower credit demand from companies. However, the growth of corporate lending has stayed high. In February – May 2012 monthly increases in housing loans to households continued to subside, while majority of newly granted housing loans were PLN-denominated loans. Weaker growth in housing loans was supported by a considerable lowering of pricing limits in the housing programme *Family on Their Own*, as well as further tightening in lending conditions and criteria as announced by banks, which was largely related to the implementation of the Recommendation S. The recent period saw a further decline in household debt resulting from consumer loans, although the scale of drops decreased. The growth of broad money weakened somewhat, yet still remained above the nominal GDP growth. Corporate deposits shrank, whereas total value of households' financial assets increased which was mainly driven by growth in household deposits and increase in the value of financial assets held by households.

In 2012 Q1, the current account deficit deepened slightly as compared to 2011 Q1. Growing imbalance on the current account was driven by rising deficit on goods and income. Slowing exports, resulting from the increasingly weak demand from the euro area countries, were accompanied by rising imports boosted by hikes in global energy commodity prices observed at the beginning of the year. At the same time the deficit on income widened substantially which could be fuelled by strong financial performance of enterprises, which involved considerable income from foreign direct investment in Poland. In 2012 Q1, the capital account surplus decreased, partially as a result of lower EU fund flows to the account. This might have stemmed from different dates of EU transfers as compared with the previous year. In 2012 Q1, the deficit on the current and capital accounts was mainly financed by the surplus on portfolio investment, attributable primarily to rising purchases of debt securities by non-residents. 2011 Q4 saw most external imbalance indicators improved.

The *Inflation Report* is structured as follows: in Chapter 1 economic developments in the external environment of the Polish economy are presented in the context of their impact on inflationary processes in Poland. Those processes as well as the domestic factors affecting them are discussed in Chapter 2. *Minutes of the Monetary Policy Council decision-making meetings* held in March - June 2012 together with the *Information from the meeting of the Monetary Policy Council* in July 2012 are presented in Chapter 3. *Minutes from the MPC meeting* held in July will be published on 23 August 2012 and so will be included in the next *Report*. MPC voting records in the period February-May 2012 can be found in Chapter 5. Moreover, Chapters 1 and 2 of this *Report* include three boxes: "Introduction of inflation targets in the United States and Japan ", "The impact of administered prices on inflation developments" and "Public debt after the global economic crisis".

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 July projection based on data available up to 15 June 2012 (cut-off date for the projection) – under the assumption of constant NBP interest rates – there is a 50-percent probability of inflation running in the range of 3.6-4.2% in 2012 (compared to 3.6-4.5% in the March projection), 2.0-3.4% in 2013 (as against 2.2-3.6%) and 1.0-2.7% in 2014 (as against 1.2-3.0%). In turn, with a 50-percent probability the July projection sees the annual GDP growth in the range of 2.2-3.6% in 2012 (compared to 2.2-3.8% in the March projection), 1.0-3.2% in 2013 (as against 1.1-3.5%) and 1.7-4.2% in 2014 (as against 1.9-4.4%).

# Chapter 1

# EXTERNAL ENVIRONMENT OF THE POLISH ECONOMY

## 1.1. Global economic activity

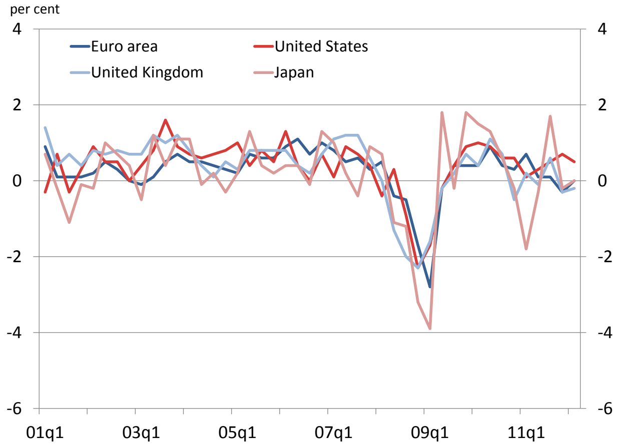
In 2012 Q1, global economic activity stabilised at a low level. Stagnation in the euro area was accompanied by moderate growth in the United States (Figure 1.1)[1]. In major emerging economies, economic growth weakened slightly while remaining markedly stronger than in the developed economies (Figure 1.6). Global business climate indicators point to a certain deterioration in the global economic sentiment in 2012 Q1 (Figure 1.2).

In some advanced economies, GDP growth was curbed by the continuing balance sheet adjustments in the financial and non-financial sector, combined with adverse conditions in the labour and real estate markets. Global economic growth was additionally inhibited by high fuel prices, notwithstanding their marked decrease observed recently.

In 2012 Q1, GDP growth in the USA slowed down somewhat in comparison to the previous quarter and stood at 0.5% q/q (as against 0.7% q/q in 2011 Q4, Figure 1.1). Simultaneously, private consumption growth accelerated, which was related to a decline in households saving rate.

**Figure 1.1**

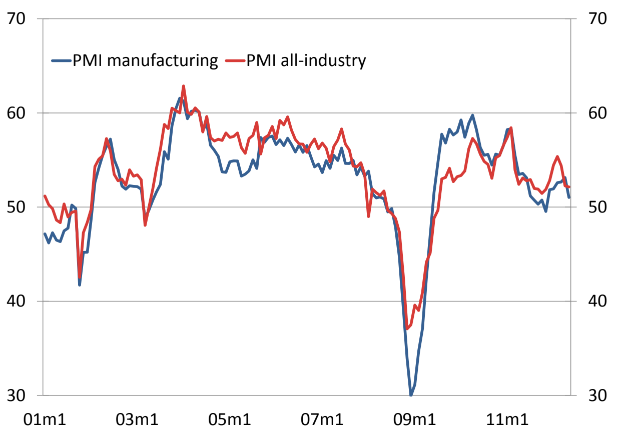
Economic growth in selected developed countries (q/q).




**Source:** Eurostat data.

**Figure 1.2**

Global economy PMI index.




**Source**: Markit data.

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

At the same time, investment growth slackened vis-a-vis the previous quarter. Public expenditure continued to fall. Contribution of change in inventories to GDP growth decreased substantially while still remaining positive. Contribution of net exports to GDP growth, on the other hand, was close to zero.

Data incoming in the recent months, including those on business climate in the corporate sector and on industrial output, point at economic activity in the United States in 2012 Q2continuing at a moderate level. At the same time, retail sales, following a marked acceleration observed at the beginning of the year, declined in April and May 2012. Labour market data indicated that employment growth slowed down and a decline in the unemployment rate – observed in the second half of 2012 and early 2012 – decelerated. Certain signs of improvement have recently been seen in the real estate market, although amidst abundant supply and limited demand, property prices remained low in comparison with the previous years.

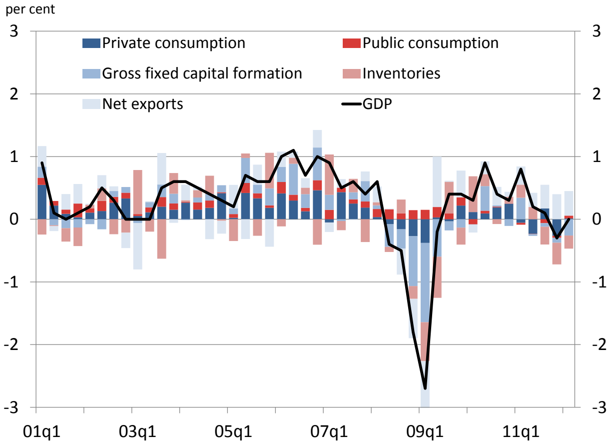
In the euro area, GDP growth was running at 0.0% (as compared to a decline of 0.3% q/q in 2011 Q4; Figure 1.3). Output growth was dragged by shrinking investment and inventories. Consumption, both private and public, continued to stall. At the same time, as exports rose amidst a marginal growth in imports, the contribution of net exports to economic growth remained positive.

Flagging euro area growth is, above all, the consequence of high indebtedness in some euro area countries and the related balance sheet adjustments in the financial and non-financial sectors. This leads to high uncertainty and limited demand on the part of households.

Incoming euro area data indicate persistently adverse conditions in the industrial sector. The

**Figure 1.3**

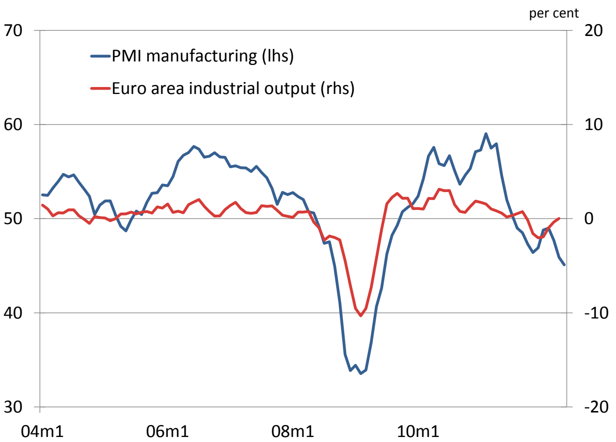
GDP growth in the euro area (q/q).




**Source:** Eurostat data.

**Figure 1.4**

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

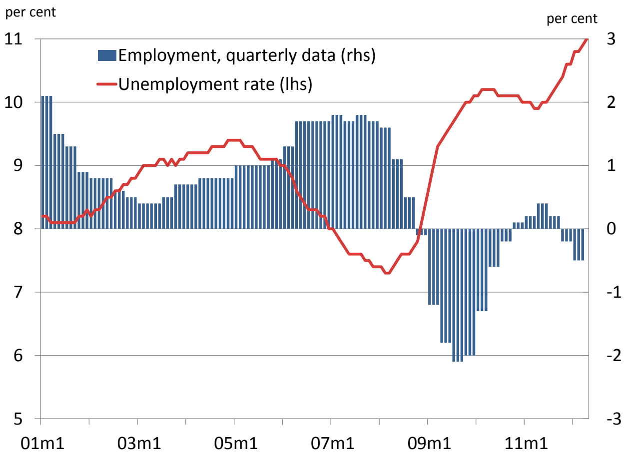



**Source:** Eurostat data, Markit.

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

**Figure 1.5**

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




**Source:** Eurostat data.

output growth, although somewhat stronger in February, remained negative in the subsequent months, while PMI index has recently dropped again (Figure 1.4). Stalling retail sales indicate that consumer demand remains weak. In many countries, most specifically Southern European countries, household demand is curbed by deteriorating labour market conditions, including a sharp rise in the unemployment rate (Figure 1.5).

Business conditions continued to vary significantly across the euro area countries. In Germany, economic growth – supported by non-euro area demand and household consumption – was relatively high and amounted to 0.5% q/q. On the other hand, in the countries most severely hit by the sovereign debt crisis recession continued, driven by declining investment and consumption, despite high positive contribution of net exports to GDP growth due to flagging imports.

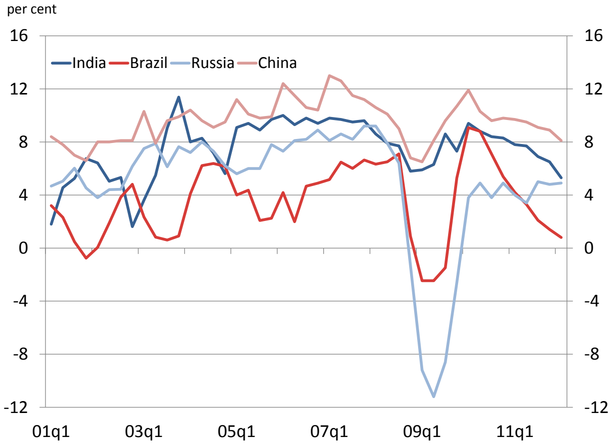
In the United Kingdom, GDP growth in 2012 Q1 was negative and stood at -0.3% q/q (as compared to -0.3% q/q in 2011 Q4). Weak economic activity could be largely attributed to the significantly reduced investment and flagging external demand, in particular from the euro area (Figure 1.1).

Declining demand from some developed economies, combined with fall in inventories translated into slower economic growth in China, which amounted to 8.1% y/y in 2012 Q1 (as against 8.9% y/y in 2011 Q4; Figure 1.6). At the same time, household consumption growth, fuelled by falling inflation and rising income, continued to be high.

Among the new EU member states outside the euro area, GDP growth diversified markedly in 2012 Q1. In some of them, most specifically Latvia and Lithuania, it remained relatively high (Figure 1.7, Figure 1.8), while in the others, e.g.

**Figure 1.6**

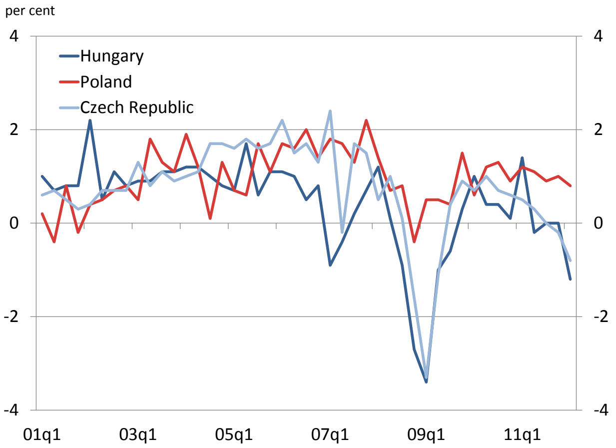
Economic growth in China, India, Brazil and Russia (y/y).




**Source:** Reuters and OECD data.

**Figure 1.7**

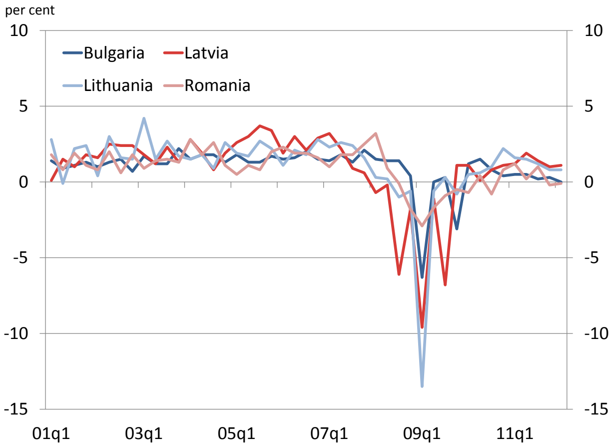
GDP growth in the Czech Republic, Hungary and Poland (q/q).




**Source:** Eurostat data.

**Figure 1.8**

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




**Source:** Eurostat data.

the Czech Republic and Hungary, it turned firmly negative amid weak domestic demand.

## 1.2. Inflation developments abroad

In recent months, inflation in the advanced economies has been easing. Concurrently, inflation in the emerging economies levelled off after a substantial decline at the turn of 2011 and 2012 (Figure 1.9). Factors curbing inflation included, above all, slowing energy price growth and in some economies also slower food price growth.

Since the publication of the previous *Report,* inflation in the United States has decreased considerably (to 1.7% in May), primarily due to the slower annual growth in food and energy prices (Figure 1.10). At the same time, core inflation persisted at levels exceeding the long-term average.

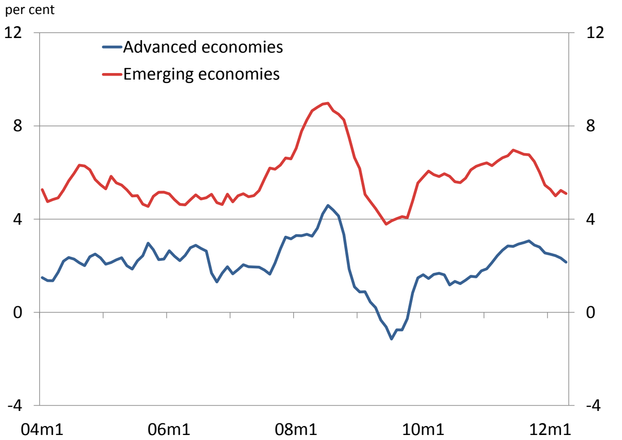
Euro area inflation, on the other hand, declined less steeply than that in the United States, reaching 2.4% in May. In the recent months, inflation has been supported by high energy price growth fuelled by the depreciation of the euro and excise tax rates increases in some countries. Despite sluggish economic activity in the euro area, including worsening labour market conditions in many countries, core inflation remained close to its long-term average.

Inflation in China has recently fallen considerably, curbed by weaker food price growth. At the same time, many emerging economies saw inflation persisting at high levels, which, in some cases, resulted in particular from currency depreciation (India), in others, from rapidly expanding lending (some South American countries).

In the recent months, inflation in Central and East European countries has gradually declined,

**Figure 1.9**

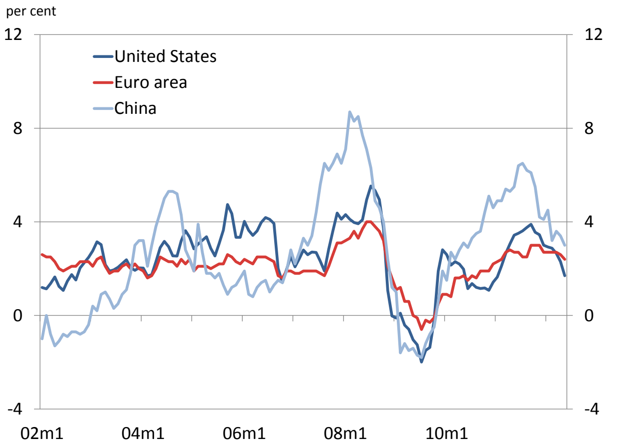
Inflation in major advanced and emerging* economies (y/y).




**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 1.10**

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

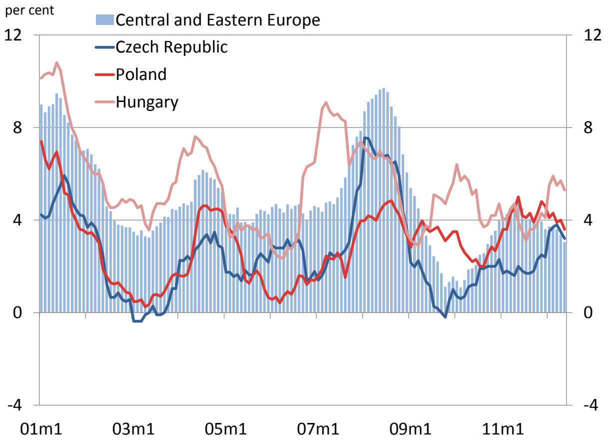



**Source:** OECD, Eurostat data.

which was supported by a somewhat slower growth in food and energy prices (Figure 1.11). Decline in the annual inflation was observed, in particular, in countries with a fixed exchange rate regime. In countries with a floating exchange rate regime (Poland, the Czech Republic and Hungary), annual inflation was fuelled by the lagged effects of the previously observed exchange rate depreciation, although the impact of this phenomenon was mitigated by an appreciation in these exchange rates at the beginning of 2012. At the same time, VAT rate increases contributed to higher inflation in some countries of the region (the Czech Republic and Hungary).

**Figure 1.11**

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




**Source:** Statistical offices' data.

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

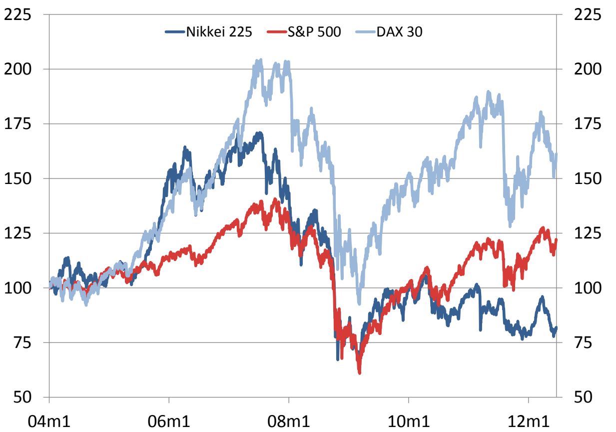
## 1.3. International financial markets and monetary policy abroad

Since the publication of the previous *Report,* volatility in the international financial markets has again increased. Financial market sentiment had continued deteriorating until the end of May 2012. This was driven by worse than expected data concerning global economy and uncertainty about the development of the sovereign debt crisis in some euro area countries, most notably in Spain and Greece. Yet, uncertainty eased in June, following the extension of financial assistance to the Spanish banking sector and the final outcome of parliamentary elections in Greece, which have translated into a slight improvement in the financial markets sentiment. Improvement in market sentiment in the recent weeks has been additionally supported by the financial market expectations regarding further extension of quantitative easing by the Fed. Despite some improvement in market sentiment, risk aversion remained elevated.

Those trends were reflected in the leveling off downward trend seen in the global stock exchange prices as from mid-March 2012, in particular in the European and Asian markets.

**Figure 1.12**

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




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

Meanwhile, quite sound – despite some recent deterioration – economic situation in the USA, (see chapter 1.1 *Global economic activity*) translated into relatively low volatility of stock exchange prices in that market (Figure 1.12).

Between the publication of the previous *Report* and May 2012 concerns mounted over the possibility to finance borrowing needs of the euro area countries most severely affected by the sovereign debt crisis. As a result, sovereign CDS spreads of those countries increased. Along with improved sentiment observed in June 2012, sovereign CDS spreads of those countries fell, yet remained elevated (Figure 1.13).

As risk aversion intensified between mid-March and end-May, yields on safe haven assets (US and German bonds) declined to historical lows. Despite a certain rise recorded in June 2012, yields in this category remain at very low levels (Figure 1.14).

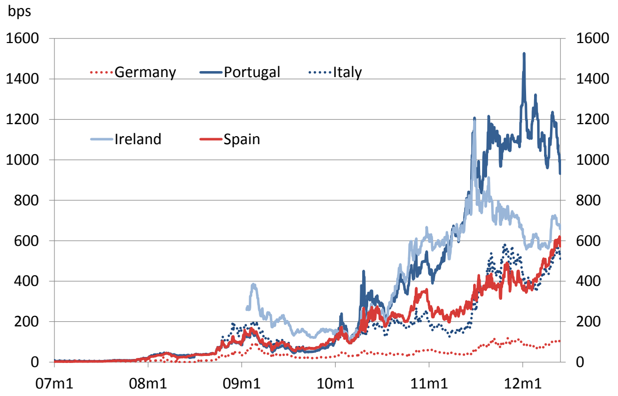
As investors fled to safe haven assets from mid-March to end-May, the US dollar resumed its appreciating trend, whilst the Swiss franc exchange rate continued very close to 1.20 EUR/CHF – its lower limit as declared by the Swiss National Bank (Figure 1.15). At the same time, exchange rates of numerous emerging economies weakened (Figure 1.16). More recently, a better financial sentiment has translated into some appreciation of the euro and of emerging currencies. Amidst persistently elevated risk aversion no significant changes occurred in the EUR/CHF exchange rate.

The major central banks continued strongly expansionary monetary policy, keeping their interest rates at historically low levels, and also continuing or extending the previously announced quantitative easing programmes (Figure 1.17).

The Fed kept its short-term interest rates close to zero (0.00-0.25%) and confirmed that they

**Figure 1.13**

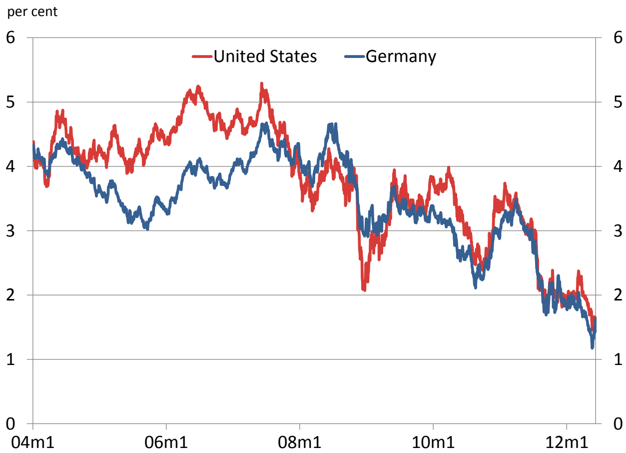
CDS spreads in selected developed countries.




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

**Figure 1.14**

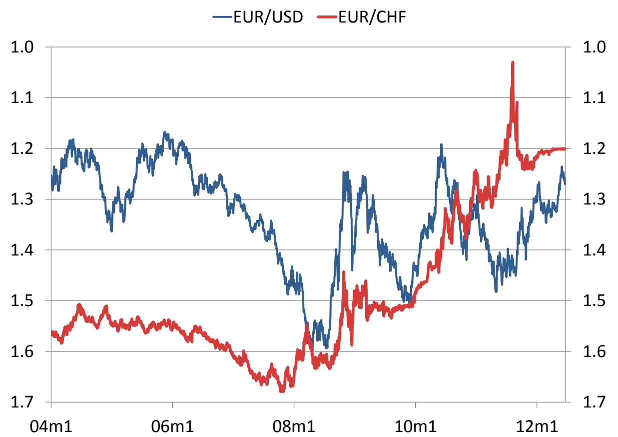
Yields on 10-year US and German bonds.




**Source:** Bloomberg data.

**Figure 1.15**

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




**Source:** Bloomberg data.

should remain unchanged at least by the end of 2014, in line with policy of reaching the inflation goal put in place in January 2012 (see Box 1 *Introduction of inflation targets in the United States and Japan*). Furthermore, the Fed finalized its programme of extending the maturity of its Treasury holdings. On 20 June it however decided to extend the programme until the end of 2012, thus expanding its size by USD 267 billion, up to the total value of USD 667 billion.

The Bank of England did not change its short-term interest rates, keeping them at 0.50%. Furthermore, the Bank had continued the quantitative easing programme until May 2012, when it reached the target level of asset purchases (GBP 325 billion).

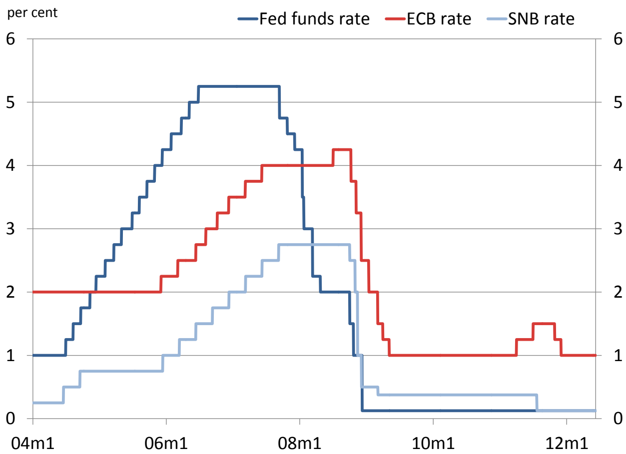
The Bank of Japan kept its short-term interest rates unchanged (0.00-0.10%), while also extending its asset purchase programme by JPY 5 trillion (up to JPY 70 trillion).

The Swiss National Bank (SNB) kept the fluctuation band for 3M LIBOR within the range of 0.00-0.25%. Moreover, the SNB intervened in order to prevent the Swiss franc from appreciating to less than 1.20 EUR/CHF declaring its readiness to conduct unlimited foreign exchange interventions aimed at protecting the lower limit for its exchange rate.

The European Central Bank (ECB) did not change its interest rates keeping the reference rate at 1.00%. Over the discussed period the ECB did not engage in secondary market purchases of Treasury bonds issued by the euro area countries most severely affected by the sovereign debt crisis. However, the Bank conducted additional operations providing liquidity to financial institutions in some euro area countries. It also announced to conduct unlimited long-term refinancing operations until the end of 2012.

**Figure 1.16**

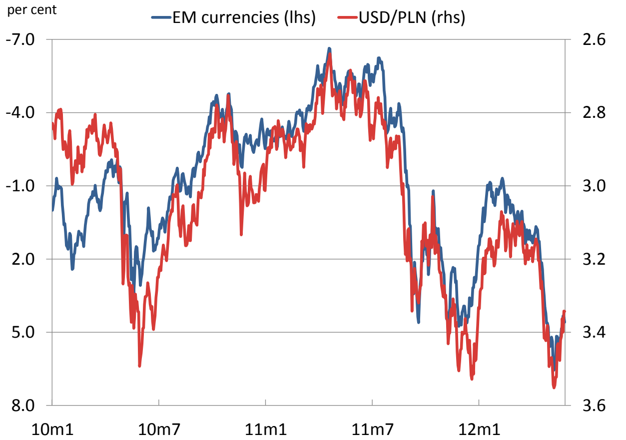
Fed Funds rate, ECB refinancing rate, and SNB rate.




**Source:** Central banks' data.

**Figure 1.17**

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




**Source:** NBP calculations based on Bloomberg data.

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

Since the publication of the previous *Report,* the central banks of emerging economies and small developed economies pursued diversified monetary policy. Many of them continued to ease their monetary policy or kept their interest rates unchanged, yet some of them increased their rates[2]. Some central banks of emerging countries, whose currencies have depreciated, intervened in the foreign exchange markets.

**Box 1. Introduction of inflation targets in the United States and Japan**

At the beginning of 2012, two of major central banks – the Federal Reserve of the United States (the Fed) and the Bank of Japan (BoJ) introduced changes in their monetary policy strategies.

- In the United States, in January 2012, the Federal Open Market Committee (FOMC) introduced a *longer run goal for inflation* at 2%, as measured by annual change of Personal Consumption Expenditures deflator (*PCE deflator)*[3]. At the same time, the FOMC began to publish individual members' estimates of the future Fed fund rate and the long-term nominal equilibrium interest rate.
- In Japan, in February 2012, the Policy Board introduced the *price stability goal* to be attained over the medium- to long-term and defined as inflation not exceeding 2% in terms of annual change in CPI[4]. At the same time, the Policy Board set a goal at 1% for the time being[5].

The two banks believe that setting the inflation target in numerical terms contributes to enhancing transparency of their monetary policies.

Although in modifying their monetary policy strategy, neither the Fed nor the BoJ explicitly termed the new strategy as "inflation targeting", yet the introduced changes have made their policy strategies resemble the direct inflation targeting (IT) strategy, which is currently pursued by a considerable group of central banks, including the National Bank of Poland. This allows for evaluating characteristics of the two banks' strategies and communications and comparing them with those pursued by other central banks.

Below we present key components of the two banks' monetary policy strategies and their backgrounds in comparison with banks pursuing inflation targeting strategy and the NBP (Table R.1.1).

[2] Since the publication of the previous *Report,* the National Bank of Poland (See Chapter 2.5 *Asset Market*) and the Central Bank of Iceland (*Sedlabanki*) have raised their interest rates. The latter bank increased its interest rates on three occasions, by a total of 100 bps.

[3] The PCE is the deflator of households' consumption spending.

[4] In 2006-2011, an "understanding of price stability" was published annually as part of the Minutes of the Policy Board. The "understanding" was described as a CPI inflation level, which, in the opinion of the respective Board members, was compatible with medium- and long-term price stability. While the "understanding of price stability" played – in the opinion of analysts – a predominantly informational role, the announced inflation target is perceived as one that the BoJ will strive to attain.

[5] At the same time, at its February 2012 meeting, the Policy Board decided to continue an expansionary monetary policy until the 1% inflation target was *in sight*, and to increase the maximum amount of its Asset Purchase Programme to JPY 65 trillion. At its April 2012 meeting, the BoJ again raised the ceiling for the Asset Purchase Programme (to JPY 70 trillion).

**Table R.1.1**

Key elements of the strategy applied by the Fed, the BoJ, the NBP and other central banks pursuing inflation targeting strategy.

| Feature | Fed | BoJ | NBP | Banks pursuing IT strategy |
|---|---|---|---|---|
| **Mandate** | The Fed's goals comprise full employment, price stability and moderate long-term interest rates. *"The Board of Governors of the Federal Reserve System and the Federal Open Market Committee shall maintain long-run growth of the monetary and credit aggregates commensurate with the economy's long-run potential to increase production, so as to promote effectively the goals of maximum employment, stable prices, and moderate long-term interest rates."*[6] | The BoJ's primary goal is to maintain price stability: *"Currency and monetary control by the Bank of Japan shall be aimed at achieving price stability, thereby contributing to the sound development of the national economy."*[7] | *"The basic objective of NBP activity shall be to maintain price stability, and, at the same time, act in support of Government economic policies, insofar as this does not constrain the pursuit of the basic objective of the NBP"*[8] | Amongst 27 central banks following IT strategy, 25 have a statutory goal of maintaining price stability. In Australia and Canada, the central banks have multiple goals, yet price stability is indicated as the superior one. |
| **Inflation target** | 2%[9] | Inflation of 2% or less 1% for the time being | 2.5% +/- 1 percentage point | Banks define their inflation targets as point without tolerance band (5 banks), with tolerance band (16 banks) or as a target range (6 banks). |
| **Target measure** | PCE deflator | CPI | CPI | All the central banks pursuing the IT strategy use the CPI |
| **Target horiozn** | Longer-term | Medium- to long-term; inflation target revised annually | Medium-term | Overwhelming majority of central banks define target horizon as medium term. 11 central banks specify the horizon in terms of years or quarters. |
| **Projections** | Intervals determined by FOMC members' point estimates of inflation (PCE deflator), GDP and unemployment rate (annual data, horizon: three subsequent years and the so-called longer term) | Policy Board members' point estimates of inflation and GDP as well as probability distributions (annual data, horizon: current and next fiscal year) | Inflation and GDP projection based on an econometric model | All the central banks publish inflation projections based on models. Some banks additionally release projections of GDP, interest and exchange rates. |
| **Monetary policy transparency and central bank accountability** | | | | |
| **Parliamentary hearings** | Yes | Yes | Yes | Parliamentary hearings conducted in case of 19 out of the 27 central banks. |
| **Press releases and conferences following decisions** | Yes - both | Yes - both | Yes - both | All the central banks use at least one of the above forms of communication (10 - only one). |
| **Publication of the *Minutes*** | Yes | Yes | Yes | 9 out of the 27 banks do not publish the *Minutes* |
| **Votes by name** | Yes - in the *Minutes* | Yes - in the *Minutes* | Yes - at the NBP website, subsequently in the Inflation Report | Only 6 out of the 27 banks publish votes by name. Another 3 banks release the number of votes cast in favour and against. |
| **Inflation Report** | Yes - twice a year | Yes - twice a year[10] | Yes - three times a year | All the banks pursuing the IT strategy publish Inflation Reports. |

**Source:** Own compilation based on Hammond (2012) and information posted at the Fed and the BoJ websites.

Literature does not offer one universally acknowledged definition of inflation targeting. However, the following conditions when met usually indicate that bank pursues this strategy:

- explicit recognition of price stability as the primary goal of monetary policy;
- public announcement of a numerical inflation target;
- making use of a wide range of information, including inflation forecasts, in the monetary policy conduct;

[6] Federal Reserve Act.

[7] The Bank of Japan Act.

[8] Act on the National Bank of Poland

[9] Fed announced its inflation target as a point target without information on tolerance bands for inflation or asymmetric approach to deviations of inflation from the target.

[10] The publication deemed to correspond with other banks' Inflation Reports is the *Outlook of Economic Activity and Prices,* which describes current macroeconomic conditions in Japan and the world as well as forecasts of future trends in real and financial variables (along with inflation and GDP projections) and outlines future monetary policy.

- transparency;
- accountability.

In the case of the Bank of Japan, price stability is established as the primary goal of monetary policy, while the Fed's mandate charges it with a dual goal comprising – equally – full employment and a stable price level[11].

The fundamental change introduced by both banks to their monetary policy strategy was to announce a numerical inflation goal. The Fed set the target at 2%; in the case of the Bank of Japan inflation is not supposed to exceed, ultimately, 2%, while inflation target is set at 1% for the time being.

However, both central banks use a different target measures. The Bank of Japan, in similarity to all the banks pursuing IT strategy, has defined its inflation target in terms of the CPI. The Fed, in turn, has adopted the PCE deflator, which differs from the CPI in that it accounts for substitution of goods in response to relative price changes and includes different range of goods and expenditures[12]. In the Fed's opinion, the former of the two differences is of particular importance making the PCE deflator more appropriate in the assessment of consumer price change[13].

What slightly differentiates the solutions adopted by the two central banks from the IT strategy implemented by most banks pursuing it is their declaration of price stability understood as a long-term phenomenon (in the case of the Bank of Japan, a medium- to long-term horizon). Meanwhile, most IT-pursuing banks strive to ensure medium-term price stability. The Fed explains its adoption of a longer-term horizon by the argument that price level is determined by central bank policies in the longer term. The Bank of Japan, in turn, argues that defining monetary policy horizon as a medium- to long-term emphasizes that the BoJ will not strive to achieve the target in the short-term at all costs. At the same time, the Bank of Japan envisages the possibility of changing its inflation target. Already at the point of introducing strategy changes, the BoJ set a temporary inflation target of 1%, and declared a possibility of annual target revision.

A significant difference between the solutions applied by IT-pursuing central banks and those adopted by the two discussed ones is the form in which they publish the expected paths of key – from a central bank's perspective – macroeconomic variables such as GDP, inflation and interest rates. As for GDP and inflation, IT-pursuing banks publish forecasts based on econometric models, most often in the form of fan charts of a given variable in the subsequent years[14]. The Fed and the Bank of Japan, in turn, announce interval forecasts based on point estimates by the members of – respectively – the FOMC and the Policy Board concerning the level of GDP and inflation in the subsequent years (in the case of the Fed, also the unemployment rate). There are also differences in the manner of announcing the expected interest rate paths. Only a restricted group of banks using the IT strategy (among them Sweden, Norway, New Zealand and the Czech Republic) publishes future interest rate path, mostly in the form of fan charts. Out of the two discussed central banks, the Fed has embarked on the publication of expected interest rate paths by announcing point forecasts of interest rates by the individual FOMC members (without name attribution). Furthermore, FOMC members launched the publication of long-term equilibrium interest rate assessment, what is not done by other central banks. The form and range of information on future interest rates released by the Fed distinguish this bank from the otherwise narrow group of IT-pursuing central banks which publish interest rate forecasts. Bank of Japan did not decide to publish expected interest rates.

[11] Apart from the abovementioned two goals, the Fed's mandate includes also maintenance of moderate long-term interest rates.

[12] The CPI index is calculated using the Laspeyeres formula, while the PCE is based on Fisher-Ideal formula. In terms of the range of items comprised, the difference can be seen, for example, in accounting for medical services - the CPI includes only consumers' private expenditures, whereas the PCE also accounts for employer-paid medical schemes. The CPI, in turn, includes imputed rents, not comprised by the PCE. See: *Focus on prices and Spending, Consumer Price Index: First Quarter 2011*, U.S. Bureau of Labor Statistics Volume 2, Number 3, May 2011.

[13] In practice, both indices gauging inflation in the United States (i.e. the CPI and the PCE) are strongly correlated. The average level of PCE deflator was lower than average level of CPI deflator by 0.4 pp. in January 1981 – February 2012, while the PCE deflator was less volatile than CPI deflator.

[14] In the case of the Fed and the BoJ, only annual, not quarterly forecasts are published.

In sum, the changes introduced to the strategies of the Fed and the Bank of Japan bring their key elements closer to the IT strategy. It can be assumed that the introduction of numerical inflation goals by the Fed and the BoJ – typical of the IT strategy – is primarily designed to boost the impact of those banks' activities upon inflation expectations and to enhance their transparency as well as improve communication with the public.

**References:**

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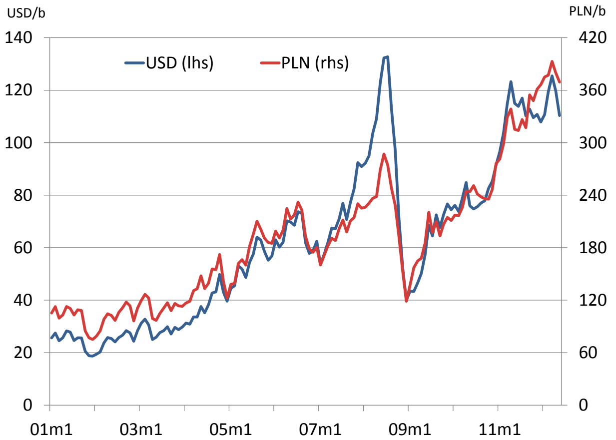
*Minutes of the Monetary Policy Meeting of 14 February 2012*, Bank of Japan.
Roger S., *Inflation Targeting Turns 20*, Finance & Development March 2010.
*The Price Stability Goal in the Medium to Long Term*, Bank of Japan, 14 February 2012.

## 1.4. Global commodity markets

Commodity prices, in particular those of energy commodities, rose in January – March 2012 driven by calmed sentiment in the global financial markets and disturbances in the supply of some commodities. From April 2012, as sentiment in the global financial markets sank (see chapter 1.3. *International financial markets and monetary policy abroad*), commodity prices decreased. The decline in some commodity prices was also supported by an improved outlook for their supply.

**Figure 1.18**

Brent oil prices in USD and PLN.

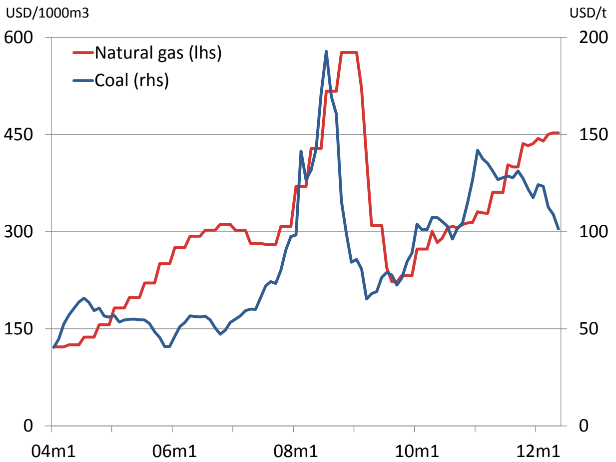



**Source:** US Energy Department data, NBP calculations.

Following the increases observed between January and March 2012, related in particular to production disturbances in the countries which are not members of OPEC and to sanctions against Iran announced by the EU and the United States, since April 2012 oil prices have been decreasing. The decline in oil prices occurred amidst slipping confidence in the financial markets, forecasts of demand for crude oil revised downward (particularly in the developed countries) and improved outlook for oil supply provided by OPEC countries (in particular, Saudi Arabia and Libya). In spite of the decline, oil prices remain high compared with their long-term average (Figure 1.18).

**Figure 1.19**

Gas and coal prices in the global markets.



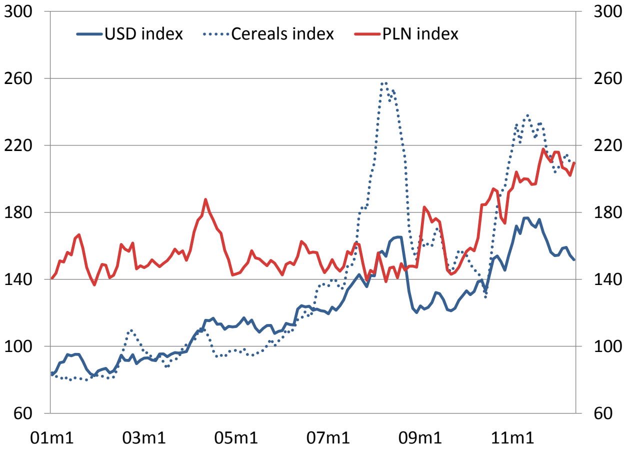

**Source:** IMF data.

Since the beginning of 2012, coal prices have been sinking steadily (Figure 1.19). At the same time, natural gas prices have been rising, mostly as a result of the prior increase in oil prices, which translate with a lag into prices of natural gas.

Following a sharp fall at the end 2011, between January and May 2012 the index of global agricultural commodity prices (as expressed in USD) changed only marginally. At the beginning of 2012, this index rose slightly, which resulted from fears of short supply in the coming economic season. Later on, as upbeat forecasts of cereal and oleaginous plant supply were released in April, the index of global agricultural commodity prices embarked on a downward trend (Figure 1.20). Yet, agricultural commodity prices in the global markets – in parallel to oil prices – persist high as compared to their long-term average.

**Figure 1.20**

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




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

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

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

Chapter 2

# DOMESTIC ECONOMY

## 2.1. Inflation developments

### 2.1.1. Consumer prices

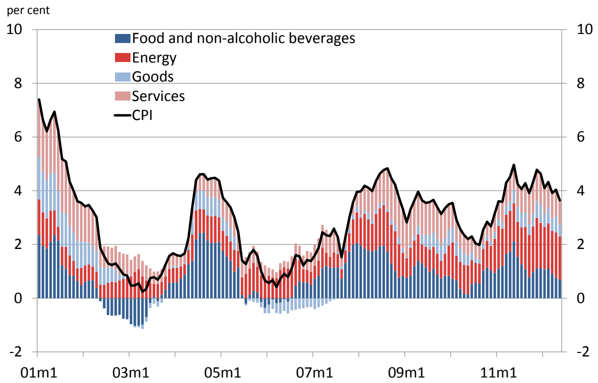
The annual consumer price growth, having accelerated at the end of 2011 to 4.6%, decreased by May 2012 to 3.6%, i.e. slightly above the upper limit for deviations from the NBP inflation target of 3.5% (Figure 2.1, Table 2.1).

The decline in inflation between December 2011 and May 2012 was driven by a slower growth in all main price categories of goods and services, above all food prices.

In the subsequent months of the period under review, growth in inflation was hampered by the zloty exchange rate appreciation (in monthly terms) observed in January and February 2012. The appreciating zloty mitigated the impact of heightened global prices of agricultural and energy commodities on domestic prices. This was reflected in weaker food price growth and a stabilisation in energy price growth in 2011 Q1[15].

**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).

| | 2008 | 2009 | 2010 | 2011 | 2012 Jan | Feb | Mar | Apr | May |
|---|---|---|---|---|---|---|---|---|---|
| **CPI (%)** | 4.2 | 3.5 | 2.6 | 4.3 | 4.1 | 4.3 | 3.9 | 4.0 | 3.6 |
| **Food and non-alcoholic beverages (pp)** | 1.6 | 1.0 | 0.7 | 1.3 | 1.1 | 1.1 | 0.9 | 0.8 | 0.7 |
| **Energy (pp)** | 1.3 | 0.8 | 1.0 | 1.5 | 1.6 | 1.7 | 1.6 | 1.7 | 1.6 |
| **Goods (pp)** | 0.2 | 0.4 | 0.3 | 0.5 | 0.5 | 0.6 | 0.5 | 0.6 | 0.4 |
| **Services (pp)** | 1.2 | 1.2 | 0.6 | 1.0 | 0.9 | 1.0 | 0.9 | 1.0 | 0.9 |

**Source:** GUS data.

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

[15] Starting in April and May 2012, the growth of domestic food prices began, in turn, to be curbed by the falling prices of agricultural commodities in the global markets (Figure 1.20). In addition, slower food price growth throughout the period was supported by the statistical base effect related to the previous year's considerable price hikes in the following groups: *sugar, jam, honey, chocolate* as well as *bread and cereals.* Moreover, growth in meat prices slowed down (due to imports of EU pork - cheaper than Polish pork); in April and May, vegetable price growth also decelerated (as new, cheaper vegetables came into the market). On the other hand, the surge in egg prices related to the entry into force of the EU regulations on cage breeding, was a factor curbing the decline in food price growth.

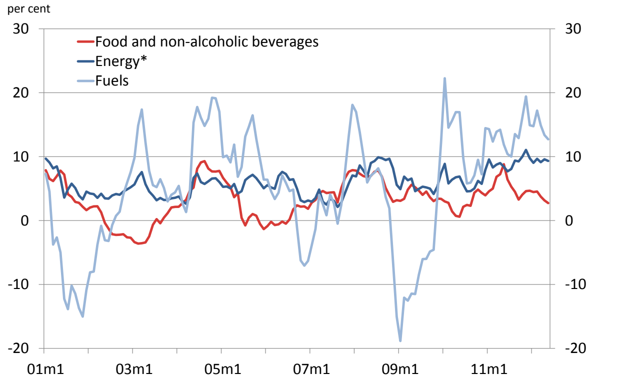
Since the beginning of the year inflation eased down further as the impact of last year's VAT rate increases on the annual price growth had worn away. This helped bring down the year-on-year price growth of many goods and services (see Chapter 2.1.2 *Core inflation*).

On the other hand, heightened inflation in the analysed period was supported by a relatively sharp rise in administered prices - both those of energy carriers and services (see Box 2 *The impact of administered prices on inflation developments).* The surge in administered prices of energy carriers resulted from increases in electricity, heating and natural gas tariffs implemented in 2011 and 2012. As for services, administered prices rose as a result of increases in local government-controlled charges (e.g. those relating to home maintenance services and public transport).

In the period under review, the impact of demand on maintaining elevated inflation was limited. This is indicative of weaker total consumption growth in 2012 Q1, related to the persistently unfavourable labour market conditions (slowing employment growth, heightened unemployment rate, sluggish real wage growth), low consumer confidence indicators and a further decline in consumer loans to households.

**Figure 2.2**

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

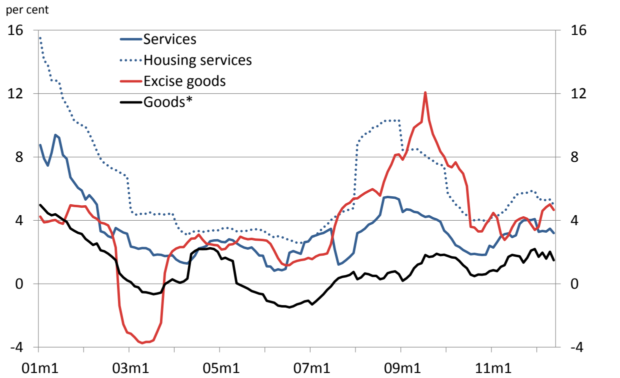



**Source:** GUS data, NBP calculations.

* 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.

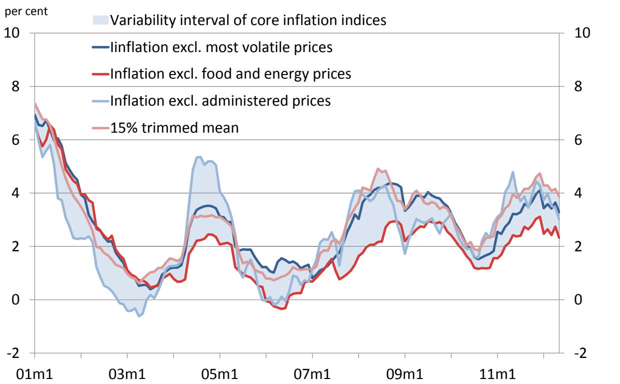
## 2.1.2. Core inflation

In December 2011 - May 2012, decreasing CPI inflation was accompanied by declines in all core inflation measures (Figure 2.4). Core inflation net of food and energy prices, which had followed a marked upward trend in 2011, reaching a peak of 3.1% in December, slipped substantially at the beginning of 2012, and in May amounted to 2.3%.

In similarity to the CPI index, core inflation declined in 2012 mostly as the impact of the

**Figure 2.4**

Core inflation measures (y/y).



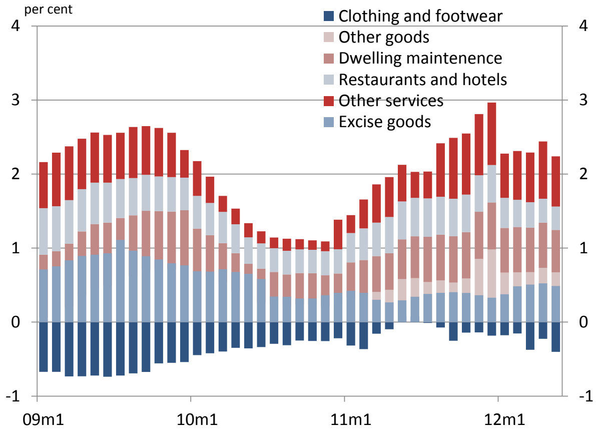

**Source:** GUS data, NBP calculations.

2011 VAT rates increases wore away and the zloty appreciated (in monthly terms) in January and February 2012. The negative base effect related to last year's VAT changes dragged on price growth in many groups of goods and services, e.g. goods related to home furnishings and equipment. The strengthening zloty, in turn, curbed import price growth. Lower core inflation was also supported by new drug reimbursement regulations, resulting in slower drug price growth[16].

On the other hand, the decline in core inflation was limited, in the period under review, by rising prices of excise products, most specifically tobacco ones (following an increase of excise tax rate this year).

**Figure 2.5**

Composition of core inflation (y/y).




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

**Box 2. The impact of administered prices on inflation developments**

According to Eurostat definition, administered prices are prices set by government authorities. This means that changes in administered prices are not directly determined by market forces, in particular, they may be insensitive to demand and supply fluctuations. The process of setting administered prices distinguishes them from other prices accounted for in the inflation index. Administered prices may, to some extent, be affected by cost factors determining the costs of services provided by budgetary entities or impacting pricing decisions of private companies, which are then subject to regulations. Yet, developments in those prices are also driven by other factors related, for example, to the financial situation of local government units. A considerable share of administered prices in the CPI basket may hamper the impact of monetary policy on inflation.

Due to the specific character of administered prices and their impact on the effectiveness of monetary policy, the NBP monitors growth in administered prices and their share in the consumer price index published by the Central Statistical Office (GUS). For this purpose, the administered price index and the inflation net of administered prices (one of the core inflation measures published by the NBP) have been constructed.

The group of administered prices encompasses consumer goods and services whose prices are fully or mainly set by government units (central, regional or local) or regulators (Table R.2.1)[17]. Both the price level (e.g. energy prices) and the permissible scale of change in prices (e.g. admissible increase in rental payments).could be subject to regulation. In practice, the administered price index includes those groups of goods and services (at the level of four-digit COICOP classification), in which 50% or more prices meet the above criterion[18]. Thus, this index does not cover all prices subject to regulations, but only those whose weight in a particular COICOP group is sufficiently high. Therefore, this index is exclusive of e.g. reimbursable drug prices, airport and seaport charges, radio and television subscription fees or pre-school tuition fees. The administered price index also does not encompass

[16] The Act of 12 May 2012 on *the Reimbursement* of Drugs, *Foodstuffs Intended for Particular Nutritional Purposes and* Medical Devices (Journal of Laws of 13 June 2011) as amended, along with the regulations of the Minister of Health introducing changes to the reimbursable drug list.

[17] For detailed classification of administered prices see: “Methodology of calculating core inflation measures published by the National Bank of Poland”, http://www.nbp.pl/statystyka/bazowa/core.pdf

[18] COICOP – *Classification of Individual Consumption according to Purpose*, prepared by the Statistics Department of the UNO for statistical institutions to conduct studies on household budgets.

those prices which fluctuate as a result of changes in indirect taxes, e.g. excise tax (alcoholic beverages, tobacco, fuels).

**Table R.2.1**

Composition of administered price index in 2012.

| Group | Weight in CPI in % | Regulatory authority |
|---|---|---|
| **Energy:** | 9.41 | |
| Electricity | 4.45 | The Energy Regulatory Office: electricity prices for households and electricity transmission charges |
| Gas | 2.56 | The Energy Regulatory Office: gas prices for households and gas transmission charges |
| Heat energy | 2.40 | The Energy Regulatory Office |
| **Services:** | 4.59 | |
| **Housing maintenance services** | 3.89 | |
| Housing rentals (first housing) | | Local government units |
| Housing rentals (second and subsequent housings) | | Local government units |
| Water supply | | Companies owned by local government units |
| Waste disposal | | Local government units |
| Sewerage services | | Companies owned by local government units |
| **Transport services** | 0.39 | |
| Passenger rail transport | | Local government units (owner of part of regional railways) |
| Combined passenger transport | | Local government units |
| **Communication** | 0.03 | |
| Postal services | | Office of Electronic Communications |
| **Other services** | 0.27 | |
| Social welfare | | Local government units |
| Other services, not elsewhere classified | | Decrees of the Council of Ministers, acts, decisions of local government units |

**Source:** NBP compilation based on GUS data.

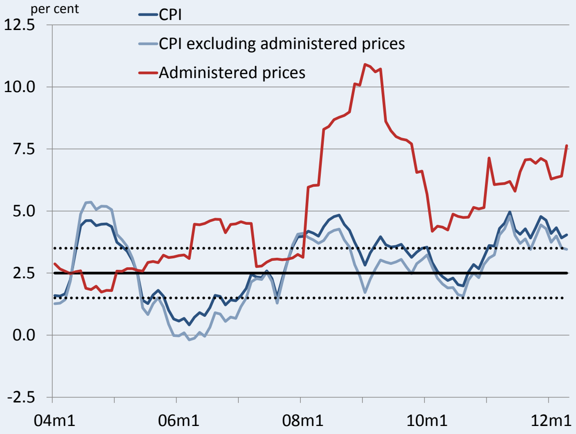
While analysing changes in administered prices, special attention should be paid to the nature of regulation. Certain price categories are regulated in order to reduce the scale or pace of their possible increases. The regulator may also aim to keep those prices below market prices. In Poland this applies, in particular, to energy prices for households.

Administered prices may be considerably affected by fiscal policy. Some regulated prices and fees have a direct impact on revenues of government entities which means that fiscal policy tightening is likely to lead to an upward pressure on this price category. In 2010-2012, the average growth of prices regulated by local government units (including, in particular, prices of home maintenance services as well as urban transport and local railway transport) stood at 5.8%, whereas growth of other prices amounted to 3.3%.

As regards long-term trends, the degree of monopolization of the economy is of particular importance for administered price developments. The stronger the monopoly practices, the more probable the upward trend in prices set by monopolists; yet, Poland as many new EU member states sees gradual deregulation of the economy. Nevertheless, there are areas where monopoly practices are hardly avoidable. This is the case of urban transport or transmission of electricity. Although the role of this factor in Poland is on a gradual decline, it is historically still more important than in countries which did not undergo economic transition.

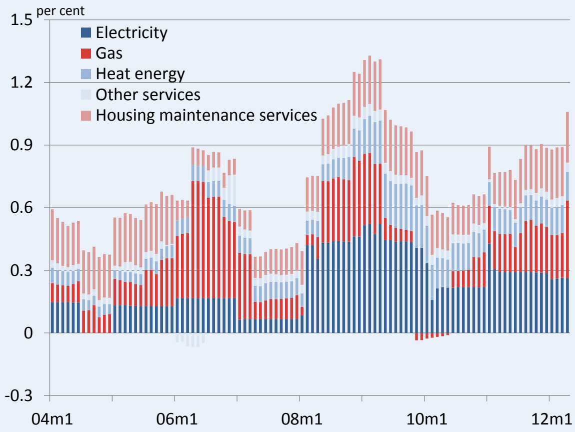
A relatively recent phenomenon likely to have a considerable impact on administered prices is the internalization of costs related to environmental protection enforced by the adoption of EU regulations. In 2013 another stage of the EU Climate and Energy Package will come into force, with its cornerstone being the auction-based greenhouse gas (GHG) emissions trading system. For Poland, it entails a considerable rise in power generation costs. The EU regulations also oblige Poland to comply with the environmental protection requirements, which means that Poland has, inter alia, to modernize its sewerage infrastructure and construct waste water treatment plants. Considerable costs of such adjustments may be pass through to end user prices.

**Figure R.2.1**
CPI and its components in Poland.




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

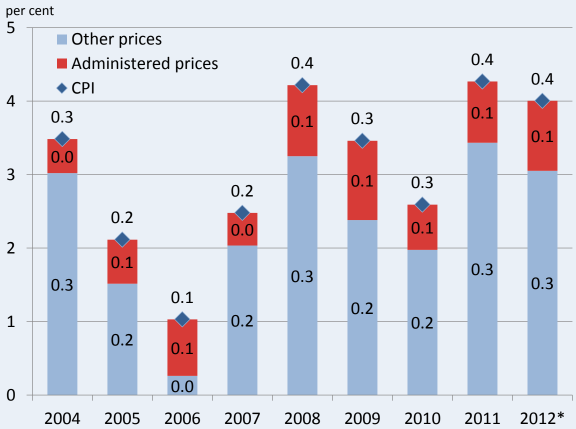
**Figure R.2.2**
The composition of administered prices' contribution to the CPI in Poland.




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

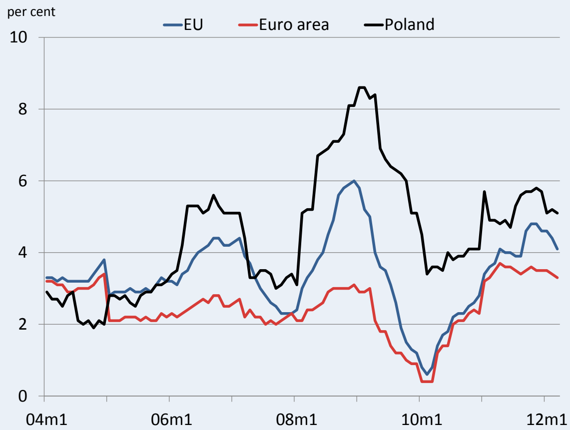
In Poland, the growth in administered prices is high. In the period from January 2004 – i.e. from the time when the permanent inflation target of 2.5% +/- 1 percentage point was set – until April 2012, administered prices growth amounted on average to 5.1%, while the average CPI index in the same period stood at 3.0%. Hence, throughout most of the analysed period, growth in administered prices exceeded growth in other consumer goods and services prices (Figure R.2.1, Figure R.2.2)[19]. As visible from the composition of the CPI index in 2004-2012, administered prices' contribution to the CPI was always positive and ranged between 0.4-1.1 percentage points (Figure R.2.3).

**Figure R.2.3**
The structure of CPI index in Poland.




**Source:** Eurostat data.

**Figure R.2.4**
Growth in HICP administered prices (HICP-AP) in Poland, EU countries and euro area countries.




**Source:** Eurostat data.

[19] The exception is the period from May 2004 to April 2005 – when growth in many non-regulated prices, in particular food prices and housing goods and services prices increased sharply after Poland's accession to the EU, and the turn of 2007 and 2008 – when the surge in commodity prices in the global markets in 2007 first fed through onto non-administered prices (especially food prices), and with a lag onto administered prices (in particular energy prices).

A particularly sharp rise in administered prices was seen in the period from 2008 Q1 to 2009 Q1. It was mainly driven by rising energy prices (notably gas and electricity), as well as mounting prices of certain services (court and lawyer fees, housing charges and postal charges). In 2009 growth of administered prices temporarily flattened out, yet, since the beginning of 2010 administered prices were again on a strong increase and throughout 2011 their growth remained relatively high. Also 2012 may be expected to see administered prices significantly boosting domestic inflation, due to the already implemented and expected increases in the prices of electricity, gas, public transport, waste disposal, sewerage and water supply services.

Poland is not the only EU country where growth in administered prices continues to be high. A marked rise in administered prices has been observed in the majority of EU countries, where energy prices (gas and electricity prices) are subject to regulations. However, the growth of administered prices in Poland exceeds both the average for EU and for euro area (Figure R.2.4). The group of countries with relatively high growth of administered prices encompasses, on the one hand, most of the CEE countries which joined the EU in 2004 and 2007, and – on the other hand, some euro area countries (Spain, Italy, France, Malta) as well as Great Britain. In some of the countries, growth in administered prices may have additionally been pushed up by recent considerable fiscal tightening.

### 2.1.3. Producer prices in industry

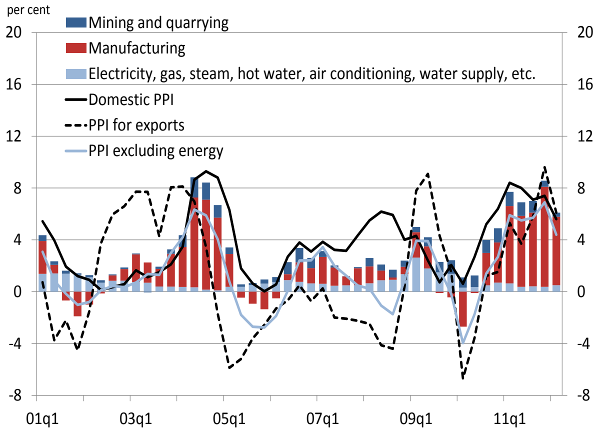
Producer prices in industry (PPI) rose by 6.1% 2012 Q1, as against an increase of 8.6% in the previous quarter[20]. The decline in the annual PPI growth was largely attributable to slower price growth in manufacturing.

Annual price growth in manufacturing was curbed in 2012 Q1 by the zloty appreciation and a simultaneous fall in oil price growth (in annual terms) in the global markets.

Producer price growth in the domestic market eased down to 5.6% y/y in 2012 Q1 (from 7.4% y/y in the previous quarter), while price growth in the export market went down to 6.2% y/y (from 9.6% y/y in the previous quarter; Figure 2.6). Higher price growth in the more import-intensive export sector was driven by the impact of the previously observed zloty depreciation upon the prices of imported intermediate goods.

**Figure 2.6**

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



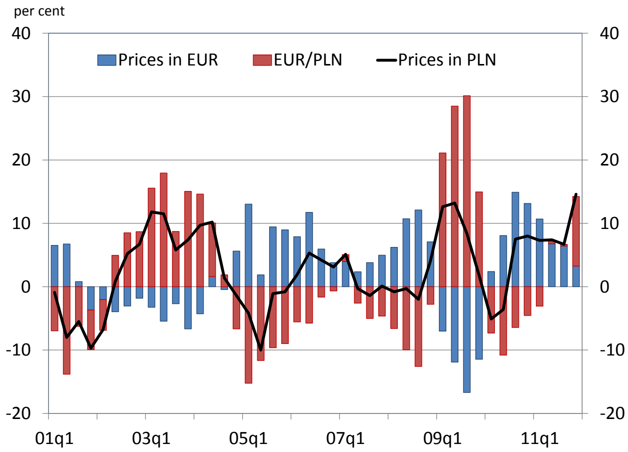

**Source:** GUS data.

### 2.1.4. Import prices

In 2011 Q4, the annual growth in the zloty-denominated import prices sped up considerably (to 14.6% as against 6.7% in the previous quarter), reaching the highest point since 1997. The rise in import prices was primarily driven by significant zloty depreciation

**Figure 2.7**

Composition of annual growth of import prices in PLN terms.




**Source:** GUS data.

[20] In April 2011 PPI remained at the level from the previous month, i.e. 4.3% y/y and in May it stood at 5.0% y/y.

in 2011 Q4 (of 11.0% y/y as against 0.3% y/y in 2011 Q3)[21]. Prices of imported goods also rose when expressed in euro (Figure 2.7), albeit at a clearly slower pace than in the previous quarter.

### 2.1.5. Inflation expectations

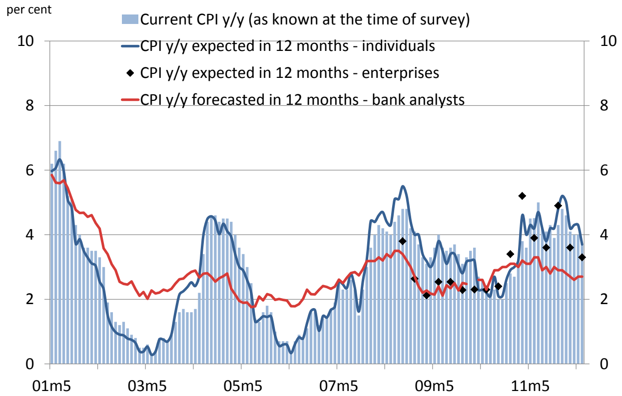
12-month inflation forecasts by financial sector analysts were revised slightly downward – from 2.9% in January to 2.7% in June 2012. (Figure 2.8). In the same period, their average annual inflation forecasts for 2012 rose from 3.5% to 3.9%, and the forecasts for the subsequent years did not change significantly (the 2013 forecasts were upgraded from 2.8% to 2.9% respectively and those for 2014 - from 2.7% in February to 2.8%)[22].

Similar average annual inflation expectations for the years 2012-2014 are posted by the March 2012 *NBP Macroeconomic Survey.*[23] The median of the central point forecasts by the responding experts stands at 3.7% for 2012, 2.8% for 2013 (as against, respectively, 3.4% and 2.8% in the previous survey round, held in December) and 2.6% for 2014. In turn, the aggregate probabilistic forecast (calculated by aggregating individual interval forecasts) shows that while the probability of the annual average inflation remaining within the band for deviations from the inflation target, i.e. 1.5%-3.5% amounts to 40% in 2012, it climbs to approx. 70% in 2013 and 2014 (Table 2.2).

12-month inflation expectations of enterprises (objectified measure), following a rise to 4.9% in 2011 Q4, declined to 3.6% in 2012 Q1 and 3.3% in Q2. The decrease in expectations – like their prior increase – resulted to a larger degree from

**Figure 2.8**

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




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

**Table 2.2**

Forecast of CPI inflation derived from individual interval forecast (in %).

| Horizon | Median | 50% probability | 90% probability | Probability of 1.5-3.5% range |
|---|---|---|---|---|
| **2012** | 3.7 | 3.3-4.1 | 2.7-4.7 | 37% |
| **2013** | 2.9 | 2.4-3.5 | 1.4-4.5 | 70% |
| **2014** | 2.6 | 2.0-3.3 | 1.0-4.9 | 69% |

**Source:** NBP Survey of Profssional Forecasters, March 2012.

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[21] Calculations based on GUS data on the value of imports as expressed in PLN and EUR.

[22] The annual average 2014 inflation has been forecast by Reuters since February 2012.

[23] The *NBP Macroeconomic Survey* is conducted on a quarterly basis. The experts responding to the survey are indicated by financial institutions, research centres and employers as well as employee organisations. Their forecasts are framed in probabilistic terms, which helps consider various scenarios of economic developments and assess the convergence of the forecasts (see Box 3 in the previous edition of the *Report).* For a more detailed description of the survey results - see http://amakro.nbp.pl

changes in the structure of answers to the survey questions than from changes in current inflation[24].

Since the publication of the previous *Report*, expectations of individuals have also declined while still remaining relatively high. The objectified measure of inflation expectations of individuals, which at the turn of 2011 had risen to approx. 5.0%, fell to 3.7% over the period March-June. This was primarily driven by a marked drop in current inflation, which was known to respondents at the time of the survey. Despite decline inflation expectations of individuals remained relatively high. This might have been due to the fact that the concurrently observed considerable upswing in prices of certain frequently purchased goods and services, considered as important by individuals (food, fuels, energy), had a strong impact on their opinions about changes in the price level.

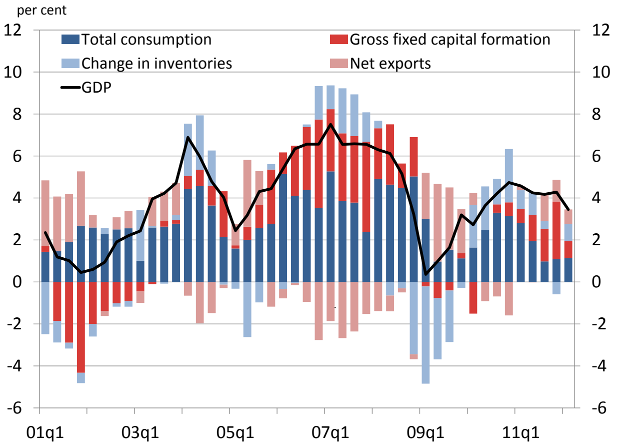
## 2.2. Demand and output

In 2012 Q1, GDP growth eased down. According to GUS preliminary estimates, in 2012 Q1 GDP growth amounted to 3.5% y/y as compared with 4.3% y/y in 2011 Q4 (Figure 2.9, Table 2.3). In line with the NBP estimates, in 2012 Q1 GDP growth also declined in quarter-on-quarter terms, and stood at 0.5% q/q, as against 1.0% q/q in 2011 Q4 (in seasonally adjusted terms).

The decline in GDP annual growth was driven both by domestic demand slowdown (to 2.7% y/y in 2012 Q1, as against 3.2% y/y in 2011 Q4) and lower contribution from net exports. Weakening domestic demand growth reflected a slower rise in investment and public consumption amidst moderate growth of private consumption.

**Figure 2.9**

Contribution of aggregate demand components to GDP growth.




**Source:** GUS data.

[24] The survey question addressed to enterprises refers to current inflation. In the latest survey this question was as follows: "In January 2012 the CPI (inflation) amounted to 4.1% in year-on-year terms. In the opinion of your enterprise, within the nearest 12 months prices will: (1) rise faster than hitherto; (2) will rise at the same pace; (3) will rise more slowly; (4) will remain unchanged; (5) will fall; (6) don't know."

Private consumption growth remained unchanged in 2012 Q1 as compared to the previous quarter, whereas public consumption growth declined further (to -1.3% y/y in 2012 Q1, as against -0.3% y/y in 2011 Q4). As a result, total consumption growth decreased to 1.3% y/y in 2012 Q1 (as compared with 1.5% in 2011 Q4).

2012 Q1 saw decelerated growth in investment dragged by lower growth in public investment. At the same time, growth in inventories increased, leading to positive contribution to GDP of this category – of 0.8% in 2012, as against -0.4% in 2011 Q4.

In 2012 Q1, further weakening both in the growth of exports (to 4.8% y/y, as against 7.9% in 2011 Q4), and that of imports (to 3.2% y/y as against 5.0% y/y in 2011 Q4) was recorded[25]. Stronger decline in exports growth, as compared to the decline in imports growth, led to a lower contribution from net exports to GDP growth (0.7% in 2012 Q1, as against 1.0%in 2011 Q4).

**Table 2.3**

GDP growth.

| | 2008 | 2009 | 2010 | 2011 | 2011 q1 | 2011 q2 | 2011 q3 | 2011 q4 | 2012 q1 |
|---|---|---|---|---|---|---|---|---|---|
| **GDP (%)** | 5.1 | 1.6 | 3.9 | 4.3 | 4.6 | 4.2 | 4.2 | 4.3 | 3.5 |
| **Consumption (%)** | 6.1 | 2.0 | 3.4 | 2.1 | 3.2 | 2.4 | 1.2 | 1.5 | 1.3 |
| **Gross fixed capital formation (%)** | 9.6 | -1.2 | -0.4 | 8.1 | 5.4 | 6.8 | 8.1 | 9.7 | 6.7 |
| **Changes in inventories (pp)** | -1.1 | -2.4 | 2.0 | 0.4 | 0.9 | 1.1 | 0.4 | -0.6 | 0.8 |
| **Net exports (pp)** | -0.6 | 2.7 | -0.7 | 0.7 | 0.2 | 0.0 | 1.3 | 1.0 | 0.7 |

**Source:** GUS data.

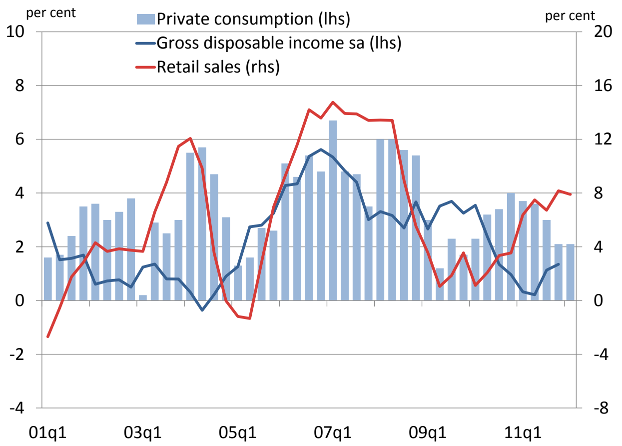
## 2.2.1. Consumption demand

Consumption demand growth remained moderate in 2012 Q1. Private consumption growth did not change in 2012 Q1 as compared to 2011 Q4 and stood at 2.1% y/y (Figure 2.10). According to the NBP's estimates, in seasonally adjusted quarter-on-quarter terms, private consumption growth slightly increased in 2012 Q1 - to 0.5% y/y (as against 0.4% y/y in 2011 Q4).

Moderate growth in consumer demand was related to further low rise in household disposable income in 2011 Q4[26]. Continued low growth in real disposable income resulted from

**Figure 2.10**

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




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

[25] Presented growth data are based on GUS national accounts and may differ from the ones presented in chapter 2.2.4 *Exports and imports*, which takes into account seasonally adjusted data.

[26] Growth rates of household disposable income and their components are presented in seasonally adjusted terms.

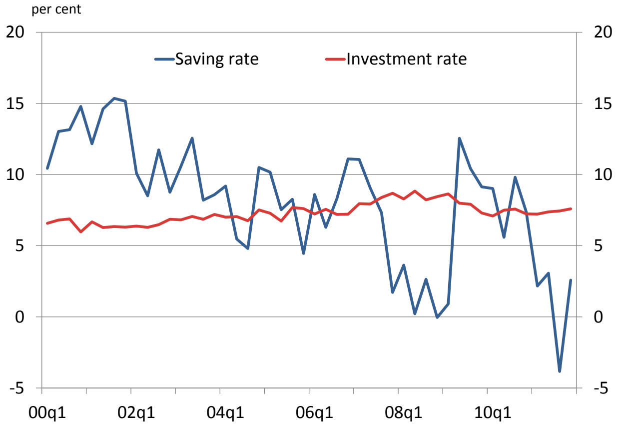
both low income from hired employment, related to a weak growth in the wage bill, as well as heightened inflation [27]. In turn, a relatively strong growth in gross operating surplus, which may be indicative of a certain improvement in financial condition of self-employed, was conducive to higher growth in disposable income. At the same time, saving rate slightly increased in 2011 Q4, although it still remained significantly lower than investment rate (Figure 2.11)[28].

Rise in private consumption in 2012 Q1 was also curbed by moderate wage growth and low employment growth (see Chapter 2.4 *Labour market),* decline in household lending (see Chapter 2.6 *Money and credit)* and pessimistic household sentiment about economic situation reflected in low consumer confidence indicators (Figure 2.12).

Persistently moderate rise in private consumption in 2012 Q1 was accompanied by a relatively high, albeit continuing on a downward trend in subsequent months, growth in retail sales posted by enterprises employing more than 9 persons [29].

**Figure 2.11**

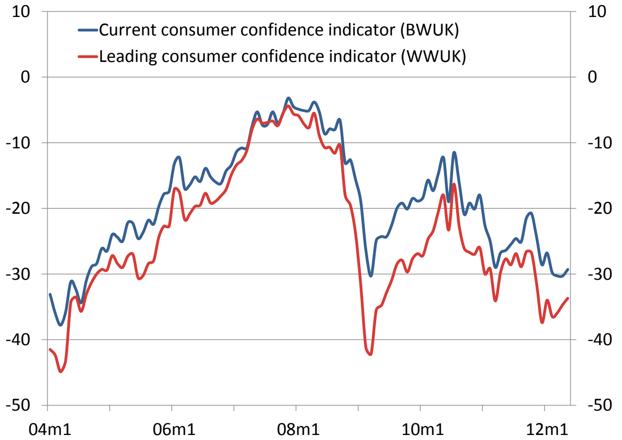
Saving rate and investment rate in households' sector.




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

**Figure 2.12**

Consumer confidence indicators.




**Source:** GUS and NBP data.

### 2.2.2. Investment demand

2012 Q1 saw further investment growth, yet the annual growth in gross fixed capital formation slowed down to 6.7% y/y (as against 9.7% y/y in 2011 Q4).

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[27] Income from hired employment includes – apart from wages – also sickness, adjustment and care allowances, in-kind income, transfers from the Enterprise Social Benefit Fund and severance pays.

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

[29] The monthly releases of retail sales data refer to sales in enterprises employing more than 9 persons. On the other hand, the aggregate retail sales data (referring also to enterprises with workforce of 9 or fewer employees) are published in annual reports only. In the recent years, the aggregate retail sales growth was largely below sales growth recorded in points of sale employing more than 9 persons which may be connected with sales being shifted from smaller points of sale to large retail areas. In 2011 the aggregate retail sales increased by 1.3% y/y, sales in enterprises with workforce exceeding 9 employees rose by 7.3%, whereas individual consumption growth stood at 3.1% y/y.

Also retail sales data referring to the whole enterprise sector are published in monthly intervals. Yet, these data are indicative of the consumption volume to a lesser extent than retail sales data. Therefore, the *Report* focuses on retail sales data.

Decrease in investment outlays growth in the economy resulted from decline in public investment growth (to 7.5% y/y as against 10.6% y/y in 2011 Q4). At the same time, growth in investment of medium and large enterprise sector, as well as housing sector accelerated (to 12.3% y/y as against 8.8% y/y in 2011 Q4 and 11.0% y/y as against 6.8% y/y in 2011 Q4 respectively; Figure 2.13).

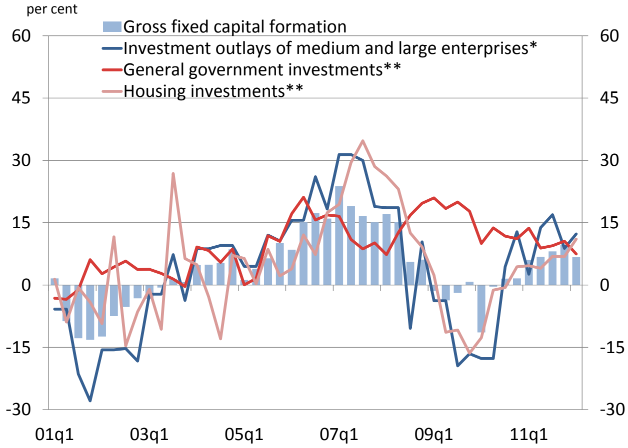
After almost two years of growth, 2012 Q1 brought a slowdown in the growth of corporate investment in plant, machinery and equipment, which amounted to 16.6% y/y (as compared to 20.9% y/y in 2011 Q4; Figure 2.14). In turn, growth in expenditure on motor vehicles accelerated to 25.2% y/y (from 10.1% y/y in 2011 Q4). In 2012 Q1, enterprises also increased their spending on buildings and premises (by 12.9 % y/y as against 4.3 % in 2011 Q4).

According to the NBP business condition surveys, in 2012 Q1 the share of enterprises planning to embark on new investments within the coming quarter increased as compared to the previous quarter (to 23.9% as against 20.9% in 2011 Q4 in seasonally adjusted terms). The rise in percentage of enterprises planning to start new investment projects in 2012 Q2 may be attributed to growing production capacity utilization in 2012 Q1 (Figure 2.16), strong financial performance in the enterprise sector and better assessment of demand by some enterprises (see Chapter 2.3 *Financial situation in the enterprise sector*). The higher percentage of companies planning new investment projects was recorded – similarly to the previous quarters – mainly in the group of large enterprises that also announce their plans to increase the value of new investment projects; this should, in turn, mitigate the slowdown in investment growth in 2012 Q2.

At the same time, the new investment index, despite a rise, remained below its long-term average. Many enterprises continued to defer

**Figure 2.13**

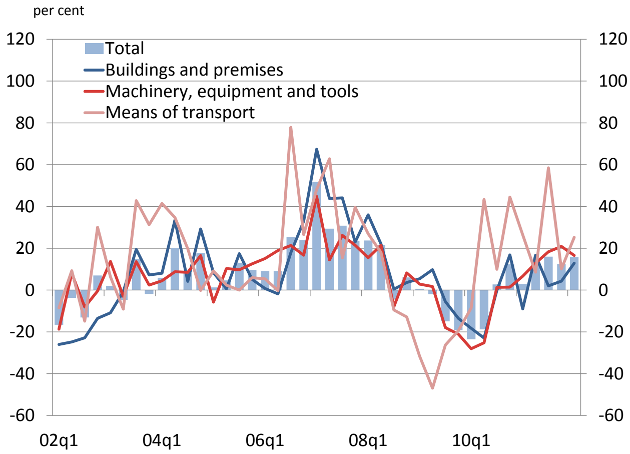
Investment spending in the economy (y/y).




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

**Figure 2.14**

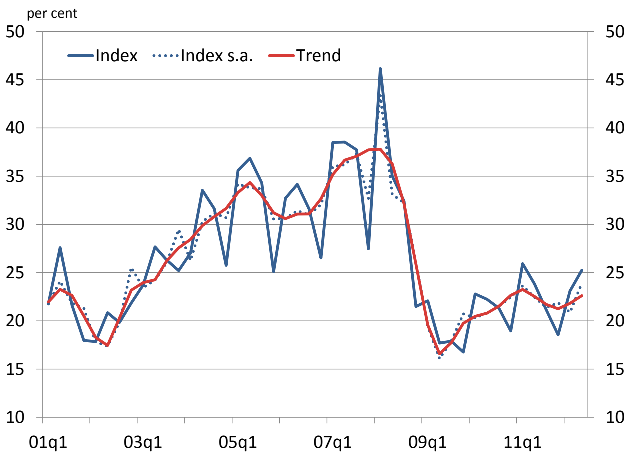
Gross fixed capital formation in the enterprise sector (in nominal terms, y/y).




**Source**: NBP estimates based on GUS data.

**Figure 2.15**

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




**Source**: NBP business condition surveys.

their investment decisions, largely due to high uncertainty about future economic developments[30].

### 2.2.3. Government demand

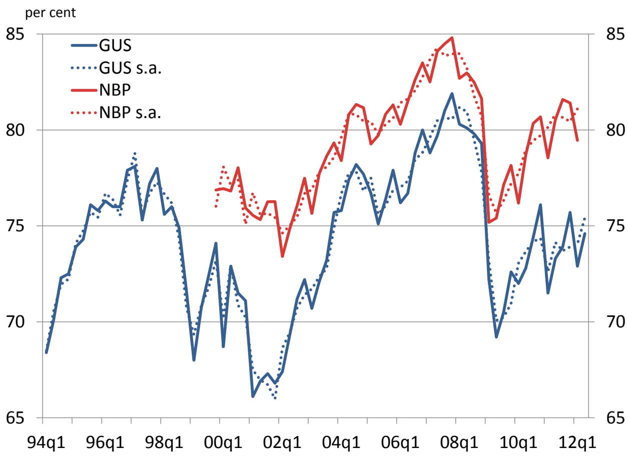
In January-May 2012, the central budget deficit stood at approx. PLN 27.0 billion and was higher than in the corresponding period of the previous year (PLN 23.7 billion)[31]. Total budget revenues in January-May 2012 rose by 5.2% y/y. Tax revenues grew at a weaker rate (4.9% y/y), markedly below that assumed in the *Budget Act*, primarily as a result of a sluggish growth in VAT revenues, which could be related to deceleration in industrial output. At the same time, budget expenditure rose by 6.7% y/y, fuelled by increased debt service costs and a higher contribution to the EU budget due to the changes in the schedule of payments vis-à-vis 2011. After 2012 Q1 the public debt stood at PLN 824.3 billion and was PLN 9.0 billion higher than at the end of 2011.

In 2012 Q1, local government entities posted a surplus of PLN 6.2 billion, i.e. PLN 1.7 billion lower than in 2011 Q1. The decline in surplus was mainly attributable to low revenues from corporate income tax due to the later date of settlement of this tax in 2012 (the beginning of April as against the end of March last year). Increase in local governments' total spending was primarily stimulated by the rise in wages and salaries as well as social contributions[32]. The debt of local government entities stood at PLN 64.5 billion in 2012 Q1, i.e. was slightly lower than at the end of 2011 (PLN 65.8 billion).

The favourable financial position of the Social Insurance Fund in the first months of 2012 reflected a high growth in social security

**Figure 2.16**

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




**Source:** GUS data, NBP business condition surveys.

The degree of capacity utilisation based on the GUS business tendency survey is significantly lower than the one quoted by the 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.

[30] See: *Information on the condition of the enterprise sector with a particular focus on business conditions in 2012 Q1 and the forecast for business conditions in 2012 Q2*, NBP.

[31] The central budget deficit stood at 77% of the annual plan as against 94% after May 2011.

[32] The rise in social contributions resulted mostly from increase in the disability pension contribution.

contributions related to the rise in the disability pension contribution as of February 2012. Accordingly, the better financial position paved the way to repaying the total debt of the Social Insurance Institution towards commercial banks. 2012 Q1 also saw an improvement in financial situation of the Labour Fund and the National Health Fund. Their financial surpluses were slightly higher than in the corresponding period of 2011.

Looking ahead, public finance imbalances are expected to unwind significantly in the course of 2012, under the fiscal tightening commenced in 2011. According to the *Convergence Programme. 2012 Update*, the general government sector deficit in ESA95 terms is to be curbed in 2012 to 2.9% of GDP (as against 5.1% of GDP in 2011). Meeting this target is to be supported by the expenditure rule applied to the central government budget, which contains the growth of discretionary expenditure, and fiscal rules at the local governments level, as well as the legislative amendments adopted in 2011 and 2012 which increase the general government revenues (especially transfer of part of contributions from Open Pension Funds to FUS, imposition of royalty charge on copper and silver and increase in the disability pension contribution).

**Box 3. Public debt after the global economic crisis**

During the global economic crisis, nearly all EU countries, including Poland, saw a considerable rise in public debt. The recession which hit the majority of developed countries had a direct impact on the debt-to-GDP ratio, as GDP fell and public finance deficits surged due to lower tax revenues. A number of countries additionally adopted discretionary fiscal expansion measures aimed at stimulating their aggregate demand. Moreover, in some EU countries, public debt rose as a consequence of government support to the financial sector – e.g. in Ireland costs of this support exceeded 20% of GDP. As a result of those phenomena, some euro area peripheral countries are now facing fiscal challenges of unprecedented scale,putting in question the possibility of restoring sustainable fiscal policies. Uncertainty about the outlook for public finances increased the aversion of the financial markets to fiscal risks and made rebalancing of fiscal policy and bringing public debt to safe levels the key challenges for economic policy.

As shown by the economic theory and empirical evidence, high level of public debt may adversely affect the economy in several ways, in particular :

- by increasing interest rates in the economy, which limits the possibility of financing private investment (Laubach, 2009);

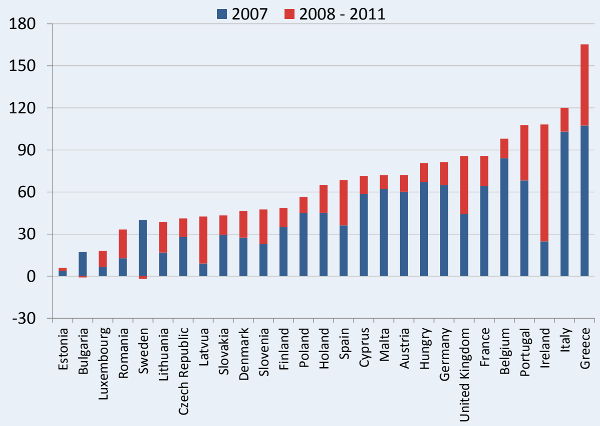
- by aggravating the vulnerability of public finance to macroeconomic shocks; a higher debt level means that an increase in interest rates or a slowdown in GDP growth result in a stronger increase in the fiscal deficit;
- higher public debt requires a larger primary fiscal surplus[33] (budget balance net of interest payments) to stop further debt accumulation, which, in turn, implies a higher tax burden to be placed on the economy with lower level of public services provided;
- a high amount of public debt that is to be rolled over in a particular year increases the risk that even short-term disruptions in access to market financing in case of market turmoil or contagion effects, may become a major obstacle in funding the borrowing needs (Das et. al., 2010);

In the past few years a number of empirical studies have been published, which indicate that public debt exceeding certain threshold of approx. 70% - 90% of GDP, depending on the studies, has a negative impact on economic growth (e.g. Reinhart and Rogoff, 2010, Kumar and Woo, 2010). Other papers (e.g. Daniel et al., 2004) attempt to determine a safe level of public debt by analysing case studies of governments' insolvency; however, crises of this kind hit practically emerging and developing countries only. No such cases were reported in developed countries after World War II[34], which makes it difficult to infer about the safe level of public debt in the present situation. The International Monetary Fund (IMF, 2011), recommends that aside from analysing public debt trends, debt sustainability analyses (DSAs) should pay more attention to the level of public debt, than they have until now. At the same time, however, the authors argue that large discrepancies between results of different empirical studies make it impossible to unambiguously determine threshold debt levels in this type of analysis. Therefore, they suggest adopting a 60% GDP threshold as the level above which a more in-depth analysis of risks to public finance sustainability is necessary; however, the situation in which this level is exceeded should not be automatically interpreted as insolvency threat.

During the global economic crisis, Poland also saw a considerable rise in the general government deficit which reached 7.8% of GDP in 2010. This led to accumulation of public debt which in 2011 reached PLN 858.9 billion, i.e. 56.3% of GDP (in ESA95 terms). The increase of public debt during the crisis was however markedly lower than in most EU countries, which was largely the result of positive GDP growth in Poland throughout the whole crisis. Debt to GDP ratio in Poland in 2008-2011 increased by 11.3 percentage points (Figure R.3.1, Figure R.3.2), whereas the EU average was 24.0 percentage points and the euro area average stood at 21.6 percentage points.

**Figure R.3.1**

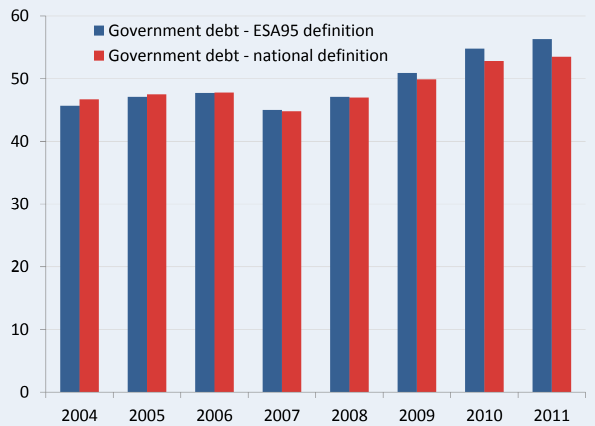
Public debt in the EU countries before the crisis and at present (ESA95, %GDP).




**Source:** European Commission (AMECO).

**Figure R.3.2**

Public debt in Poland according to national methodology and in ESA95 terms (%DGP).




**Source:** Ministry of Finance.

[33] Under the assumption of interest on debt exceeding GDP growth.

[34] In the case of Austria, Greece, Japan, Germany and Italy in the period after World War II, restructuring contracts were signed with respect to insolvency periods started before or during the War (Borensztein and Panizza, 2008).

Poland is a unique country in terms of institutional arrangements to prevent the build-up of public debt. The public debt limit set at 60% of GDP in the *Constitution of the Republic of Poland is such an arrangement*. It is combined with the so-called prudential thresholds set forth in the *Act on Public Finance*, enforcing corrective measures should the debt thresholds of 50% of GDP and 55% of GDP be breached. Until 2007 Poland was, next to Germany[35], the only EU member state with a constitutional fiscal rule applying either to the whole public finance sector or at least to its central subsector (European Commission, 2010). In 2007 Sweden introduced to its Constitution the rule of a structural budget surplus of 1% of GDP. In 2011 fiscal rules limiting the public debt level were adopted in the Constitutions of Hungary, Slovakia, Bulgaria and Spain[36].

The debt rule provided for in the *Constitution* and prudential thresholds set forth in the *Act on Public Finance* apply to the public debt as defined in the *Act on Public Finance*. Its value is calculated with the use of a slightly different methodology that the one applied to calculate the debt of the general government sector in line with the European system of national accounts ESA95. The following differences between the two approaches may be identified:

- Institutional coverage of the public finance sector. In the case of public debt according to the national definition, the coverage of the sector is defined by the law – the *Act on Public Finance* includes the exhaustive list of units that form the sector. Meanwhile, classification of units according to the European system of national accounts ESA95 is done on the basis of their functions. It means in practice that certain units, not included in the public finance sector on the basis of the national definition, yet performing governmental functions, are considered general government sector units in ESA 95 terms. The National Road Fund may be an example of such a unit; its debt at the end of 2011 amounted to PLN 36.4 billion and was the key reason behind the difference between the level of public debt according to national definition and public debt in ESA95 terms.
- Different approach to accounts payable. According to the *Act on Public Finance*, accounts payable of the public finance sector units are part of public debt. Meanwhile, in ESA95 terms, they are not classified as public debt.

In the past few years, the difference between public debt according to the national definition and public debt in ESA95 terms increased. (Figure R.3.2) This was primarily the result of the National Road Fund's debt; the National Road Fund was financed by infrastructure bonds issued by Bank Gospodarstwa Krajowego (BGK), which also contracted loans on behalf of the Fund at the European Investment Bank.

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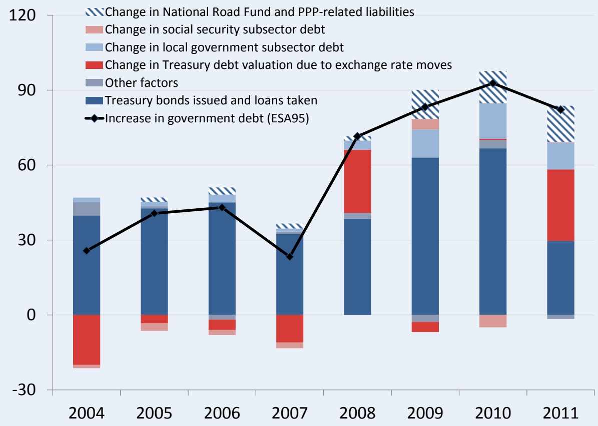
[35] In 1969 the German Constitution was amended to introduce the so-called „golden rule" in public finance, stating that the Government will borrow only to finance investment. In mid-2009, legislation was adopted to replace the „golden rule" with the so-called debt-brake rule (*Schuldenbremse*). According to this rule, structural deficit at the federal level may not exceed 0.35% of GDP, and in the case of federal states budgets should be at least balanced in nominal terms.

[36] The debate over the implementation of new fiscal rules has been under way also in other EU member states, in particular, in the euro area countries. In line with the Treaty on Stability, Coordination and Governance in the Economic and Monetary Union (commonly referred to as fiscal pact) adopted in March 2012, the euro area countries will be obliged (after the Treaty has been ratified) to transpose into their national legislation, as far as possible into their Constitutions, the rules set out in the Treaty, introducing tighter fiscal discipline. In line with those rules, public finance has be close to balance and public debt exceeding 60% of GDP has to be reduced at an appropriate pace, while in the case of deviations from the said rules an automatic corrective mechanism should be triggered. Signatories of the Treaty not being euro area countries, including Poland, will be obliged to apply disciplinary rules provided for in the Treaty only upon joining the euro area; yet, they may decide to enforce them at an earlier date on a voluntary basis.

**Figure R.3.3**

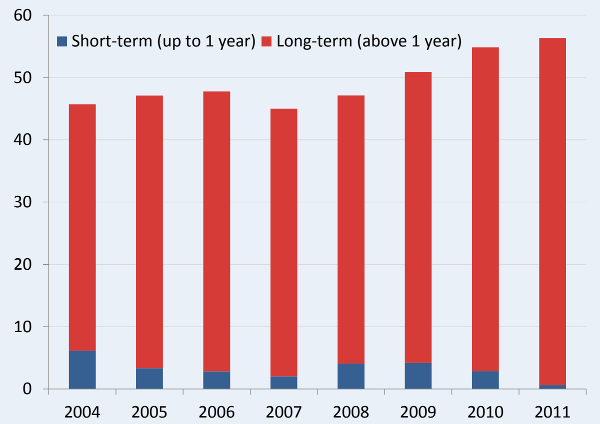
Changes in public debt in ESA95 terms (PLN billion).




**Source :** Ministry of Finance.

**Figure R.3.4**

Maturity structure of public debt in ESA95 terms according to the original maturity (% of GDP).




**Source :** Ministry of Finance.

The increase in public debt in ESA95 terms which took place in 2011 was driven to a large extent by the zloty exchange rate depreciation, rising debt of the National Road Fund and liabilities resulting from projects executed under the Public–Private Partnership (PPP) scheme. Debt of the local government sector also rose, but to a smaller extent than in the years 2009-2010 when local government units carried out public investment projects on a record scale. On the other hand, the amount of bonds issued and loans taken out by the Treasury was exceptionally low as compared to the previous years (Figure R.3.3). This was driven by a one-off reduction in borrowing needs by PLN 24.5 billion as a result of consolidation of public sector liquidity management. In 2011, the share of short-term debt in public debt declined, contributing to the lengthening of average debt maturity and safe debt refinancing in the future (Figure R.3.4).

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International Monetary Fund, (2011) Modernizing the Framework for Fiscal Policy and Public Debt Sustainability Analysis, Policy Paper.

Kumar M., Woo J., Public Debt and Growth, IMF Working Paper 10/174, 2010.

Laubach, T. New Evidence on the Interest Rate Effects of Budget Deficits and Debt, Journal of the European Economic Association, 7: 858–885, 2009.

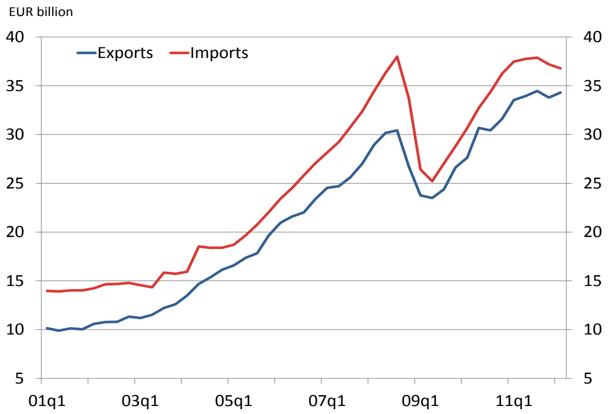
Reinhart C., Rogoff K. Growth In a Time of Debt, NBER Working Paper 16539, 2010.

## 2.2.4. Exports and imports

In 2012 Q1 Poland's foreign trade growth slowed down considerably as compared to the 2011 Q4[37]. Export growth decelerated to 1.3% y/y as against 6.7% y/y in the previous quarter. Import volume declined in 2012 Q1 by 0.4% y/y, following a rise of 1.8% y/y in 2011 Q4 (Figure 2.17).

**Figure 2.17**

Value of Polish exports and imports.




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

[37] Analysis of the value of Polish exports and imports in this subsection is based on the seasonally adjusted GUS data (expressed in EUR).

The slowdown in exports in 2012 Q1 was primarily driven by a 2.3% y/y fall in the sales to the euro area as compared to a 3.7% y/y growth in 2011 Q4 (Figure 2.18). Falling exports to the euro area concerned consumer and intermediate goods, which was related to weaker consumption and a deceleration in the euro area external trade. At the same time, sales of investment goods to the euro area increased.

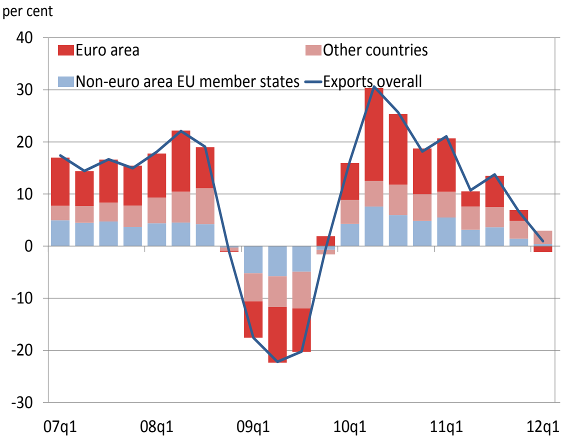
Growth in exports to non-euro area countries in 2012 Q1 slackened (to 5.7% y/y as compared to 10.3% y/y in 2011 Q4), despite a considerable rise in sales to the former USSR countries (mainly Russia and Ukraine).

Due to a particularly sharp deceleration in the growth of exports of highly import-intensive goods, imports of intermediate goods declined in 2012 Q1 by 4.9% y/y (versus a 1.0% y/y increase in 2011 Q4)[38]. At the same time, imports of final goods, both investment and consumer goods, continued to decline which may have been driven by weakening internal demand and the previously observed depreciation of the zloty. Higher value of imported raw materials and fuels, resulting from their rising prices in the global markets, mitigated the decline in the value of imports.

2012 Q1 brought an appreciation in the nominal and real effective exchange rate of the zloty (Figure 2.19). Nevertheless, price competitiveness of Polish exports remained high as confirmed by the NBP's business condition surveys. According to these surveys, despite falling export profitability in 2012 Q1 as compared to the 2011 Q4, the zloty market exchange rate remained considerably below the threshold export profitability rate as declared by enterprises and exports profitability persisted high (Figure 2.20).

**Figure 2.18**

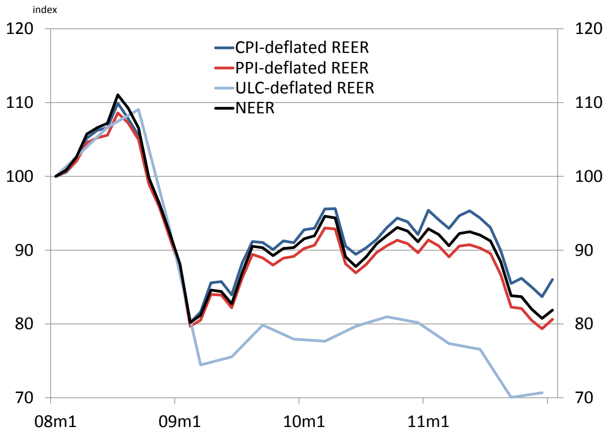
Geographic composition of Polish export growth (in EUR billion).




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

**Figure 2.19**

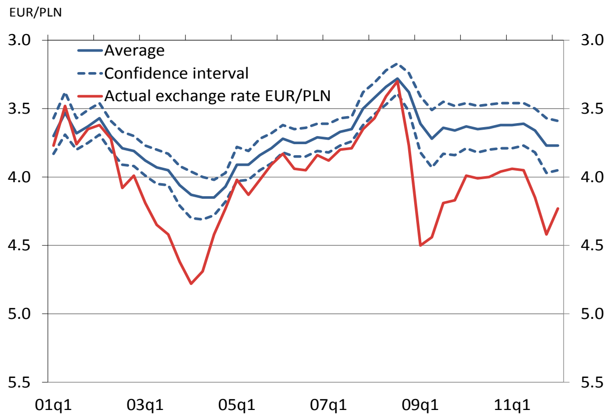
Zloty real and nominal effective exchange rate (increase denotes appreciation; January 2008=100).




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

**Figure 2.20**

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)?"

[38] Highly import-intensive goods include investment goods, passenger cars and durable consumer goods.

### 2.2.5. Output

In 2012 Q1 gross value added growth weakened (to 3.2% y/y, as compared to 3.8% y/y in 2011 Q4), dragged mainly by decline in gross value added in industry[39]. At the same time, all key production sectors made a positive contribution to the growth of gross value added (Figure 2.21).

In January-May 2012, the growth of sold production in industry decelerated markedly, accompanied by further deterioration in industrial orders portfolio and a drop in the PMI index, which points to a weakening of a business climate in this sector (Figure 2.22).

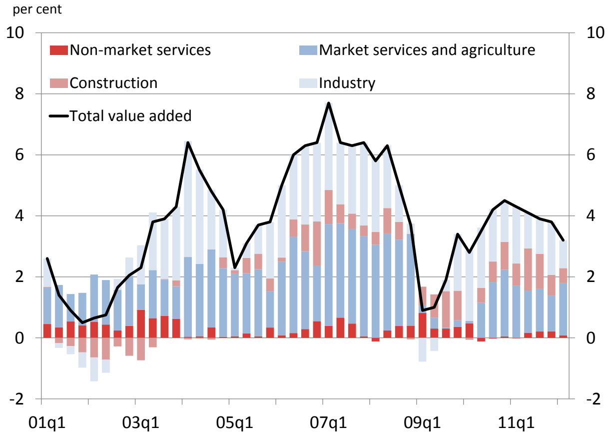
Data on construction sector may also be indicative of worsening business conditions. Annual growth both in construction and assembly output and construction orders portfolio slid significantly between January and May 2012 (Figure 2.23).

Since the publication of the previous *Report,* there have also been sings of a slowdown in the market services sector. Growth in wholesale sales (in nominal terms) declined to 4.3% y/y in January-April 2012, as against 13.4% y/y in 2011. Likewise, in the subsequent months of 2012, growth in retail sales of companies employing over 9 persons decreased (see chapter 2.2.2 *Consumption demand)*[40]. Slight acceleration was recorded in total sales of services of transportation companies, amounting (in real terms) to 8.3% in 2012 Q1, as compared to 8.0% in 2011.

According to leading economic indicators published by the GUS, in the recent months enterprises have continued to be pessimistic about the economic outlook (Figure 2.24). Most

**Figure 2.21**

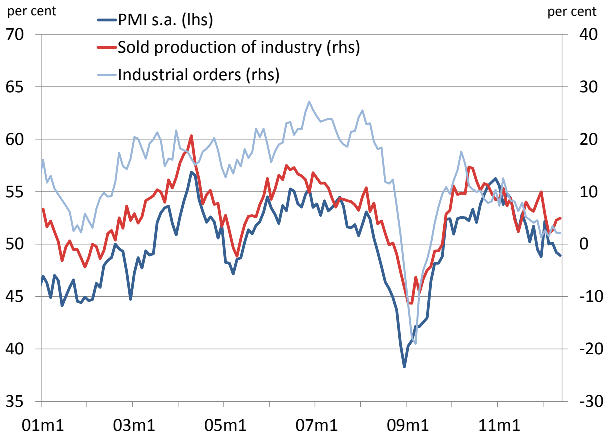
Sector contribution to annual growth of gross value added.




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

**Figure 2.22**

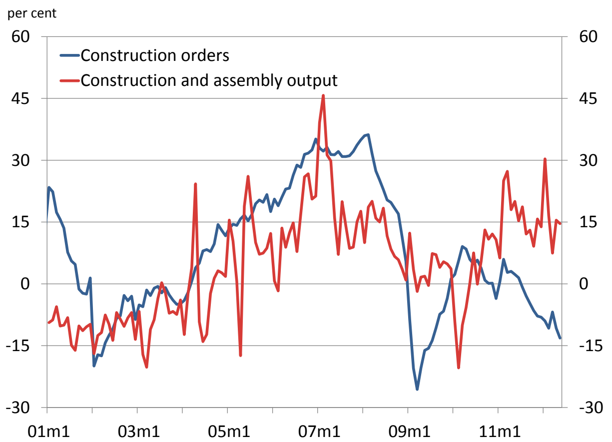
PMI and annual growth of sold production of industry and of industrial orders.




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

**Figure 2.23**

Annual growth of construction and assembly output and construction orders.




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

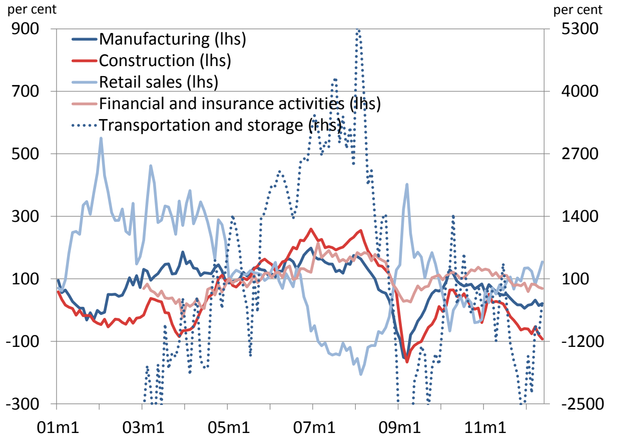
[39] Information on sold production in industry, industrial orders portfolio, PMI index, construction and assembly output and construction orders portfolio refers to seasonally adjusted data.

[40] Monthly data on retail sales do not fully reflect changes in total retail sales. See footnote 28.

leading economic indicators in the respective sections are running below their long-term average. At the same time, the NBP business climate surveys point to a slight improvement in the assessment of current economic situation and outlook for demand as expressed by companies[41].

**Figure 2.24**

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 Q1 financial situation of enterprises remained sound, albeit deteriorated slightly as compared to 2011 Q4.

In 2011 Q4 gross operating profit of enterprises increased as compared to 2011 Q3. This improvement was mainly driven by considerably better result on financial operations combined with slightly lower result from sales largely due to a significant rise in the costs of materials and raw materials (Figure 2.25). Liquidity of enterprises, supported by a rapid increase in cash holdings, remained high.

In 2012 Q1, on account of strong revenue growth from financial operations and other operating activity, total revenue growth remained high, despite certain slowdown driven mainly by deceleration in foreign sales related to further weakening of demand from Poland's main trading partners (see chapter 2.2.4 *Exports and imports*, Figure 2.26).

**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 |
|---|---|---|---|---|---|---|---|---|
| **Sales profitability ratio** | 5.0 | 5.0 | 5.2 | 5.3 | 5.5 | 5.6 | 4.7 | 4.4 |
| **Net turnover profitability ratio on credits and loans** | 3.3 | 4.1 | 4.4 | 4.3 | 6.1 | 3.7 | 4.1 | 4.1 |
| **Total debt ratio** | 47.5 | 46.9 | 47.1 | 47.3 | 47.6 | 48.2 | 48.8 | b.d. |
| **Interest coverage ratio** | 7.6 | 8.6 | 9.0 | 9.2 | 9.4 | 8.6 | 8.9 | b.d. |
| End of the period data | | | | | | | | |
| **Liquidity ratio of the first degree** | 0.34 | 0.39 | 0.40 | 0.39 | 0.38 | 0.37 | 0.38 | 0.34 |

**Source:** GUS data.

[41] *Information on the condition of the enterprise sector with a particular focus on business conditions in 2012 Q1 and the forecast for business conditions in 2012 Q2*. NBP.

Slowdown in revenues, in 2012 Q1 was accompanied by deceleration in enterprises' costs, particularly strong in case of imported raw materials due to zloty appreciation in this period (Figure 2.26).

Sales profitability ratio of enterprises dropped in 2011 Q1. Despite this decline, net turnover profitability ratio in the corporate sector remained relatively high, supported by positive result on both financial operations and other operating activity.

According to preliminary data published by the GUS, in 2012 Q1, liquidity ratio of the first degree in the enterprise sector declined, which was mainly driven by a sharp decline in short-term investment in related units.[42] Falling liquidity did not affect all groups of enterprises. While liquidity of large enterprises declined, particularly in case of largest enterprises (employing over 1999 persons), liquidity position in SME sector improved.

As indicated by the NBP business climate surveys and GUS data, enterprises' debt servicing capacity in 2012 Q1, despite a certain decline, remained relatively high.

## 2.4. Labour market

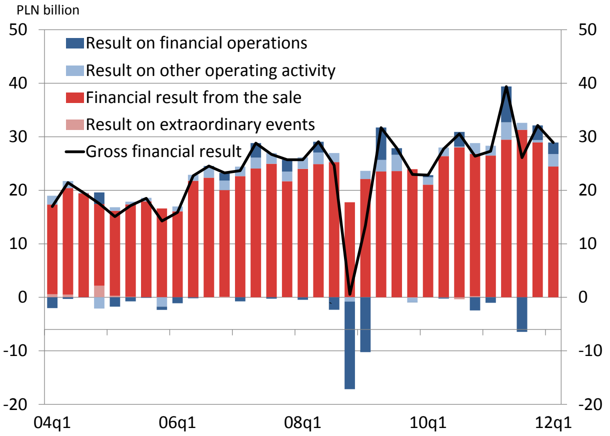
### 2.4.1. Employment and unemployment

In 2012 Q1, the annual growth in the number of persons working in both the economy and the enterprise sector declined further, although still remained positive (Figure 2.27). At the same time, the number of the economically active was on a steady rise and the unemployment rate was higher than a year before.

According to the Labour Force Survey (LFS) data,

**Figure 2.25**

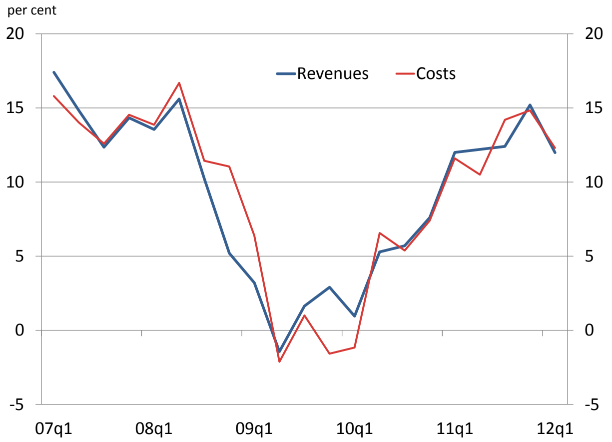
Enterprises' financial result and its components.




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

**Figure 2.26**

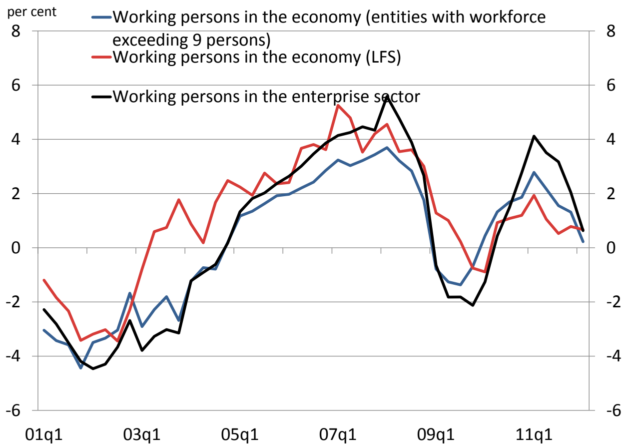
Rates of growth of revenues and costs.




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

**Figure 2.27**

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 in the enterprise sector.




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

[42] This decline can be due to the sale of shares in related companies,, repayment of granted loans as well as settlement of differences resulting from a decline in the value of the held securities .

the number of working persons increased by 0.7% y/y (as against 0.8% y/y in 2011 Q4; Figure 2.28). Growth in the number of persons working in services picked up to 1.7% y/y (as compared to 0.8% y/y in the previous quarter). At the same time, along with declining gross value added in industry, growth in the number of persons working in this sector decreased to 0.0% y/y (as against 2.3% y/y in the previous quarter). The number of persons working in agriculture continued on a downward trend (a 2.3% y/y drop in 2012 Q1 as compared to a 2.7% y/y fall in 2011 Q4).

Employment growth in the enterprise sector also decelerated and was running at 0.6% y/y in 2012 Q1 (as compared to 2.0% y/y in 2011 Q4). Further slowdown in the annual employment growth in this sector is also suggested by the April and May 2012 monthly data.

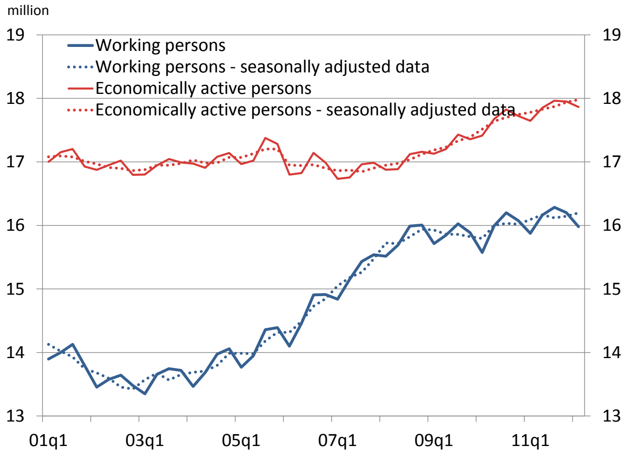
At the same time, the employment forecast indicator as presented in the NBP business sentiment surveys, suggests that 2012 Q2 will see more enterprises cutting down on employment than expanding their workforce; nevertheless, this indicator has improved slightly comparing to the 2012 Q1 figure and remains above its long term average[43].

In 2012 Q1 the rise in the number of the economically active persons, observed since 2007, continued (seasonally adjusted data; Figure 2.28). The number of the economically active increased in 2012 Q1 by 1.1% y/y (as compared to 1.1% y/y in the previous quarter).

The LFS unemployment rate in 2012 Q1 rose in year-on-year terms (by 0.5 percentage point) reaching 9.9% (seasonally adjusted data; Figure 2.29). The year-on-year increase in the unemployment rate was mainly fuelled by growing labour supply, which was the result, apart from higher number of the economically

**Figure 2.28**

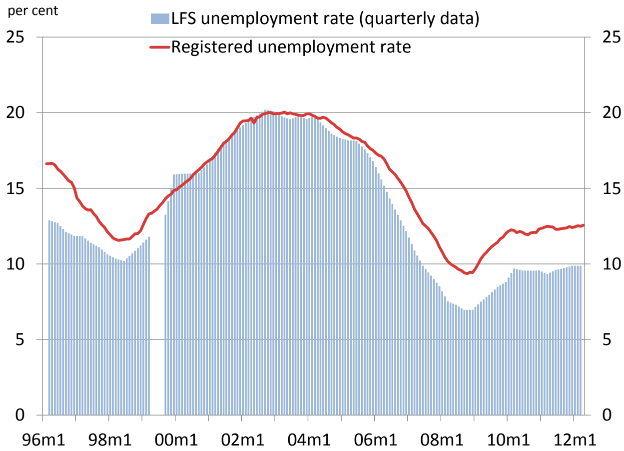
Number of working persons and the economically active in the economy according to the Labour Force Survey.




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

**Figure 2.29**

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.

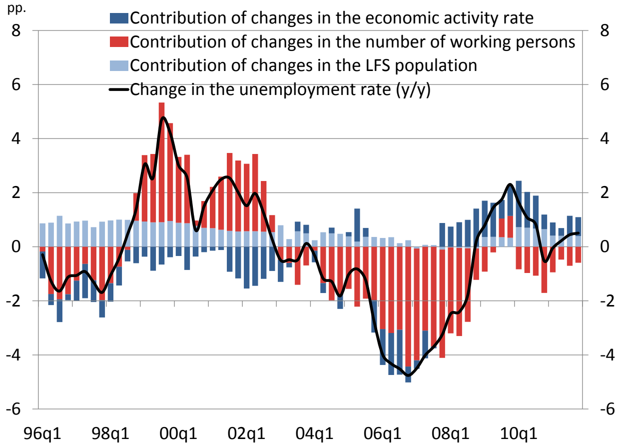
[43] *Information on the condition of the enterprise sector with a particular focus on business conditions in 2012 Q1 and forecast for 2012 Q2,* NBP.

active, of an upward revision in the LFS population estimates by the GUS in 2011 Q2[44] (Figure 2.30). Unemployment growth was concurrently curbed by rising number of the working persons.

Data released by employment offices indicate that the registered unemployment rate continued on an upward trend in the recent months, rising from 12.4% in January 2012 to 12.6% in April (Figure 2.29; seasonally adjusted data). At the same time, in line with the NBP's estimates, the likelihood of finding a job was diminishing significantly, while the likelihood of losing a job was growing only gradually. These developments of probabilities could indicate that enterprises postpone hiring new employees, abstaining, at the same time, from significant job reductions.

**Figure2.30**

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.

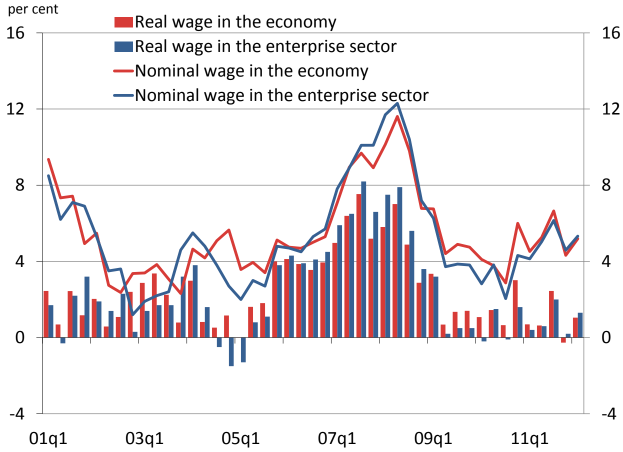
## 2.4.2. Wages and labour productivity

According to the incoming data both the nominal wage growth in the economy and the nominal growth in unit labour costs have remained moderate in the recent period.

In 2012 Q1 the nominal wage growth in the economy and in the enterprise sector slightly exceeded their levels recorded in the previous quarter, reaching 5.2% y/y and 5.3% y/y respectively (as compared to 4.3% y/y and 4.6% y/y in the previous quarter), thus remaining close to the average 2011 level (Figure 2.31). Higher wage growth may have been, to some extent, driven by the payment of additional wage components being brought forward from December 2011 to January 2012. The first quarter of 2012, amidst slightly lower inflation as compared to the previous quarter, brought a slight increase in the real wage growth.

**Figure 2.31**

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




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

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

Monthly data on the corporate sector point that wage growth in the period February-May 2012 was lower than in 2011. At the same time, according to the NBP's business sentiment surveys, in 2012 Q2 fewer employees received wage increases and their scale was smaller than in 2012 Q1[45].

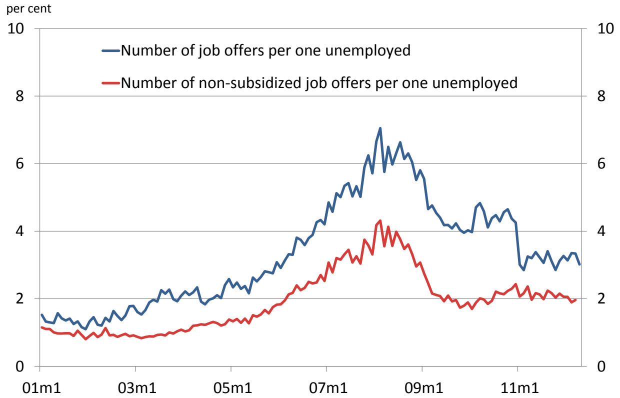
The market tensions index (number of job offers per one unemployed person) remained at a modest level (Figure 2.32).

Labour productivity growth in the economy slowed down in 2012 Q1, which was largely the result of lower GDP growth (Figure 2.33). Weaker labour productivity growth, combined with slightly higher wage growth, supported an increase in unit labour costs; yet, it remained moderate.

Growth in the unit labour costs in industry in the recent months was slightly higher than at the end of 2011, with its average remaining close to zero. A slight increase in unit labour costs was fuelled by somewhat less pronounced decline in labour productivity growth than in wage growth in this sector (Figure 2.34).

**Figure 2.32**

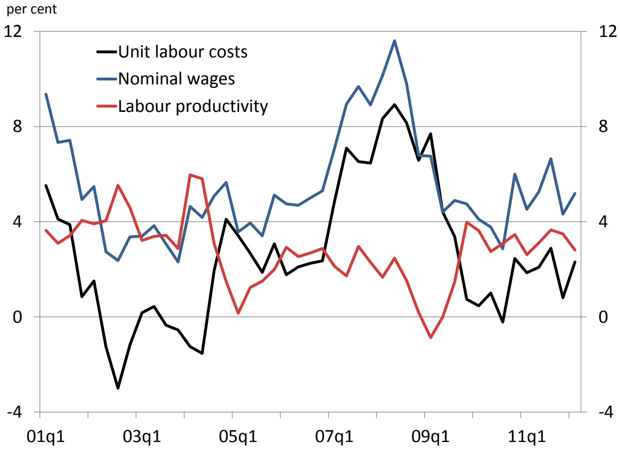
Market tensions index (number of job offers per one unemployed).




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

**Figure 2.33**

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




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

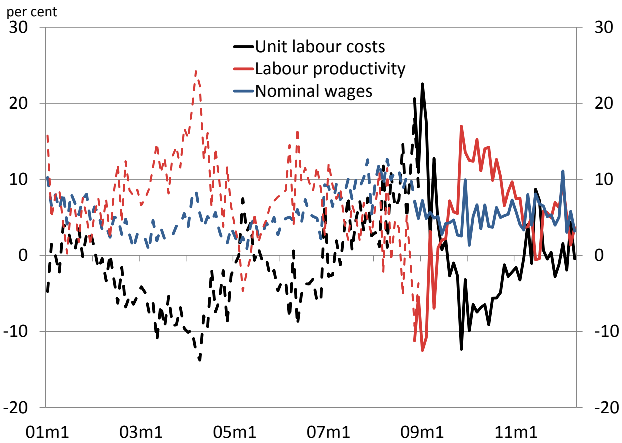
## 2.5. Financial markets and asset prices

### 2.5.1. Financial asset prices and interest rates

Since the publication of the previous *Report* the Monetary Policy Council raised the NBP interest rates by 0.25 percentage points, increasing the reference rate to 4.75% (Figure 2.35). This triggered an increase in the money market rates. Between the publication of the previous *Report* and 20 June 2012, the 1-month WIBOR increased by 0.20 percentage point and the 3-

**Figure 2.34**

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 since November 2008 (solid lines in the figure) are not fully comparable with the previously recorded rates.

[45] *Information on the condition of the enterprise sector with a particular focus on business conditions in 2012 Q1 and forecast for 2012 Q2,* NBP.

month WIBOR increased by 0.19 percentage point.

At the same time, the WIBOR-OIS 3M spread, which approximates the level of credit risk premium in the interbank market decreased slightly, in line with global trends.

According to Reuters poll of 4 June 2012, market participants expected the NBP reference rate to stay unchanged till mid-2013. Market expectations based on FRAs of 20 June 2012 pointed to a possibility of some increase in the interest rates within a four-month horizon, and their subsequent drop until mid-2013.

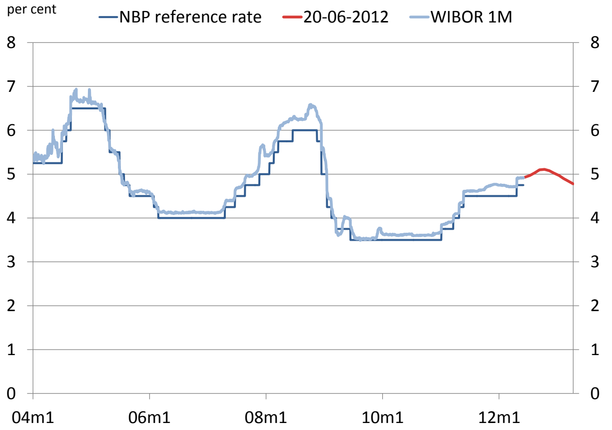
Since the publication of the previous *Report* the yield curve has flattened. The NBP interest rate increase of May 2012 translated into a rise in 2-year Treasury bond yields. The yields of Treasury bonds with longer maturities were determined mainly by sentiment in the international financial market (see chapter 1.3 *International financial markets and monetary policy abroad)*; some of them changed insignificantly, while others fell (Figure 2.36). CDS rates for Poland remained lower than the average in the emerging economies (Figure 2.37).

According to the National Depository for Securities data, in April 2012 non-residents slightly reduced their exposure to the domestic debt market amidst an increase in risk aversion. Nevertheless, their exposure remained high (Figure 2.38).

Stock prices at the Warsaw Stock Exchange, under the impact of global sentiments, fell strongly between mid-March and end-May 2012, to unwind partly in the following weeks (Figure 2.39). Since the publication of the previous *Report* the WIG stock exchange index decreased by 1.9% and the WIG 20 index – by 1.4%.

**Figure 2.35**

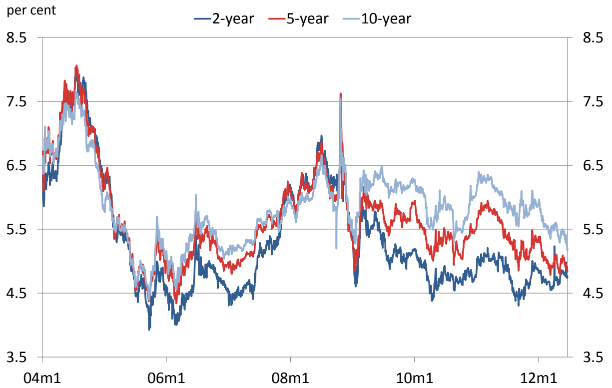
NBP reference rate, 1-month WIBOR and 1-month interest rate implied by FRAs.




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

**Figure 2.36**

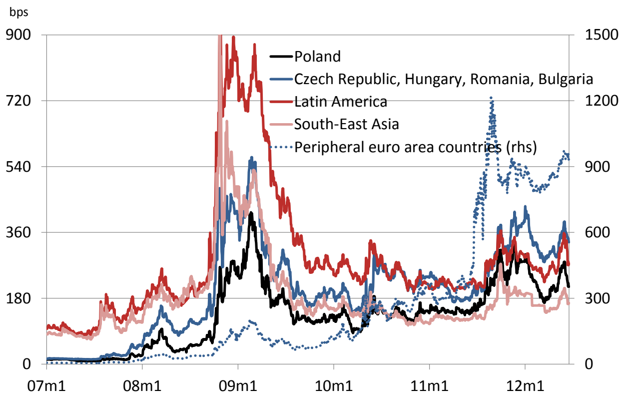
Yields of Polish benchmark bonds.




**Source:** Reuters data.

**Figure 2.37**

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




**Source:** Bloomberg data.

### 2.5.2. Housing prices

2012 Q1 saw no significant changes in the housing market in major Polish cities in comparison with the previous quarter[46]. Both asking and sale prices in the primary and secondary markets still followed a declining trend (Figure 2.40).

The tightening of credit conditions on mortgage loans and a significant reduction of price limits in the housing programme *Family on Their Own* (see chapter 2.6 *Credit and money*) somehow limited the number of transactions. The flats introduced in the market still outnumbered the flats sold, which may be conducive to further declines in flat prices.

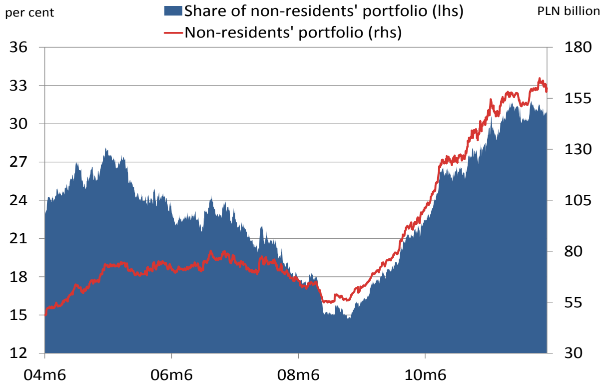
Despite falling real estate prices, profit margins in the housing construction sector remained relatively high, which encouraged developers to launch new investment projects. In 2012 Q1 the number of building permits increased by 37.7% as compared to 2011 Q1. At the same time, in comparison to 2011 Q1 the number of completed flats rose by 30.6%, i.e. by the fastest pace since 2008 Q3, which may have been due to new provisions to enter into force. These provisions effectively delay the receipt of an advance payments from buyers to the developer[47].

### 2.5.3. Exchange rate

Similarly to other currencies of the emerging markets, in the period between the publication of the previous *Report* and the end of May 2012, the zloty depreciated due to deteriorating sentiments in international financial markets,

**Figure 2.38**

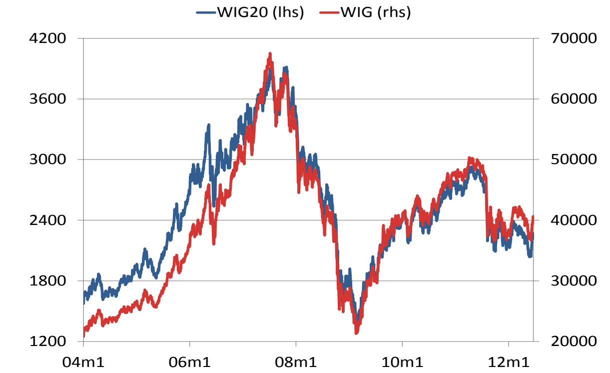
Non-residents' involvement in the Polish Treasury bond market.




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

**Figure 2.39**

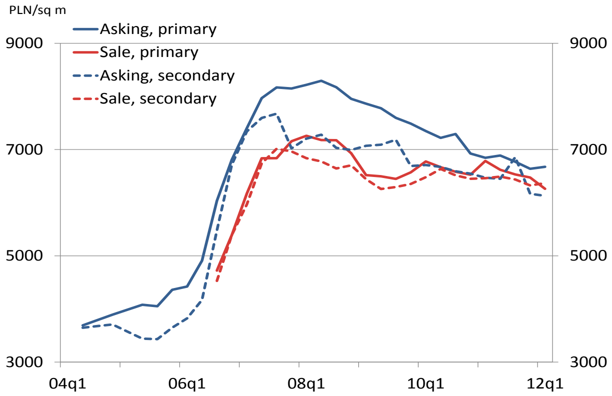
WIG and WIG20 stock exchange indices.




**Source:** Reuters data.

**Figure 2.40**

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




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

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

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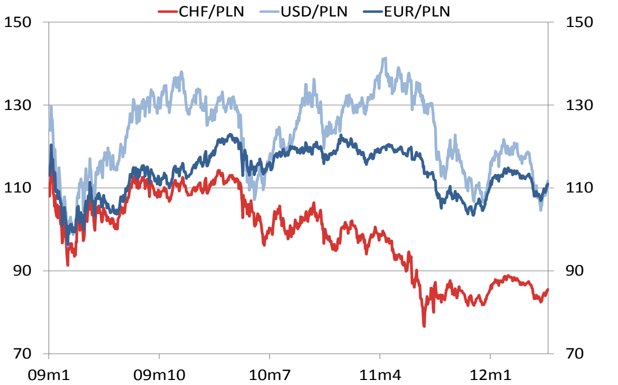
[46] More information on the conditions in the Polish housing market can be found in NBP publications: *Report on the prices of flats and the situation on the residential market in Poland in 2011 Q4,* and *Report on the situation in the Polish residential and commercial real estate market in 2010,* available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

[47] 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 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.

with the scale of depreciation being relatively high in the first half of May. In June 2012 the zloty slightly appreciated. Between the publication of the previous *Report* and 20 June 2012, the nominal exchange rate of the zloty depreciated by 3.4% against the euro, 3.8% against the Swiss franc, and 6.5% in relation to the US dollar (Figure 2.41).

**Figure 2.41**

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




**Source:** Ecowin Reuters data.

## 2.6. Credit and money

### 2.6.1. Loans

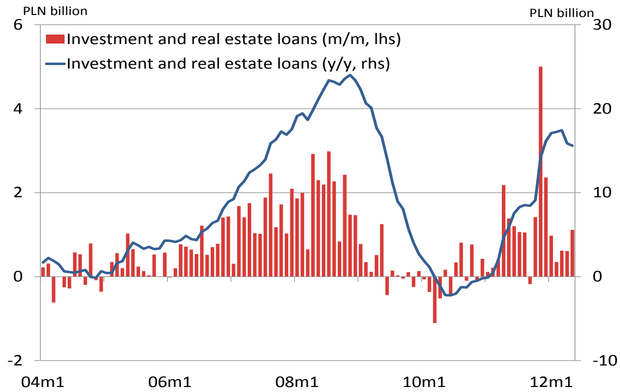
Since the publication of the previous *Report* lending growth slowed down somewhat[48]. In February – May 2012, the average monthly increase in debt stood at PLN 3.1 billion as compared to PLN 5.7 billion in October 2011 – January 2012[49]. At the same time, the annual growth in lending went down to 7.7% y/y in May 2012 from 9.4% y/y in January this year.

The recent months have seen a slowdown in corporate lending. In February – May 2012, the average monthly growth in corporate bank debt slid to PLN 1.3 billion from PLN 2.7 billion in February-May 2011[50]. Growth in corporate lending fell to 11.1% y/y in May 2012 from 14.4% y/y in January 2012 (Figure 2.42, Figure 2.43). In the analysed period, growth in both investment lending and short-term loans decreased.

Debt of small and medium-sized companies continues to grow faster than that of large enterprises, which are less dependent on

**Figure 2.42**

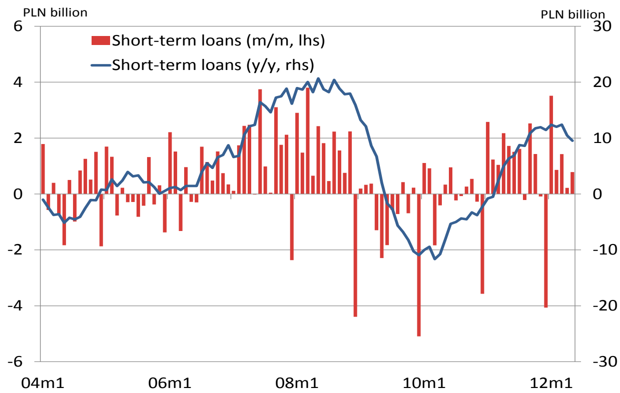
Investment and real estate loans to enterprises.




**Source:** NBP data.

**Figure 2.43**

Short-term loans to enterprises.




**Source:** NBP data.

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

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

[50] Lending to enterprises is subject to strong seasonal variations (e.g. in December lending to enterprises falls considerably, to grow again in January). Therefore, average monthly increases in corporate loans and deposits are compared between corresponding periods in subsequent years.

external sources of financing[51].

Weaker corporate lending may have been supported by lower credit demand from companies, which is suggested by the NBP business condition surveys (Figure 2.45)[52]. As declared by banks, a decline in demand for corporate financing was observed in the case of fixed capital formation, rather than current assets and inventories[53]. Despite banks' announcements of further tightening in most lending conditions and criteria, interest rate on corporate loans has not changed significantly in the recent period and stood at 6.7% in April 2012, while the share of approved loan applications remained high.

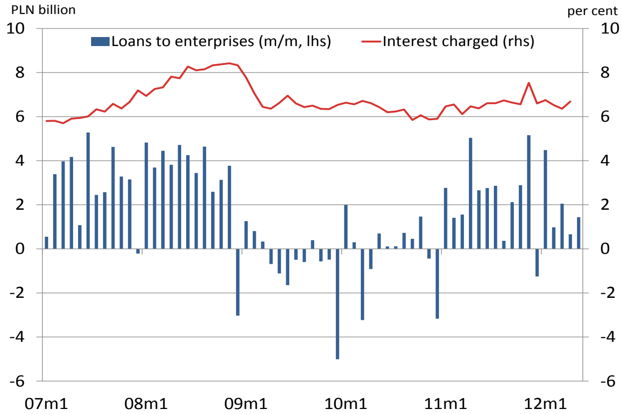
2011 Q4 saw a decline in the total foreign debt of enterprises (by EUR 2.1 billion) which led to a fall in its growth down to 8.1% y/y (as against 8.3% y/y in 2011 Q3)[54].

Since the previous *Report*, monthly increases in housing loans to households continued to subside and their monthly average stood at PLN 1.3 billion in February – May 2012 (as against the monthly average of PLN 1.8 billion for the period October 2011 – January 2012; Figure 2.46). Slower monthly increases translated into a further decline in the annual growth of this loan category (to 7.5% y/y in May 2012 from 9.4% y/y in January 2012)[55]. Weaker growth in housing loans curbs demand in the housing market, which is conducive to falling prices in this market (see chapter 2.4.2 *Home prices*).

Relatively high share of newly granted housing loans in PLN in total loans, observed since 2009, continued. This share reached 85.5% in April

**Figure 2.44**

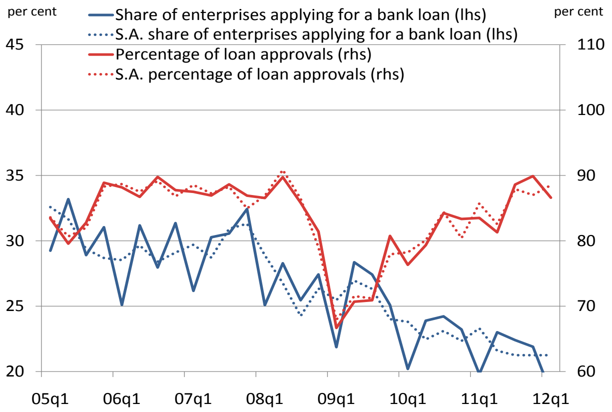
Monthly increases and average interest charged on newly granted loans to enterprises.




**Source:** NBP data.

**Figure 2.45**

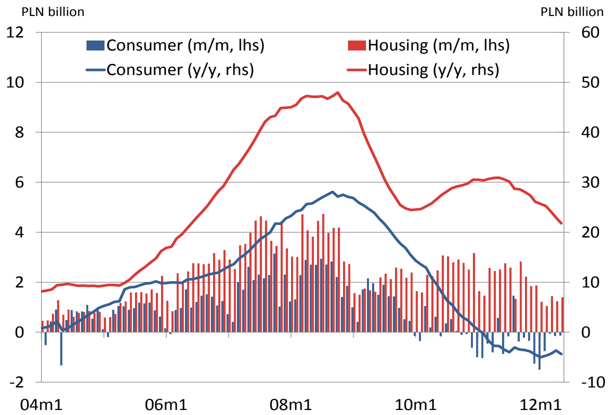
Share of enterprises applying for loans and percentage of approved loan applications.




**Source:** NBP data.

**Figure 2.46**

Loans to households.




**Source:** NBP data.

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

[52] *Information on the condition of the enterprise sector with a particular focus on business conditions in 2012 Q1 and forecast for 2012 Q2,* NBP.

[53] *Senior Loan Officer Opinion Survey on Bank Lending Practices and Credit Conditions in 2012 Q2,* NBP.

[54] The total foreign debt of enterprises in 2011 Q4 reached EUR 105 billion, while the total debt of Polish enterprises with domestic banks in December 2011 amounted to PLN 239 billion.

[55] Falling growth was seen both in housing loans denominated in PLN and in foreign currencies. In April 2012 it amounted to 19.9% y/y and 1.2% y/y respectively (as against 22.1 % y/y and 2.2% y/y, respectively, recorded in January 2012).

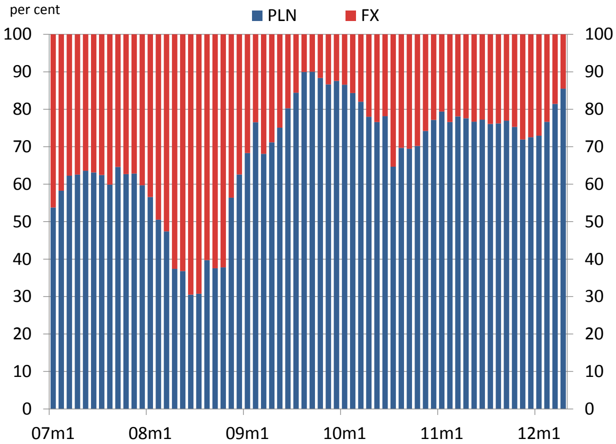
2012 as compared to 72.5% in December 2011 (Figure 2.47). Nevertheless, housing loan debt in foreign currencies continues to exceed housing loan debt in PLN (the share of foreign currency loans in total housing loans amounts currently to approx. 59.5%).

Weaker growth in housing loans was supported by a considerable lowering of pricing limits in the housing programme *Family on Their Own* (see chapter 2.5 *Asset markets*), as well as further tightening in lending conditions and criteria as announced by banks, which was largely related to the implementation of the Recommendation S[56]. As shown by survey studies of banks, weaker growth in housing loans may also be attributed to deterioration in the financial condition of households. At the same time, since the previous *Report* interest charged on newly granted housing loans had not changed considerably and amounted to 7.0% in April 2012. (Figure 2.48).

The recent period saw a further decline in household debt resulting from consumer loans, although the scale of drops decreased (an average decline of PLN 0.3 billion in February – May 2012 as against an average decline of PLN 0.8 billion in October 2011 – January 2012). In May 2012, the growth of consumer loans reached – 3.2% y/y as compared to – 3.6% y/y in January 2012 (Figure 2.48). Continued decline in consumer loans was driven by growing interest charged on those loans (by 0.9 percentage point between December 2011 and March 2012) as well as by tightening of credit criteria as declared by banks. At the same time, rising household demand for consumer loans – as recorded by banks – was conducive to curb the decrease in household consumer loans.

**Figure 2.47**

Currency structure of newly granted housing loans to households.

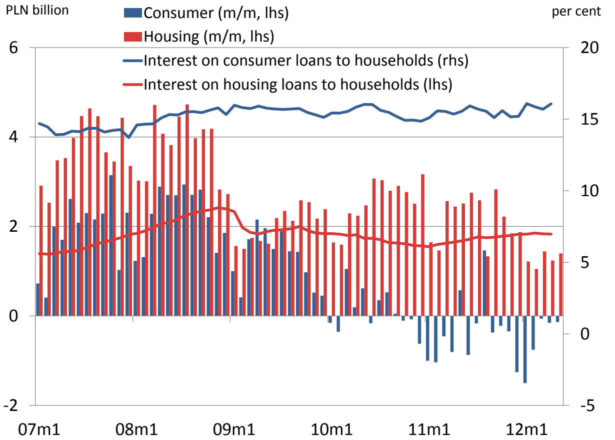



**Source:** NBP data.

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

**Figure 2.48**

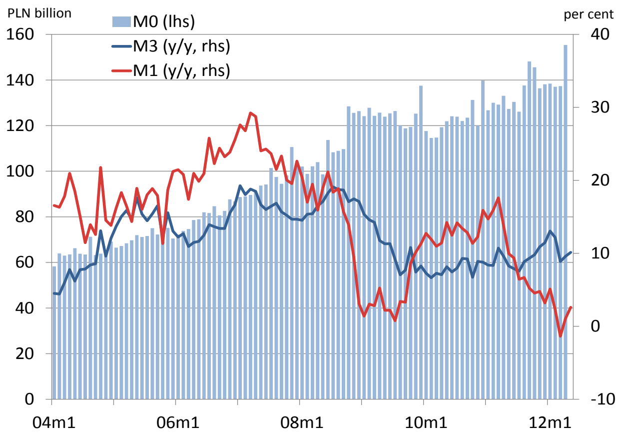
Monthly growth and average interest charged on newly granted PLN loans to households.




**Source:** NBP data.

**Figure 2.49**

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




**Source:** NBP data.

[56] *Senior Loan Officer Opinion Survey on Bank Lending Practices and Credit Conditions in 2012 Q2*, NBP. More detailed information on the consequences of changes in the government subsidized housing programme "Rodzina na swoim" may be found in the *Financial Stability Report*, July 2012, NBP.

## 2.6.2. Deposits and monetary aggregates

In February – May 2012, the growth of broad money weakened somewhat, reaching 10.1% y/y in May 2012, yet still remained above the nominal GDP growth (Figure 2.49)[57].

Since the previous *Report*, corporate deposits shrank (an average monthly fall of PLN 1.7 billion was recorded in the period February – May 2012 as against an average growth of PLN 1.8 billion in the period February – May 2011), whereas growth of those deposits went down to 2.9% y/y in May 2012 as compared to 11.3% y/y in January 2012 (Figure 2.50, Figure 2.52).

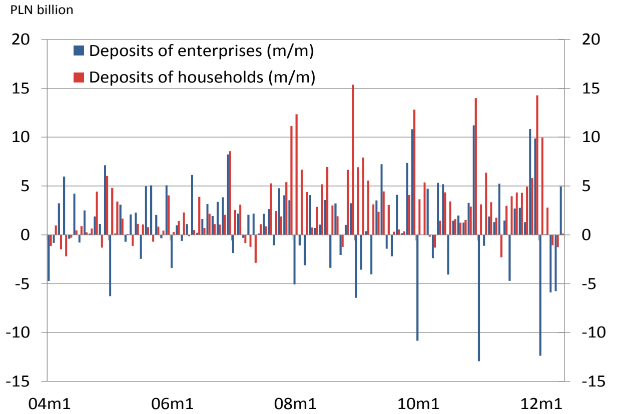
In January – April 2012, the total value of households' financial assets increased by PLN 13.7 billion amidst the annual growth of 4.2% in April 2012[58].

The increase in the value of households' financial assets was mainly driven by growth in household deposits seen until February 2012. In March and April 2012 household deposits declined somewhat, to increase slightly in May 2012. Their annual growth slowed down to 11.7% y/y in May from 14.0% y/y in January 2012 (Figure 2.50, Figure 2.52) [59].

Moreover, the increase in the value of financial assets was fuelled by growing value of shares and investment funds held by households (net payments to these funds amounted to PLN 1.4 billion) which may be associated with the sentiment in the financial markets temporarily calming down at the end of 2011, in January and February 2012.

**Figure 2.50**

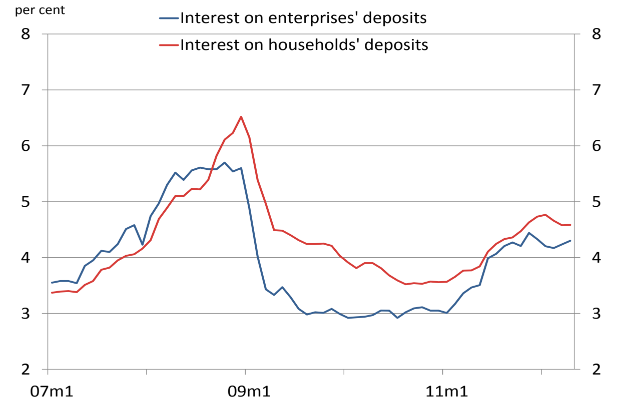
Monthly growth of deposits of households and enterprises.




**Source:** NBP data.

**Figure 2.51**

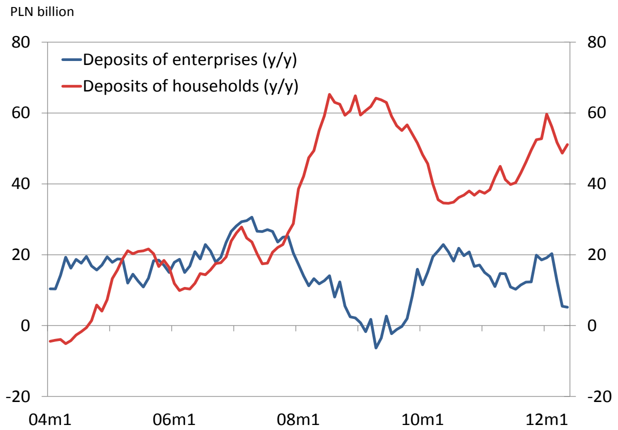
Average interest charged on deposits of households and enterprises.




**Source:** NBP data.

**Figure 2.52**

Annual growth of bank deposits of households and enterprises.




**Source:** NBP data.

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[57] According to preliminary estimates published by the GUS, the nominal GDP growth in 2012 Q1 stood at 6.0% y/y.

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

[59] This refers to deposits with maturity 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.

## 2.7. Balance of payments

In 2012 Q1, the current account deficit deepened slightly as compared to 2011 Q1 (in terms of monthly data, it amounted to EUR 3.6 billion as against EUR 3.1 billion)[60]. Growing imbalance on the current account was driven by rising deficit on goods and income (Figure 2.53).

The deficit on goods, having narrowed in 2011 Q4, expanded slightly in 2012 Q1 as compared to the corresponding period of the previous year (EUR 2.1 billion as against 1.9 billion in 2011 Q1). Slowing exports, resulting from the increasingly weak demand from the euro area countries, were accompanied by rising imports boosted by hikes in global energy commodity prices observed at the beginning of the year. However, having accelerated sharply in January, import growth gradually lost momentum over the subsequent months. This may be indicative of weakening domestic demand.

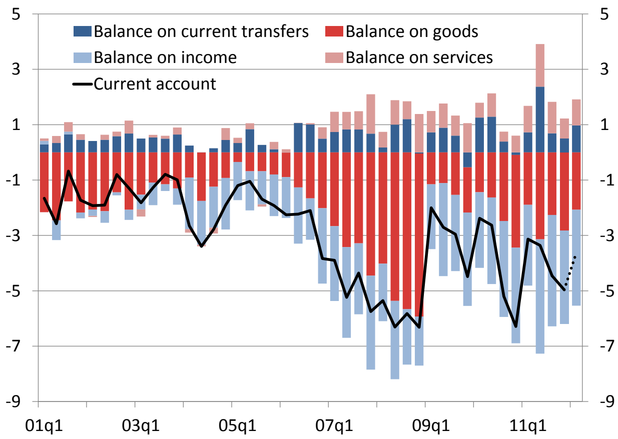
In 2012 Q1, the deficit on income widened substantially as against 2011 Q1 (EUR 3.5 billion and EUR 2.9 billion respectively). This could be fuelled by strong financial performance of enterprises, which involved considerable income from foreign direct investment in Poland.

In 2012 Q1, the capital account surplus decreased, partially as a result of lower EU fund flows to the account. This might have stemmed from different dates of EU transfers than in 2011 Q1 (Figure 2.54).

In 2012 Q1, the deficit on the current and capital accounts was mainly financed by the surplus on portfolio investment, attributable primarily to rising purchases of debt securities by non-residents[61]. In 2012 Q1, net capital

**Figure 2.53**

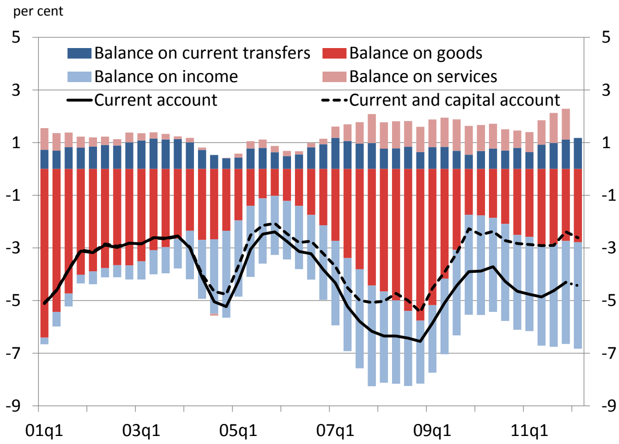
Current account balance (in EUR billion).




**Source:** NBP data and estimates.
The 2012 Q1 data are preliminary monthly data for the period January to March 2012.

**Figure 2.54**

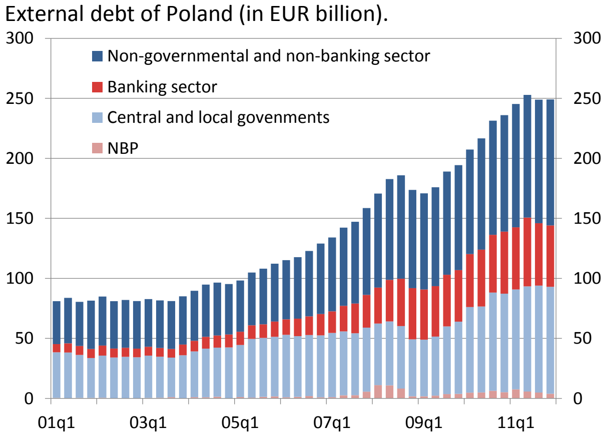
Current and capital account to GDP (4-quarter rolling window).




**Source:** NBP data.
The 2012 Q1 data are preliminary monthly data for the period January to March 2012.

**Figure 2.55**

External debt of Poland (in EUR billion).




**Source:** NBP data.

[60] The 2012 Q1 data are preliminary monthly data for the period January to March 2012.

[61] Financial account surplus was also boosted by reduction of Polish banks' deposits held in foreign banks.

inflow from portfolio investment was heavily affected by one-off transactions.

In 2011 Q4, most external imbalance indicators improved, including the short-term external debt to official reserve asset ratio and the coverage ratio of current and capital account deficit by gross FDI (Table 2.5). Poland's net international investment position, after a considerable improvement in 2011 Q3, in 2011 Q4 remained largely unchanged (Figure 2.56). At the same time, the country's foreign debt rose only slightly (Figure 2.55).

**Table 2.5**

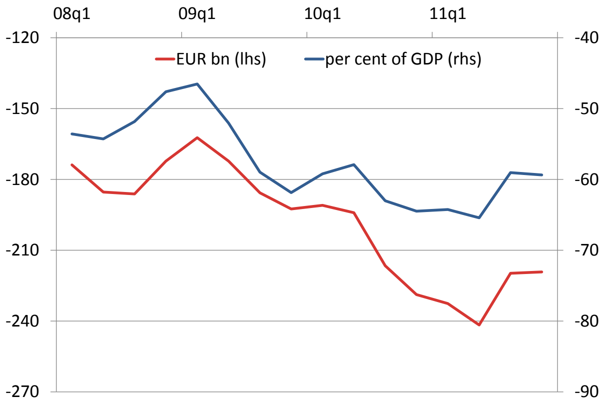
Selected indicators of external imbalances.

| | 2007 | 2008 | 2009 | 2010 | 2011 q1 | 2011 q2 | 2011 q3 | 2011 q4 | 2012 q1 |
|---|---|---|---|---|---|---|---|---|---|
| **Current account balance/GDP(%)** | -6.2 | -6.6 | -3.9 | -4.7 | -4.8 | -4.9 | -4.6 | -4.3 | -4.5 |
| **Current and capital account balance/GDP (%)** | -5.1 | -5.4 | -2.3 | -2.8 | -2.9 | -2.9 | -2.7 | -2.1 | -2.4 |
| **Trade balance/GDP(%)** | -4.4 | -5.8 | -1.7 | -2.5 | -2.6 | -2.9 | -2.9 | -2.7 | -2.8 |
| **Gross foreign direct investment/current account deficit (%)** | 90 | 43 | 77 | 41 | 39 | 40 | 59 | 65 | 23 |
| **Gross foreign direct investment/current and capital account balance (%)** | 109 | 51 | 132 | 67 | 64 | 68 | 103 | 132 | 43 |
| **Official reserve assets in terms of monthly imports of goods and services** | 3.9 | 3.3 | 5.3 | 5.4 | 5.6 | 5.4 | 5.2 | 5.3 | 5.2 |
| **Foreign debt/GDP (%)** | 51 | 48 | 63 | 67 | 68 | 68 | 67 | 67 | n.a. |
| **Short-term foreign debt/official reserve assets (%)** | 93 | 106 | 88 | 82 | 88 | 87 | 78 | 74 | n.a. |
| **Foreign debt with maturity up to 1 year and current accunt deficit/official reserve assets (%)** | 141 | 167 | 152 | 120 | | 118 | | 116 | |
| **Net international investment position/GDP (%)** | -53 | -48 | -62 | -64 | -64 | -65 | -59 | -59 | n.a. |

**Source:** NBP data.

**Figure 2.56**

Net international investment position of Poland.




**Source:** NBP data.

Chapter 3

# MONETARY POLICY IN MARCH – JULY 2012

At the meetings in March and April 2012 the Monetary Policy Council decided to keep the NBP interest rates unchanged. At the meeting in May 2012 the Monetary Policy Council decided to raise the NBP interest rates by 25 basis points: the reference rate to 4.75%, the lombard rate to 6.25%, the deposit rate to 3.25% and the rediscount rate to 5.00%. At the meeting in June and July 2012 the Monetary Policy Council decided to keep the interest rates unchanged.

What follows in the next part of the chapter are the previously published *Minutes of the Monetary Policy Council decision-making meetings* held in March, April, May and June 2012 as well as the *Information from the meeting of the Monetary Policy Council* in July 2012. *Minutes of the MPC decision-making meeting* in July will be published on 23 August, and after that included in the next *Report*.

**Minutes of the Monetary Policy Council decision-making meeting held on 7 March 2012**

At its meeting, the Monetary Policy Council discussed the current and future monetary policy decisions against the background of external and domestic macroeconomic developments, including inflationary processes and the NBP's March projection of inflation and GDP.

While referring to the external conditions of the Polish economy, some members of the Council indicated that the recently published favourable data on the US and euro area economy supported optimistic sentiment in the global financial markets. Few members of the Council also pointed out that considering the current data, economic slowdown in the euro area might turn out less pronounced than previously expected.

Other members of the Council emphasized that problems related to the fiscal crisis in the euro area had not been solved yet, and implementation of the fiscal package would be a long-term process. This means that should fiscal problems in some euro area countries escalate again, improved sentiment in the financial markets might prove short-lived and the outlook for economic growth in the euro area worse than currently anticipated. As regards the outlook for economic growth, those members of the Council drew particular attention to the lack of prospects for revival in lending by European banks despite a considerable liquidity provision by the European Central Bank.

While discussing the monetary policy of major central banks, members of the Council pointed to their continued monetary expansion through increasing liquidity provision to the financial system, even though inflation in the United States, the euro area and Great Britain is running markedly above the target. In the opinion of some Council members, expansionary monetary policy will fuel price pressure.

Data on economic activity in Poland, including data on output, retail sales and corporate lending, indicate that GDP growth in 2012 Q1 may continue at a relatively high level. At the same time, however, members of the Council emphasized that according to the forecasts for subsequent quarters, considering the relatively low level of most leading economic indicators, domestic economic growth, and, in particular, consumption are to weaken. It was also pointed out that consumption weakening may be partly driven by the observed lower lending to households. Moreover, some members of the Council indicated that the appreciation of the zloty exchange rate, affecting primarily import volume, would lead to lower contribution of net exports to GDP growth.

Few members of the Council emphasized that in line with the NBP's March projection, despite the forecast considerable slowdown in domestic economic activity, output gap might remain positive till the end of projection horizon. Likewise, throughout the projection horizon unemployment rate was supposed to run below the equilibrium unemployment rate as estimated in the NECMOD model. However, other members of the Council emphasized that both potential output and equilibrium unemployment rate were non-observable variables, and therefore their estimates as well as conclusions regarding the condition of the economy based on them should be read with caution.

While addressing the situation in the labour market, members of the Council pointed out that the January data on employment and wages in the enterprise sector might be considerably distorted by temporary factors. Some members of the Council assessed that the persistently elevated unemployment had a mitigating effect on wage pressure, and, consequently, inflationary pressure. Other members of the Council argued that moderate wage growth in the recent period, combined with heightened inflation observed for more than a year now, increasing household maintenance costs, posed a risk of higher wage pressure. Few members of the Council also claimed that the observed moderate wage growth had been largely driven by rising labour supply, and, the anticipated halting of labour supply growth might consequently add to wage pressure.

While analysing the inflationary developments, some members of the Council emphasized that decline in January inflation was more pronounced than had been forecast, and in the absence of zloty depreciation, inflation might be expected to decrease further by the end of the year. Those Council members also pointed to lowering core inflation in January 2012.

Other members of the Council indicated, however, that despite some decline, inflation continued to run considerably above the target as well as above the upper limit for deviations from the target, and in line with the NBP's March projection, inflation was also likely to remain above 3.5% in a one-year horizon. Moreover, in comparison with the November 2011 projection, the period during which inflation is forecast to remain at a heightened level had been extended. Those members of the Council additionally emphasized that by the end of the projection horizon, core inflation was also to continue at a relatively high level. In the opinion of those Council members, growth in the prices of energy commodities in the global markets and the effects of implementing the EU climate and energy package continue to be risk factors for a marked decrease in inflation. Those Council members also indicated that it was difficult to assess the likelihood of reductions in VAT rates in 2014.

Some members of the Council argued that interest rates were currently at a relatively low level, considering the macroeconomic situation in Poland, and even assuming for the possibility of a decline in the natural interest rate driven by the global financial crisis. Those Council members also assessed that high growth in monetary aggregates pointed to a merely slight decline in the natural interest rate in Poland. In the opinion of those Council members, low interest rates posed a risk of rising inefficiency in the economy.

Yet, other members of the Council indicated that amidst growing monetary expansion abroad, keeping the NBP interest rates unchanged, additionally accompanied by a rise in WIBOR 3M rate in October 2011, and zloty appreciation at the beginning of the year, would mean a relative tightening of monetary policy in Poland.

While discussing the decision on the NBP interest rates, members of the Council agreed that, given the heightened uncertainty about the global and domestic economic developments, it was justified to keep NBP interest rates unchanged at the current meeting. As regards future monetary policy decisions, the majority of the Council members maintained their view that NBP interest rates increase in the subsequent months could not be ruled out.

Some members of the Council argued that – should the expected economic slowdown in Poland prove less pronounced than previously anticipated and, consequently, should the prospects of inflation returning to the target fail to improve – keeping the NBP interest rates unchanged could be conducive to both inflation expectations and inflation persisting at the elevated levels.

At the same time, in the opinion of few members of the Council, a possible rise in the NBP interest rates in the subsequent months – amidst the expected weakening of economic activity abroad and in Poland – posed a risk that such monetary policy tightening would lead to an excessive weakening of demand in the Polish economy. Some members of the Council assessed that the NBP interest rates should be increased if the already visible decline in inflation was proceeding too slowly. In the opinion of those Council members, a decision to increase the NBP interest rates, if any, should depend on the pace of inflation decline in subsequent months and performance of the real sphere of the Polish economy.

On the other hand, few members of the Council indicated that considering the NBP's March projection of inflation and its balance of risks, in mid-2013 inflation should come close to the target and in 2014 it should run markedly below the target. Thus, the NBP interest rates increases might not be justified.

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

**Minutes of the Monetary Policy Council decision-making meeting held on 4 April 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 developments, including inflationary processes.

While analysing the external conditions of macroeconomic developments in Poland, some Council members pointed out that GDP growth abroad was likely to remain weak in the coming quarters. In particular, it was emphasised that should there be no substantial improvement in the US labour market, the revival in the United States may slow down, especially amidst the announced fiscal tightening in this economy. Attention was also drawn to the fact that economic activity in the euro area was significantly weaker than in the United States, albeit considerable differences could be seen across countries. Few Council members argued that notwithstanding the slow economic growth in the euro area, the German economy– the main recipient of Polish exports – was in a relatively good condition.

Council members indicated that in many countries inflation persisted at a high level. This largely resulted from rising global prices of energy commodities, which were partly driven by unconventional monetary policy measures undertaken by the major central banks. Some Council members indicated at this juncture that increasing commodity prices would continue to drive up inflation also in the medium term. Increasing commodity prices will be supported by both – rising demand, especially on the part of the major emerging economies, and by expanding production of biofuels.

While discussing the outlook for domestic economic growth in the current year, some Council members assessed that the economic slowdown in Poland was likely to be smaller than previously expected, which might be indicated by strong data incoming over the first few months of 2012. These Council members underlined, in particular, that private consumption would most probably remain to be a factor supporting economic growth in the nearest quarters; yet amidst temporarily slow real income growth, consumption would be financed, to a greater degree, by decrease in savings rate. Few Council members argued at that point that the observed lower propensity to save might be the effect of heightened inflation eroding the real value of savings. In the opinion of some members of the Council, the expected economic slowdown will also be mitigated by a further inflow of EU funds supporting investment growth.

However, few Council members stressed that consumption growth had been gradually decreasing since mid-2011 and it could not be ruled out that its contribution to GDP growth would continue to shrink in the subsequent quarters. Moreover, these members of the Council argued that since firms' propensity to invest highly depends on business conditions abroad, amidst the expected slow global growth, the contribution of private investment to GDP growth might also decrease in the coming quarters. Thus, in the opinion of those Council members, the weakening in economic growth in Poland might turn out significant.

Some Council members argued however that even if economic slowdown in the nearest quarters turned out significant, 2013 might be expected to bring gradual acceleration of GDP growth. In the opinion of those Council members, growth would be supported by rising private sector demand. Acceleration of consumption in 2013 will be driven by the expected fall in inflation, which will boost real disposable income growth, whereas acceleration of investment will be supported by the anticipated improvement in economic conditions abroad. Improved external conditions should also be conducive to exports expansion in 2013. Moreover, the extent of further fiscal tightening in Poland is likely to be smaller than in 2012, thus its dampening impact on the 2013 domestic demand growth will be limited.

While discussing inflationary developments, Council members stressed the fact that – like in other countries – heightened inflation had been largely driven by external factors, including rising global prices of energy commodities, which translated into higher prices of energy, and in particular into higher prices of fuels. February saw also a rise in domestic prices of tobacco products, following an increase in excise tax, which also increased core inflation rate.

Council members pointed out that over the next few months, elevated inflation would continue to be driven, above all, by fast-growing prices of energy and food. Moreover, in the opinion of few members of the Council, due to European Football Championship, restaurant and hotel prices could be expected to increase in some Polish cities in June 2012; these prices might not fall back to their previous levels immediately after Euro 2012. According to few Council members, an additional risk to inflation in the short term is the likely rise in prices of services and fees that are at the discretion of local government units.

As regards the impact of the exchange rate on inflation, few Council members assessed that the likely appreciation of the equilibrium exchange rate would limit the anti-inflationary influence of the exchange rate appreciation at the beginning of 2012 on domestic prices. At the same time, these Council members pointed out that exchange rate fluctuations were closely connected to shifts in risk aversion in the global financial markets that are hard to predict. In this context, attention was drawn to the persisting uncertainty concerning the situation in the financial markets, especially in Europe.

The Council members emphasised that inflation was now expected to remain above the target levels for longer than previously anticipated, which, according to most members of the Council, increased the risk of inflation persisting at an elevated level and provided grounds for considering monetary policy tightening. Most Council members pointed that – as elevated inflation was largely driven by factors beyond the direct influence of the domestic monetary policy - the increase in the NBP interest rates should primarily prevent persisting heightened inflation expectations, mounting wage pressures and emerging of second-round effects. However, few Council members argued that amid continued elevated unemployment, still moderate wage growth and further fiscal tightening constraining public sector wage growth, the risk of second-round effects was limited.

Referring to the level of interest rates, some Council members emphasised that, notwithstanding the monetary policy tightening of 2011, interest rates were currently at moderate levels, what is reflected – in their opinion – in a relatively fast growth of monetary aggregates. In the opinion of these members of the Council, moderate level of interest rates in Poland was further evidenced by the comparison of inflation deviation from the target and the estimated output gaps in Poland and other countries. However, other Council members assessed that amidst strongly expansionary monetary policies of the world's major central banks, monetary policy easing by central banks in developing countries and persisting uncertainty about the economic outlook abroad, the monetary policy pursued by the NBP was not overly accommodative. Moreover, few Council members also stressed that the transmission of the monetary policy tightening in the first half of 2011 was so far not full. In the opinion of few Council members the impact of the 2011 interest rates increases on economic activity seemed rather small.

Some Council members pointed out that restricted availability of foreign currency loans to households had strengthened the impact of NBP interest rates increases on credit growth, and thus on private demand.

With regard to the decision on the NBP interest rates, the majority of Council members found that – given a likely persistence of factors fuelling inflation that are beyond the direct influence of domestic monetary policy – the limited scale of expected economic slowdown might not decrease inflationary pressure to a degree sufficient for inflation returning to the target in the medium term. The risk of inflation running above the target in the medium term is additionally increased by elevated inflation expectations. In view of the above, the Council members deemed it appropriate to consider monetary policy tightening in the near future. In the opinion of some Council members, the tightening should take place as soon as possible; hence, in their opinion, it was justified to increase interest rates at the current meeting. However, most Council members argued that a possible increase in interest rates should be preceded by a more thorough assessment of the state of the economy and the scale of the expected economic slowdown. This assessment will be feasible after the data on the subsequent months of 2012 has been analysed, since the January and February 2012 data might have been distorted by one-off factors. Therefore they decided that the NBP interest rates should be kept unchanged at the current meeting. Nevertheless, monetary tightening might prove justified in the nearest future, unless signs of considerable economic weakening in Poland appear and the outlook for inflation returning to the target improves.

In the opinion of few Council members, should weakening in the domestic economic growth in the subsequent quarters prove considerable due to low activity abroad, monetary policy tightening might not be necessary.

A motion to raise the NBP interest rates by 25 basis points was put forward at the meeting. The motion did not pass. The Council decided to keep the NBP interest rates unchanged: reference rate at 4.50%, lombard rate at 6.00%, deposit rate at 3.00%, rediscount rate at 4.75%.

**Minutes of the Monetary Policy Council decision-making meeting held on 9 May 2012**

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

While analysing the external conditions of macroeconomic developments in the Polish economy, members of the Council pointed to the continued uncertainty about the situation in the euro area. Some members of the Council argued that the results of the elections held in France and Greece suggested the possibility of changes in economic policy of those countries and hence a weaker support for restrictive fiscal policy in some euro area countries. In this context, some members of the Council pointed to the risk of intensification of the crisis in some euro area countries which would, in turn, translate into further economic weakening. At the same time, some members of the Council argued that notwithstanding economic stagnation in the euro area, in Germany – Poland's main trading partner – a gradual recovery in economic activity is expected.

Members of the Council emphasized that uncertainty in the external environment of the Polish economy had remained elevated for a long time and could be expected to continue at a high level in the coming quarters. Some members of the Council assessed that heightened uncertainty about economic developments in the euro area and in other developed countries was becoming a permanent feature of the balance of risks for inflation and GDP; therefore, it should not be the key factor in the conduct of monetary policy in Poland. Other members of the Council argued, however, that such a high uncertainty limited the possibility of interest rate adjustments.

While discussing the economic activity in Poland, some members of the Council pointed out that March had seen a significant slowdown in manufacturing and construction production. Yet, the data released in the previous months suggest that in 2012 Q1 economic growth remained relatively robust in Poland.

At the same time, those members emphasised that according to the NBP's business climate surveys, in 2012 Q1 economic situation of enterprises remained sound, with production capacity utilization improved and the number of companies planning to boost production and employment in 2012 Q2 increased. Also corporate lending rose rapidly in the first few months of 2012 and a relatively high growth in zloty housing loans to households continued, although total growth in housing loans was still decreasing. In the opinion of those members of the Council this might mean that the scale of the expected economic slowdown would be smaller than previously expected. Good financial situation of enterprises might additionally support this scenario.

Few members of the Council argued, however, that weak economic activity abroad would translate into lower contribution of net exports to GDP growth in Poland, whereas heightened inflation and lower employment growth would undermine consumer demand. It was pointed out that decline in consumer loans was another factor conducive to weaker consumer demand. Those members also argued that uncertainty about the outlook for both export demand and domestic demand posed a risk of slump in corporate investment, and, consequently, sharper decline in GDP growth in Poland in the coming quarters.

While analysing inflationary processes, some members of the Council pointed out that although CPI and core inflation declined slightly in March, subsequent months were likely to see, once again, higher price growth. The rise in inflation may be primarily fuelled by gas price increases and temporary rise in the prices of restaurant and hotel services (the impact of the European Football Cup in Poland).

On the other hand, while addressing the outlook for inflation in the medium-term, some members of the Council emphasized that the coming quarters were likely to see continued upward pressure of external factors on inflation in Poland. Those factors included high commodity prices in the global markets, being largely the result of both rising demand for energy and food in the rapidly growing emerging markets and strongly expansionary monetary policy in the main developed countries.

In the opinion of those members of the Council, as a result of the above factors inflation is expected to remain above the target for a longer time.

Other members of the Council pointed out that should the recently observed decline in oil prices continue – especially amidst zloty strengthening – inflation might fall considerably by the end of 2012. In the opinion of those members of the Council, such a possibility was also indicated by considerably weaker producer price growth, suggesting that companies did not increase their margins.

While addressing inflation expectations, it was emphasised that although one-year ahead inflation forecasts by financial sector analysts were consistent with the NBP's inflation target, expectations of households and enterprises were largely based on current inflation. As a result, private sector's expectations have continued, for a long time, well above the inflation target. Few members of the Council also argued that, notwithstanding still elevated unemployment rate, high inflation expectations persisting in the longer term increased the risk of their impact on contracts concluded by enterprises and consequently on the dynamics of the costs of production, including labour costs. In this context, attention was also paid to the announced minimum wage increase in 2013 as a factor likely to boost wage pressure.

Other members of the Council emphasized that high inflation expectations had not so far translated into higher wage demands, which is evidenced by lowering growth in the wage bill. Few members of the Council pointed out that wage freeze in the public sector was conducive to limiting wage pressure in the whole economy.

While discussing monetary policy stance, some members of the Council argued that despite the fact that heightened inflation was largely the result of factors beyond the impact of domestic monetary policy, when considering its negative consequences for the economy, efforts should be made to stabilise price growth at a low level. Those members pointed out that monetary policy should be pursued in such a way so as to support lowering of inflation expectations. Moreover, members of the Council emphasised that interest rate decisions should take into account, in the first place, expectations about macroeconomic developments over the period of 6-8 quarters. In the opinion of few members of the Council, over that horizon an acceleration in economic growth may be expected.

Other members of the Council emphasised, however, that considering the fact that the currently heightened inflation was driven by supply factors, in order to curb inflation economic activity would have to fall below potential. On the other hand, excessively high interest rates might not only put a strong downward pressure on GDP growth over the next several quarters but also adversely affect domestic economic activity in the longer term.

With regard to the decision on the NBP interest rates, the majority of Council members argued that the limited scale of the expected economic slowdown amidst heightened inflation persisting for over a year and its forecasted only slow decline over the coming quarters justified the NBP interest rate increase at the May meeting. In the opinion of those members of the Council, the outlook for inflation returning to the target had not improved since the last meeting, especially considering the persistently strong inflationary impact exerted by factors beyond the influence of domestic monetary policy and continuously heightened inflation expectations. At the same time, signals coming from the real economy did not clearly point to significant slowdown in economic activity in Poland. The majority of the Council members also emphasized that NBP interest rate increase was an adjustment to the current and anticipated macroeconomic situation in Poland and was aimed to ensure that real interest rates are kept above zero. At the same time, some members of the Council assessed that it might be necessary to adjust the NBP interest rates again in order to affect inflation expectations.

Other members of the Council argued that it was still difficult to assess the scale of the anticipated economic slowdown and the decision about a possible adjustment of the NBP interest rates should be postponed. In the opinion of those members of the Council, only the data released in the coming months will enable the assessment whether economic slowdown in Poland will be strong or limited. Those members assessed that amidst high uncertainty about Poland's external environment and continued fiscal tightening, it was justified to keep interest rates unchanged at the current meeting.

A motion to raise the NBP interest rates by 25 basis points was put forward at the meeting. The motion was passed. The Council decided to increase the NBP interest rates to the following levels: reference rate to 4.75%, lombard rate to 6.25%, deposit rate to 3.25%, rediscount rate to 5.00%.

**Minutes of the Monetary Policy Council decision-making meeting held on 6 June 2012**

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

While analysing developments in the external environment of the Polish economy, the Council members pointed to a moderate economic growth in the United States, stagnation in activity in the euro area and a weakening growth in several major emerging economies. While discussing the outlook for the euro area, the Council highlighted mounting concerns about the developments in the countries most affected by the sovereign debt crisis. Those concerns translated into deteriorating sentiment and rising risk aversion in the international financial markets. Weakening confidence has in turn resulted in depreciation of the exchange rates of the emerging currencies, including the zloty, and decrease of global commodity prices.

Some Council members assessed that despite the deteriorating economic outlook for the euro area, GDP growth in Poland's main trading partners was set to remain firmly positive. However, these Council members also pointed out that the slowdown observed in major emerging economies, which are important recipients of German exports, might translate – through trade links between Poland and Germany – into further weakening in Polish exports.

While addressing economic developments in Poland, it was pointed out that the data released in May, particularly concerning the GDP in 2012 Q1 and its composition, confirmed the gradual weakening in the Polish economic activity. The Council members pointed especially to a relatively slow consumption growth coupled with weakening investment and exports. Furthermore, in the opinion of some Council members, recent data on industrial production and retail sales, as well as a significant number of leading business climate indicators justify the expectation of slower GDP growth in 2012 Q2 in comparison to Q1. While addressing the outlook for growth in the subsequent quarters, some Council members stated that, apart from likely continued decline in external demand, the GDP growth will probably be further dampened by the on-going fiscal tightening, combined with a weaker consumption growth due to slow real wage growth and decelerating household lending. However, other members of the Council argued that the slowdown in the Polish economy may prove moderate. This could be indicated by some April data, in particular, further rise in the corporate investment lending and zloty-denominated mortgage lending, flattening downward trend in industrial production growth and an acceleration in construction and assembly output. At the same time, some Council members claimed that the increase in zloty-denominated mortgage lending was partly due to falling demand for foreign-currency mortgage lending.

While discussing the prospects for lending expansion, few Council members highlighted that the deteriorating position of the euro area banking sector may to have an adverse effect on the credit supply by domestic banks. These Council members were of the opinion that credit supply may additionally be negatively affected by a decline of private sector deposits held in the banking sector seen over recent months, in part as a result of the deposits being transferred to the investment funds. Other Council members argued that amid persisting liquidity surplus in the banking sector, the above factors might not necessarily translate into weaker lending, as credit supply is far more responsive to the assessment of risks related to economic developments as well as changes in the credit standing of the potential borrowers.

While analysing the labour market developments, some Council members pointed out that the LFS (Labour Force Survey) data for 2012 Q1 suggest slower annual growth of the employment in the economy, coupled with a rise in the unemployment rate compared to a year ago. Similar trends may be observed in the monthly data on employment in the enterprise sector and unemployment as registered by the Labour Offices. At the same time, wage growth accelerated somewhat in 2012 Q1, which – coupled with a simultaneous deceleration in GDP growth – added to an increase in unit labour costs in the economy. Yet, some Council members argued that the 2012 Q1 pick-up in wages might have been driven by one-off factors (i.e. expedited payments of some remuneration components before an increase in disability contributions). This may be corroborated by the corporate wage growth decelerating since February and running currently at low levels. In this context, some Council members assessed that the economy was not experiencing any intensification in wage pressures. In the opinion of few Council members, wage pressures were additionally mitigated with a wage freeze in the public sector. Other Council members emphasised, however, that for the last two years corporate sector had seen upward trend in labour costs.

While discussing the risk of an increase in wage pressures, it was highlighted that inflation expectations were persisting at a relatively high level. Given their adaptive nature, they might also remain elevated in the coming months. Yet, some Council members assessed that the risk of the second-round effects was limited due to slowing employment growth and heightened unemployment.

With reference to inflation developments, it was pointed out that April saw a rise in both the CPI and core inflation. It was also highlighted that the current elevated inflation was driven, to a great extent, by factors beyond the impact of the domestic monetary policy. On the other hand, some Council members pointed out that in comparison with other countries in the region – in which inflation was influenced by similar external factors – inflation in Poland remained relatively high.

While discussing the short-term outlook for inflation, it was indicated that the nearest months might be expected to see inflation continue above the upper limit for deviations from the target. This will be driven by the sustained steep growth in administered prices, accompanied with accelerating annual food price growth. The sharp rise in administered prices is partially an effect of increased fees and prices controlled by the general government units. These increases were related to measures aimed at curbing the general government deficit. Amongst other factors raising inflation in Poland, the Council also mentioned the recently observed depreciation of the zloty related to deteriorating sentiment in the global markets as well as the risk of a temporary hike in restaurant and hotel prices in some cities connected to the European Football Cup.

With regard to inflation trends in longer run, some Council members highlighted that some forecasts pointed to a risk of inflation remaining above the target for longer period. These Council members in particular pointed to the relatively high core inflation, which might continue to run at relatively high levels also in the subsequent quarters. This, given a low – in their opinion – likelihood of any substantial drop in growth of energy and food prices, would impede inflation returning to the target. Few Council members emphasised at this point that the recently observed decline in commodity prices might prove temporary, particularly amid political tensions in some major commodity economies. Other Council members indicated that the contribution of food and energy price growth to CPI inflation might decline substantially in the coming quarters, due to, in particular, favourable base effects for both categories.

While analysing the current monetary policy, some Council members assessed that the current level of interest rates might be adequate to maintain price stability over the medium term, particularly considering the economic slowdown. At the same time, few Council members argued that any further interest rate increases may – through their dampening effect on demand growth – impede the reduction of the general government deficit in relation to the GDP, which in turn, by forcing additional fiscal adjustment, may ultimately result in an excessive curbing of economic growth. Yet, other Council members argued that – despite the already implemented adjustment – the current level of interest rates in Poland may prove slightly too low to stem the risk of inflation persisting at a heightened level over the medium term, given particularly the risk of persistently elevated core inflation. Few Council members pointed out that too low interest rates might negatively affect the saving rate in the economy.

While discussing decisions on the NBP official interest rates, the Council members decided that these should be left unchanged at the current meeting. Some Council members emphasised that amidst the on-going economic slowdown, the increase of the NBP rates at the previous meeting was probably a sufficient adjustment of interest rates to the current and anticipated macroeconomic developments in Poland. Such an assessment is also supported – in their opinion – by the risk of deteriorating situation in the euro area economy. Other Council members believed that another interest rate adjustment might be justified in the coming period, should the expected period of inflation persisting above the target protract, and the scale of the anticipated economic slowdown prove moderate. In the opinion of most Council members, a more comprehensive assessment whether another interest rate increase was justified should take into account the data released in the coming period as well as results of the NECMOD projection and of other forecasts.

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%.

**Information from the meeting of the Monetary Policy Council held on 3-4 July 2012**

The Council decided to keep the NBP interest rates unchanged: reference rate at 4.75% on an annual basis; lombard rate at 6.25% on an annual basis; deposit rate at 3.25% on an annual basis; rediscount rate at 5.00% on an annual basis.

Incoming data suggest weakening activity in the global economy. Stagnation in the euro area is accompanied by moderate growth in the United States. At the same time, economic activity in the major emerging economies is deteriorating. Weakening growth in the global economy contributes to falling commodity prices. Deceleration in growth of energy prices, and – in some countries – also food prices, is conducive to the decline in global inflation.

Despite persisting uncertainty about the situation in the euro area, the sentiment in the international financial markets has stabilized in the recent weeks. This contributed to appreciation of most emerging economies' currencies, including the zloty.

In Poland, data on output and retail sales in May were better than expected. However, the total growth in output and sales in the first months of Q2 decelerated as compared to the previous quarter, which, amidst leading business indicators persisting at relatively low levels, confirms further gradual slowdown in economic growth. In May employment growth in the corporate sector remained weak and the unemployment rate persisted at elevated level. Wage growth in the corporate sector was still moderate.

At the same time, growth in lending to enterprises weakened somewhat. Lending to households decelerated further, driven by a decline in consumer loans and lower growth of housing loans.

In May, CPI inflation fell to 3.6%, remaining above the NBP's inflation target (2.5%). Decline was also noted in core inflation and inflation expectations of households and corporates.

The Council got acquainted with the inflation and GDP projection prepared by the Economic Institute of the NBP, being one of the inputs to the Council's decisions on the NBP interest rates. The July inflation and GDP projection implies that GDP growth in 2013 will fall below its 2012 level and then accelerate in 2014. At the same time, inflation, after a temporary rise in 2012 Q3, will be gradually declining and will be close to the inflation target in 2013.

In line with the July projection based on the NECMOD model – prepared under the assumption of constant NBP interest rates – there is a 50-percent probability of inflation falling within the range of 3.6-4.2% in 2012 (as compared to 3.6-4.5% in the March projection), 2.0-3.4% in 2013 (as compared to 2.2-3.6%) and 1.0-2.7% in 2014 (as compared to 1.2-3.0%). In turn, in line with this projection there is a 50-percent probability of the annual GDP growth falling within the range of 2.3-3.6% in 2012 (as compared to 2.2-3.8% in the March projection), 1.0-3.2% in 2013 (as compared to 1.1-3.5%) and 1.7-4.2% in 2014 (as compared to 1.9-4.4%).

In the opinion of the Council, in the coming months inflation is likely to increase temporarily and remain above the upper limit of deviations from the inflation target. However, in the medium-term, economic slowdown amidst fiscal tightening and interest rates increases implemented in 2011 and 2012 will be conducive to inflation returning to the target. This assessment is also supported by the July projection of inflation and GDP.

Therefore, the Council decided to keep the NBP interest rates unchanged.

The Council does not rule out the possibility of further monetary policy adjustment, should the outlook for inflation returning to the target deteriorate.

The Council adopted the *Inflation Report – July 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, Director of the Economic Institute. The process was coordinated by the Bureau of Macroeconomic Forecasts of the Economic Institute. Using the macroeconomic model NECMOD[62], the projection was prepared as the outcome of an iterative process in the course of which the paths of some variables were adjusted if they diverged from NBP experts' economic intuition based on their knowledge of economic processes. The Management Board of the NBP approved the projection to be submitted to the Monetary Policy Council. The projection is one of the inputs to the Monetary Policy Council's decision making process concerning NBP interest rates.

The July projection based on the NECMOD model covers the period from 2012 Q2 to 2014 Q4. The starting point for the projection is 2012 Q1.

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

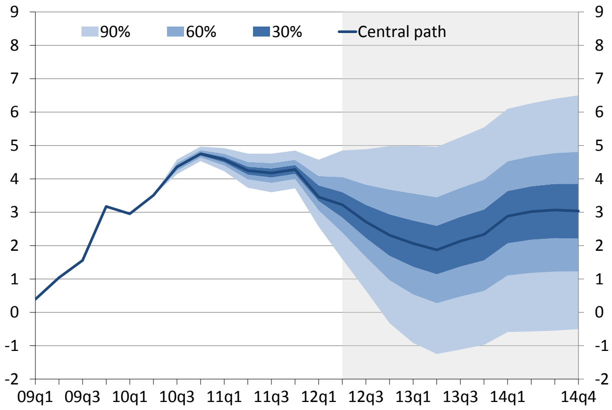
## 4.1. Summary

According to the current estimate of the GUS, GDP growth in Poland in 2012 Q1 went down to 3.5% y/y from 4.3% in 2011, which is consistent with the gradual economic slowdown scenario assumed in the previous inflation and GDP projection. This slowdown is largely due to unfavourable conditions in the external environment of the Polish economy. Since 2011 Q4, the euro area has been facing recession again, which is largely driven by sovereign debt problems affecting some euro area countries. At the same time, energy commodity prices (crude oil, natural gas and coal), expressed in the Polish zloty, despite a decline observed in the recent weeks, are now higher than before the global financial crisis. Relatively high commodity prices result from growing demand from emerging markets, limited capacities to expand commodities supply within a short period of time, persisting political risks in some oil-producing countries as well as zloty depreciation. Observed for the past few quarters economic slowdown in the euro area translates, with approx. three-quarter delay, into economic downturn in Poland. Factors mitigating the impact of economic slowdown abroad on domestic economy include high absorption of EU funds (estimated at over 4% of GDP) and related rise in public investment, a relatively favourable situation in Germany, the main recipient of Polish exports as well as weakening of the zloty improving the price competitiveness of domestic production.

Within the projection horizon, the positive impact of these factors will gradually fade. It is assumed that in 2012 growth in the German economy will fall to a level slightly above zero. In turn, taking into account the fact that the recently observed depreciation of the zloty was not driven by fundamental factors and was

**Figure 4.1**

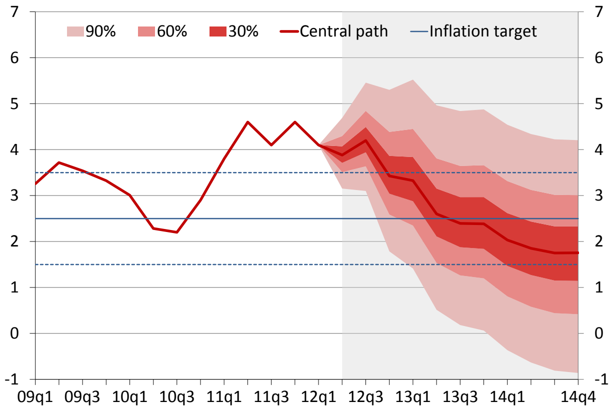
GDP (y/y, %).




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

**Figure 4.2**

CPI inflation (y/y, %).



largely due to increased risk aversion in the global financial markets – which enhanced the exchange rate deviation from the equilibrium level – the zloty is expected to appreciate gradually over the projection horizon. Furthermore, in 2012-2013 a fiscal policy tightening aimed to narrow the public sector deficit to a level enabling Poland to exit the excessive deficit procedure (EDP) is anticipated. In the years 2013-2014 absorption of EU funds along with public spending on their co-financing will diminish. As labour market conditions deteriorate it is expected that further financing of consumption with lower savings rate will be limited over the projection horizon. As a result, economic growth in Poland over the projection horizon will slow down considerably (to 2.0% in 2013). In the longer projection horizon, GDP growth will rise to the level close to 3% y/y as a result of improving situation abroad, reduced scale of fiscal policy tightening and limited downward trend in the inflow of EU funds.

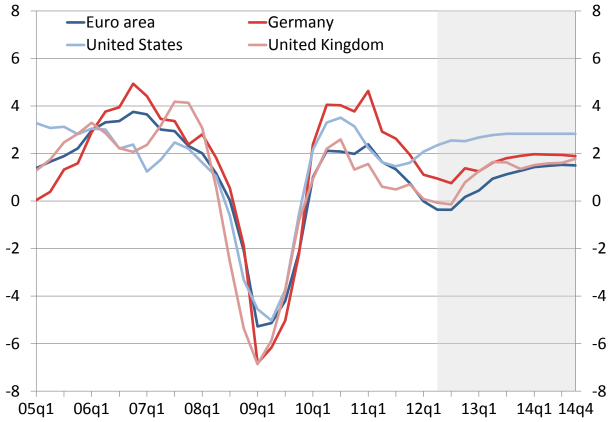
In the short-term, CPI inflation will remain high, close to 4% y/y (Figure 4.2), which is driven by the previously observed zloty depreciation, unfavourable supply conditions maintaining domestic food and energy prices at a high level and the implemented regulatory changes (increase in excise tax on diesel oil and in the disability pension contribution, the policy of the Energy Regulatory Office). In the medium-term projection horizon, inflation will decline due to gradual easing of inflationary pressure of the zloty depreciation and weakening of domestic economic growth, and, consequently, easing demand pressure. Inflation will also be reduced by stabilizing energy commodity prices and falling prices of agricultural commodities in the global markets, which will be driven by a slowdown in the global economy. Inflation decline in 2013 will be partly offset by the introduction of $CO_2$ emission charges, connected with Poland’s implementation of the Energy and Climate Package. Moreover, in 2014 decline in inflation will be enhanced by the zloty appreciation and reduction in the VAT basic rate to the 2010 level. The above factors, with a moderate economic recovery, will drive inflation down below the inflation target (Figure 4.21).

The main source of inflation and GDP forecast uncertainty is the situation in the euro area and the related zloty exchange rate developments. At present, in our assessment the likelihood of stronger deterioration in the growth prospects abroad (which might be the case should the debt crisis in the euro area aggravate) as compared to the one assumed in the central projection scenario, is close to the likelihood of developments in the external environment of the Polish economy being more favourable (higher GDP growth) than the ones assumed in the central projection scenario. This means that the distribution of uncertainties, reflected in the fan charts of inflation and GDP, is symmetrical (Figure 4.1, Figure 4.2).

## 4.2. External environment

Data for 2012 Q1 indicate that GDP growth in the euro area and the United States was higher than the one expected in the previous forecasting round (Figure 4.3). In the euro area, Germany's GDP grew considerably, which resulted, to a large extent, from persistently growing demand for German goods from developing countries, including China, as well as increased consumption. Despite slightly better than expected data for 2012 Q1, leading economic indicators suggest that GDP growth in the subsequent quarters may remain at a low level. For this reason, an upward revision of GDP forecasts for the euro area economy was minor and related only to the short-term projection horizon. In the long-term projection horizon, factors inhibiting the improvement in the euro area economic activity include persisting structural and debt problems faced by some euro

**Figure 4.3**
GDP abroad (y/y, %).



area countries and their financial institutions. The United States, being a more flexible economy as compared to the European one, expect slightly stronger acceleration of economic growth. Overall, long-term growth forecasts for the external environment of the Polish economy are similar to the ones in the previous forecasting round.

The current projection assumes that interest rates increases in the euro area – following possible decreases in the short-term projection horizon – may be observed not before the second half of 2013 (Figure 4.5). The reasons for the ECB to maintain low interest rates include unfavourable outlook for economic growth and tensions in the financial sector along with maintained low inflationary pressure (Figure 4.4). Also high level of uncertainty related to continuing debt crisis and concerns about the integrity of the Economic and Monetary Union are of particular importance for the economic growth prospects in the euro area and, consequently, interest rates running at low levels. In the USA interest rate hikes are expected only in the first half of 2014, due to the labour market situation in which the scale of recovery is smaller than in previous business cycles. Increased uncertainty in the euro area, apart from reduced interest rate differential, also contributed to the projected weakening of the euro against the U.S. dollar as compared to the previous projection (to an average of 1.28 in 2012-2014).

Easing political tensions in the Middle East and mounting debt crisis in some euro area countries, drove down current and projected energy commodity prices in the global markets as compared to the previous forecasting round (Figure 4.6). However, the index of energy commodity prices will remain relatively stable over the projection horizon. On the one hand, as a result of gradually increasing global demand, amidst reduced supply, coal prices will increase

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

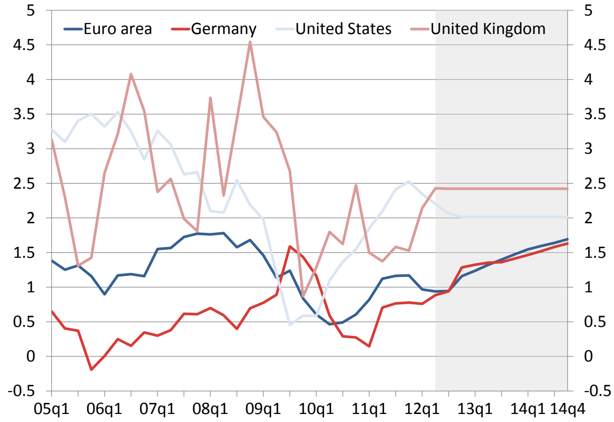



**Figure 4.5**
Interest rate abroad (%).

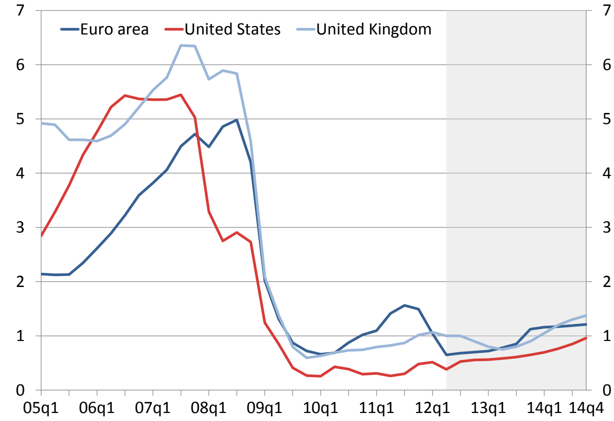
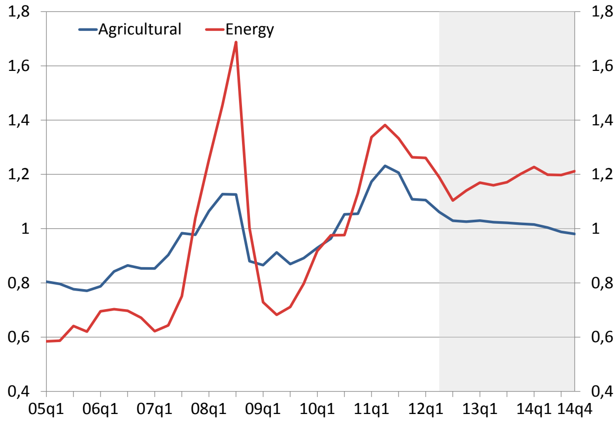



**Figure 4.6**
Index of commodity prices in the global markets (USD, 2009=1).



moderately and natural gas prices will level off. On the other hand, crude oil prices will fall over the projection horizon, due to easing geopolitical risks.

Slowdown in the global economy, especially the one observed in 2012, has led to a drop in global demand for agricultural commodities and products, intended both for consumer and industrial use. In addition, decline in agricultural commodity prices over the projection horizon (Figure 4.6) will also be driven by the expected improvement in the conditions of agricultural production (with agro-meteorological conditions expected to return to their long-term average), as compared to unfavourable developments in the recent years. In the long-term horizon, declining oil prices, which determine production costs of agricultural products and prices of biofuels, will also drive down prices of agricultural commodities.

## 4.3. Polish economy in 2012-2014

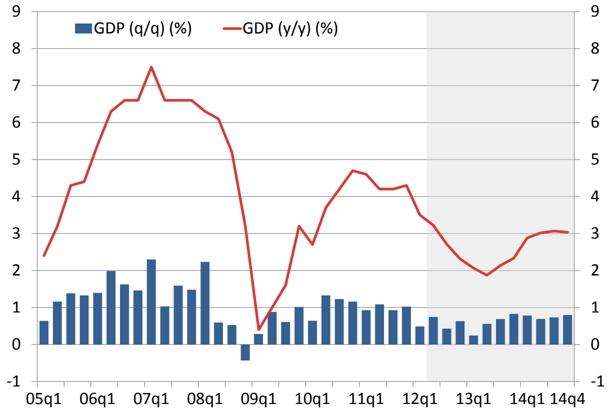
### Aggregate demand

Following the economic slowdown in countries being Poland's main trading partners, GDP growth drops from 4.3% observed in 2011 to 2.9% in 2012 and 2.1% in 2013. Apart from unfavourable developments abroad, factors responsible for this GDP growth slowdown in Poland in 2012-2013 include measures aimed to reduce the public finance sector deficit, lower absorption of EU transfers, declining household consumption growth and the completion of inventory rebuilding. The negative impact of these factors is mitigated by a positive contribution of net exports to growth, which will be sustained over the projection horizon.

In 2014, the gradually improving economic situation abroad will boost domestic demand, supported by growing consumption and

**Figure 4.7**

Economic growth.



corporate investment, the end of fiscal policy tightening as well as inventory rebuilding picking up. GDP growth will rise to approx. 3% y/y, with a close-to-zero contribution of net exports.

In the short- and medium-term projection horizon, private consumption growth will stabilize slightly below 2% y/y, close to the long-term historical minimum for the Polish economy (Figure 4.9). The unfavourable outlook for consumer demand in 2012-2013 results from real household income growth having fallen to almost zero, which is, in turn, related to a gradual worsening of the situation in the labour market, low growth of income from self-employment (resulting from the economic slowdown) and decreasing net social transfers (resulting from fiscal policy tightening). At the same time, the possibility of smoothing the private consumption path is be limited by the historically low current savings rate and banks' propensity to tighten lending criteria[63]. Public consumption, following a fall in 2011, will climb only moderately in the years 2012-2013 in response to consolidation measures in the public finance sector (including a wage freeze in the public sector in 2012 and applicable fiscal regulations).

In 2014, private consumption growth is expected to accelerate moderately. This will be driven by the easing of negative trends in the labour market and lower inflation, boosting real income growth. Due to the expiration of the current expenditure rule of the state budget assumed in the projection, public consumption growth will rise as well.

Growth in gross fixed capital formation follows a downward trend in the short- and medium- term projection horizon, running in 2013 at a level close to zero. A gradual rebound of investment is expected as late as early 2014. Fluctuations in the total volume of investment in the coming years are largely affected by changes in public

**Figure 4.8**

GDP growth (y/y, %) – breakdown.

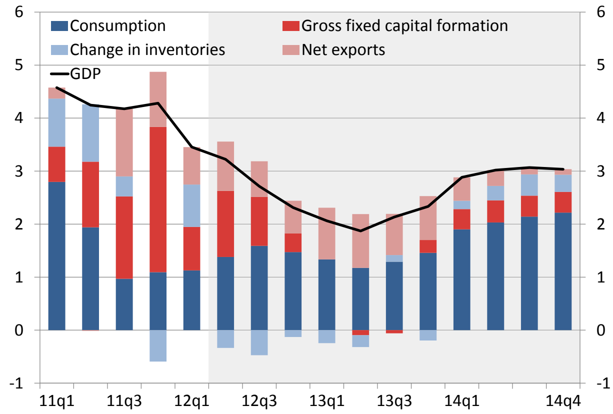
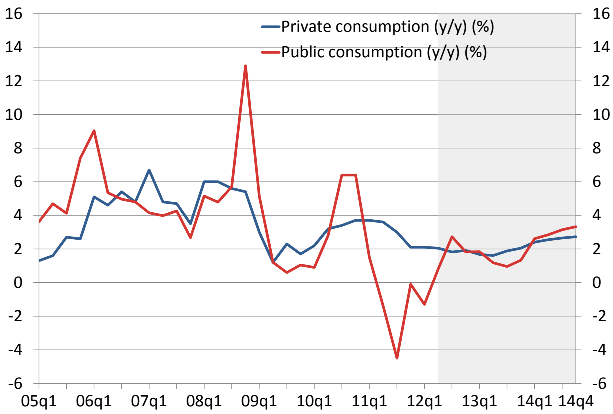



**Figure 4.9**

Private and public consumption.




[63] See *Senior Loan Officer Opinion Survey on Bank Lending Practices and Credit Conditions*, 2012 Q2, NBP.

investment (Figure 4.10), financed substantially by the inflow of EU structural funds, whose absorption declines on account of the National Cohesion Strategy 2007-2013, which is going to end in 2015 (Figure 4.11). Further decline in public investment growth will be driven by lower investment spending of local government units in the coming years related to local government fiscal rules. As a result, a significant decline in the public investment to GDP ratio will be observed throughout the projection horizon.

Along with the persisting unfavourable situation in the euro area and a slowdown of the domestic economy, in 2012-2013 corporate investment growth will be lower than in 2011. Yet, the decline in the growth rate of gross fixed capital formation in the enterprise sector continues to be moderate because of the sound financial conditions of enterprises, low user cost of capital and the inflow of EU transfers intended for capital expenditure of the private sector (which will grow – in contrast to capital transfers to the public sector). The negative impact of weak domestic and foreign economic activity on private investment will additionally be curbed by the expected implementation of replacement investments (following the renouncement to embark on new investment projects during the last downturn), what might be indicated by the growing production capacity utilization. Along with the improved outlook for growth in the domestic and foreign economies, corporate investment will pick up considerably in 2014.

In 2012 Q1, growth in residential investment most likely remained relatively high as indicated by estimates of the Economic Institute of the NBP, which are based on number and size of completed dwellings. Over the projection horizon, growth in this category will decline driven by the expected tightening of bank lending policies and a deterioration of household sentiment, which is undermining households' propensity to enter long-term financial liabilities

**Figure 4.10**

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

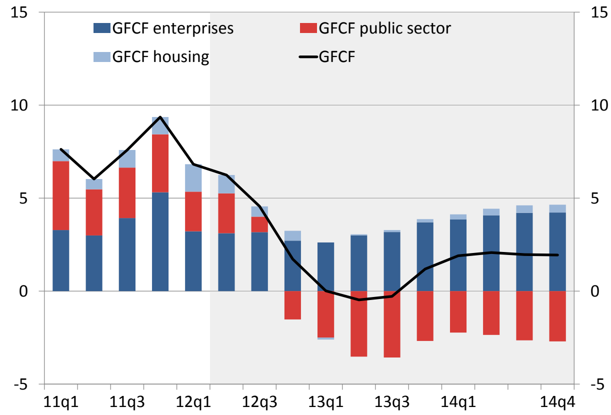
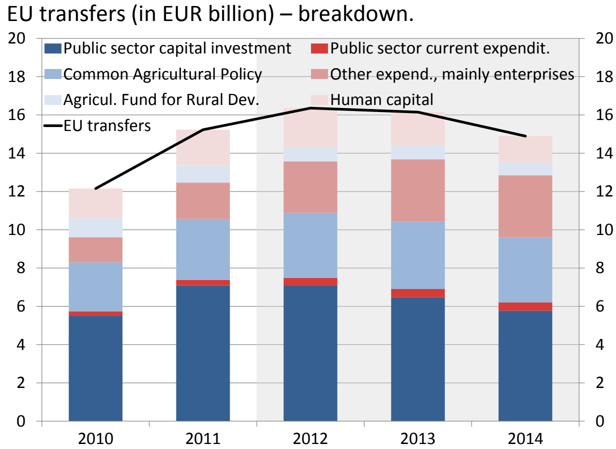



**Figure 4.11**

EU transfers (in EUR billion) – breakdown.



as a result of the unfavourable situation in the domestic and foreign economy[64]. An important factor mitigating the impact of declining demand for housing investment will be a relatively high rate of return on residential development projects given the current housing prices in relation to the cost of construction[65].

Due to slower growth abroad and weakening domestic demand, 2012-2013 will bring a slump in the volume of foreign trade as compared to 2011 (Figure 4.12). Yet, the reduction in the growth rate of imports will be stronger in relation to exports due to the higher sensitivity of imports to economic developments in the domestic economy and abroad as well as the weakening of the zloty in 2011, which has improved the price competitiveness of domestic producers. Consequently, in the short- and medium- term projection horizon, the contribution of net exports to GDP growth will remain positive. In the long term, along with a gradual appreciation of the zloty, the contribution of net exports will decline to a level close to zero.

## 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 expected slowdown in economic activity, the output gap will be slightly negative starting from 2013, reflecting a drop of GDP below its potential level (Figure 4.13).

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 the growth of public capital (reflecting falling public

**Figure 4.12**

Foreign trade.

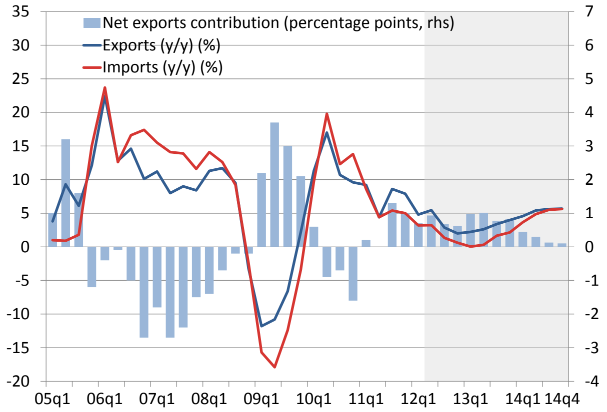



**Figure 4.13**

Output gap.

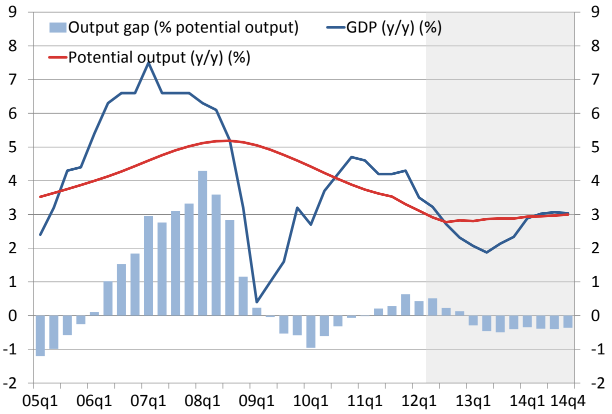
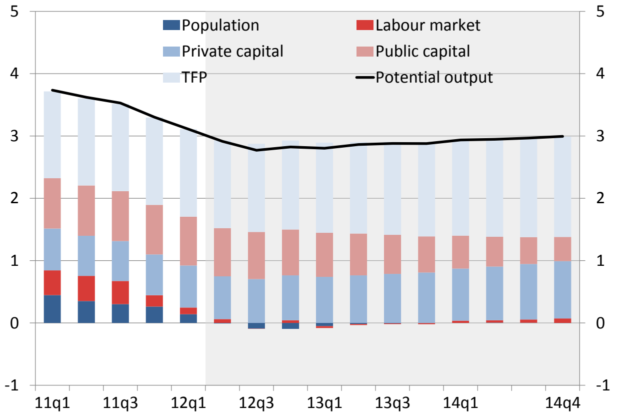



**Figure 4.14**

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




[64] See *Senior Loan Officer Opinion Survey on Bank Lending Practices and Credit Conditions,* 2012 Q2, NBP.

[65] See *Information on home prices and situation in the residential and commercial real estate market in Poland 2011 Q4*, NBP.

investment, Figure 4.14). Besides that, the stable equilibrium labour supply is neutral with respect to potential output growth over the projection horizon due to both positive and negative implications of structural change in the labour market, which are offsetting each other. On the one hand, the age structure of the population will deteriorate as a result of a growing number of post-production age persons and funds allocated to active labour market policies will decline. This is also related to lower EU transfers co-financing these expenditures. On the other hand, the economic activity ratio will be positively affected by legal changes limiting the eligibility for retirement benefits, including eligibility for the so-called bridging pensions, as well as the raise of the retirement age.

The developments in the labour market reflect changes in economic activity (Figures 4.15, Figure 4.16, Figure 4.17). Due to the expected slowdown, the number of employed persons will start to fall from the beginning of 2013, translating into a rise of the unemployment rate by a total of 0.3 percentage points until the end of 2014. Over the projection horizon there are no signs indicating the possibility of both a significant slowdown and an acceleration of wage growth (Figure 4.16). A stronger decline in wage growth is unlikely due to a relatively small rise in unemployment and the decline of the share of wages in GDP observed in the past few years. On the other hand, due to the expected economic slowdown, growth in real wages over the projection horizon will be moderate and should not exceed labour productivity growth. Beyond the short-term projection horizon, when growth of unit labour costs is driven by a rising disability pension contribution, growth in this category will remain at a level close to 2.5% y/y.

Throughout the projection horizon, current account deficit and negative trade balance will be to a large extent offset by the inflow of EU funds. External imbalances, as measured by the ratio of

**Figure 4.15**

Employment and activity in the labour market.

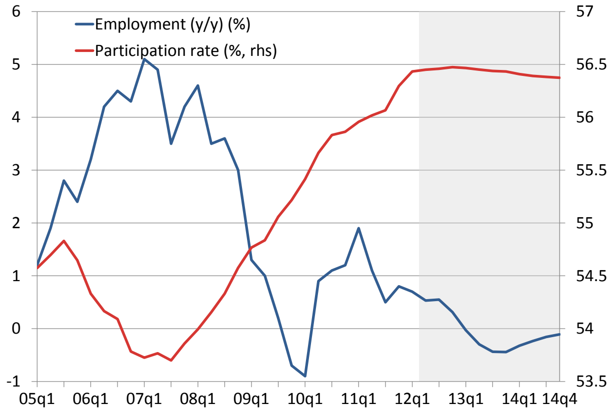



**Figure 4.16**

Unemployment.

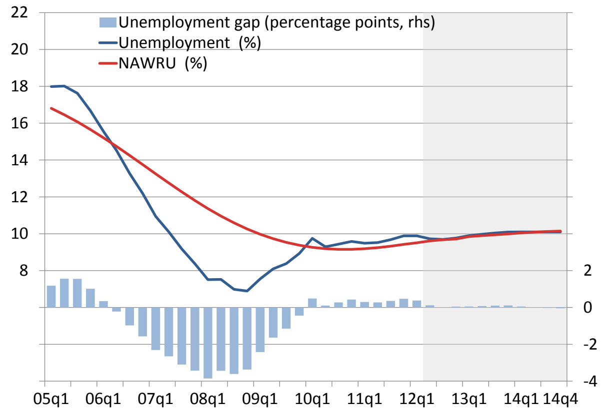
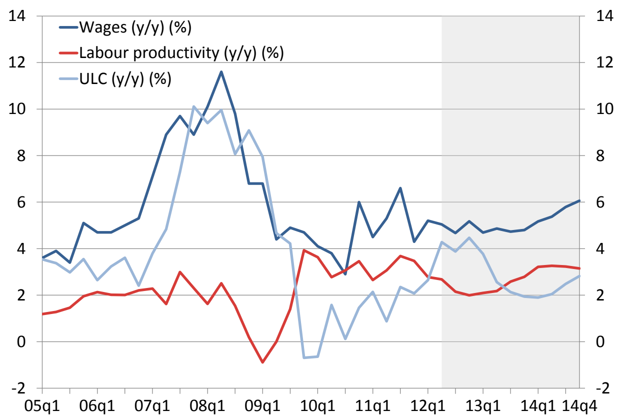



**Figure 4.17**

Unit labour cost.



current and capital account deficit to GDP, will decline over the projection horizon (from 2.1% of GDP in 2012 to 1.6% of GDP in 2014) as a result of the improving trade balance (positive contribution of net exports throughout the projection horizon) – despite a deteriorating balance of transfers from the EU (end of the budget perspective) and income (increase in non-resident income from direct and portfolio investment).

## Exchange rate and inflation

In recent quarters, strong fluctuations of the zloty exchange rate due to elevated uncertainty in the global financial markets were observed. This was driven by concerns about the possibility of financing growing debt of certain euro area countries, liquidity problems of some European banks and an unfavourable growth outlook for the global economy. It is estimated that following the May depreciation of the zloty, the zloty exchange rate is now below the level determined by fundamental factors and should gradually strengthen over the projection horizon to come close to its equilibrium level. The scale of appreciation of the zloty exchange rate will, however, be limited by weak growth in the domestic and foreign economy limiting the inflow of direct and portfolio investment into the Polish market. Additionally, a falling interest rate disparity, resulting from the assumption of a constant NBP reference rate adopted in the projection, will limit zloty appreciation.

The appreciation of the zloty and moderate economic growth will gradually drive core inflation down to 1.6% in 2014 (Figure 4.19). In the short term, this decline will be limited by rapidly growing import prices (Figure 4.18), rising unit labour costs (due to increases in disability pension contributions) and the effects of the implementation of the Climate and Energy

**Figure 4.18**

Terms-of-trade.

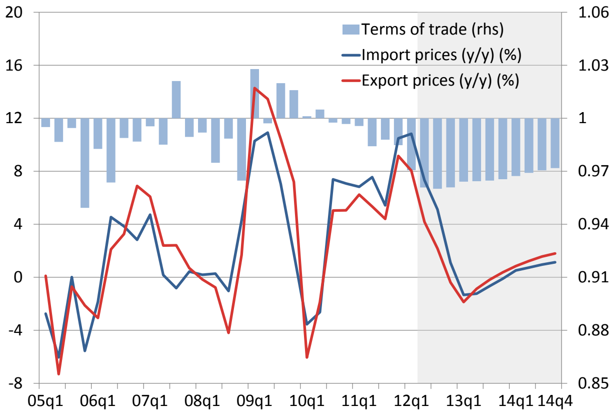
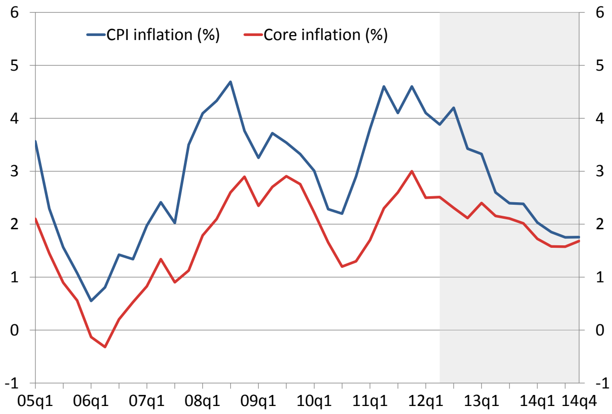



**Figure 4.19**

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

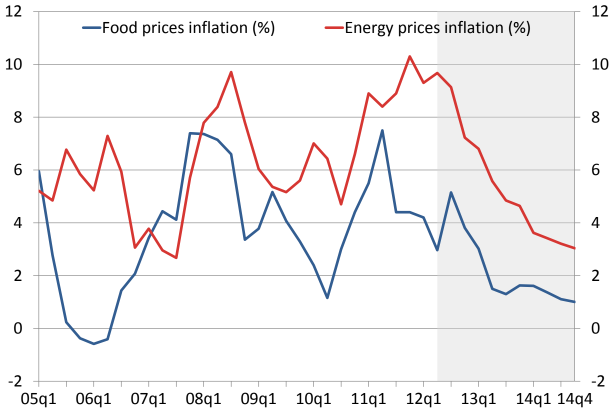


Package in 2013[66]. In 2014, the basic VAT rate is expected to be reduced back to 22%, which will help to drive inflation down further, despite the impact of an improved economic situation on core inflation in this period.

In the short term, food prices inflation remains high due to unfavourable supply conditions in the meat, fish and eggs market. In addition, the path of food prices in 2012 is determined by a base effect associated with fluctuations in fruit and vegetable prices in the previous year (Figure 4.20). In the subsequent years, the growth rate of domestic food prices will slow down to 1.3% in 2014. Limited growth of food prices in the longer term is also driven by agricultural commodity prices in the global markets declining throughout the projection horizon, besides the appreciation of the exchange rate and lower economic growth (factors hindering growth in other consumer price categories).

**Figure 4.20**

Inflation of food and energy carrier prices.




Energy price inflation in the short term projection horizon will remain high (8.8% in 2012) as a result of energy price increases implemented by the Energy Regulatory Office and rises in the excise tax on diesel oil as of 2012. In the projection horizon, energy prices in the world markets denominated in zloty stabilized at their 2011 level, as a result of which growth in energy prices in the mid- and long-term horizon will decline but nonetheless run above CPI inflation. In 2013, factors boosting energy prices may include higher energy costs, related to the purchase of $CO_2$ emission allowances, being fed through to electricity prices. In 2014, the impact of the implementation of the Energy and Climate Package on energy price growth will be lower, although still positive. Lower energy price growth in the last year of the projection should be driven, however, by the expected lower standard VAT rate.

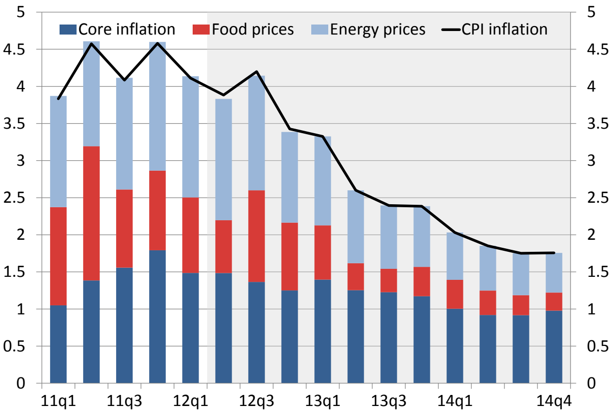
As a result of these developments, CPI growth in

[66] See *Short-term Macroeconomic Impact of the Energy and Climate Package in the Polish Economy*, NBP, 2012.

2012 will continue at a level similar level as compared to last year (3.9% y/y). The relatively high CPI inflation in 2012 results from both weakening of the zloty in the recent months and regulatory factors (increase in the excise tax on diesel fuel, increased disability pension contributions, the policy of the Energy Regulatory Office), besides moderate demand pressures. In the medium term, along with the on-going economic slowdown and deterioration of the labour market situation, inflation will decrease to a level close to the NBP inflation target (2.7% in 2013). The implementation of the Energy and Climate Package is a factor likely to delay the return of inflation to the target (Figure 4.21). In 2014, the downward trend in inflation will continue (CPI inflation will go down to 1.8%), supported by favourable developments in commodity prices in the global markets (falling agricultural commodity prices and levelling off of energy prices), the strengthening of the zloty exchange rate and the reduction of the basic 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% increases from 2% in 2012 Q2 to an average of 48% in the years 2013-2014.

**Figure 4.21**

CPI inflation (y/y, %) – breakdown.




## 4.4. Current versus previous projection

The main factors behind changes in the path of inflation and GDP between the March and July forecasting round include: appreciation of the zloty, lower energy commodity prices in the global markets and rising NBP interest rate.

As a result of these changes, both the annual growth in consumer prices and the GDP growth will be, over the projection horizon, lower than expected in the previous forecasting round by an average of 0.2 percentage point (Table 4.1).

**Table 4.1**

July projection versus March projection

| | 2012 | 2013 | 2014 |
|---|---|---|---|
| **CPI inflation (y/y, %).** | | | |
| **VII 2012** | 3.9 | 2.7 | 1.8 |
| **III 2012** | 4.1 | 2.9 | 2.0 |
| **GDP (y/y, %).** | | | |
| **VII 2012** | 2.9 | 2.1 | 3.0 |
| **III 2012** | 3.0 | 2.3 | 3.2 |

## GDP

Since the cut-off date for data used in the previous projection, the effective zloty exchange rate appreciated, and the basic NBP interest rates rose by 0.25 percentage point. These changes are conducive to zloty appreciation throughout the projection horizon, which adversely affect price competitiveness of domestic production. Fluctuations in the NBP interest rates also boosted costs of borrowing and lowered interest rate on deposits by reducing domestic investment, inventories and consumption. The downward revision in GDP projection was also driven by changes in fiscal assumptions between forecasting rounds, including a reduction in public consumption forecast in 2013 to account for the wage freezing in the public sector. The impact of the factors listed above will be partially offset by positive effects on domestic economic activity of lower energy commodity prices in the global markets and a slightly higher projected GDP growth abroad.

**Figure 4.22**

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

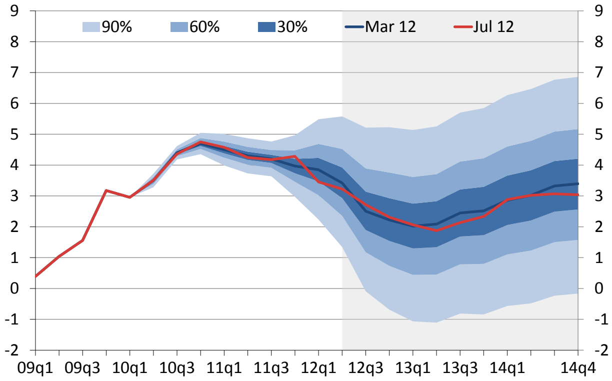
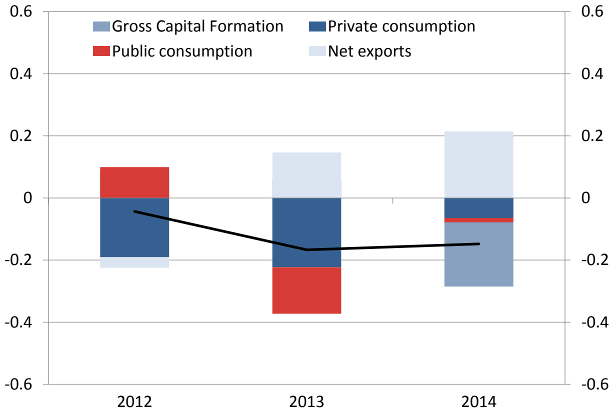



**Figure 4.23**

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

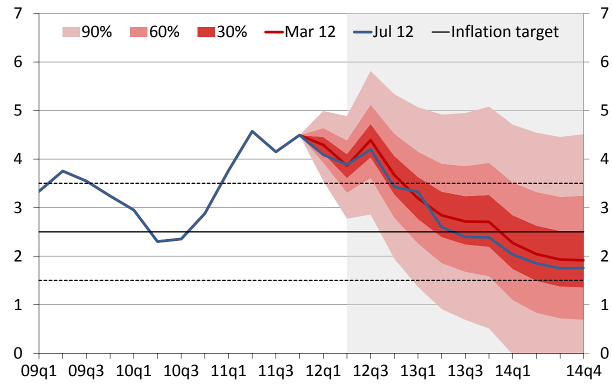



## Inflation

The strengthening of the zloty exchange rate and the rising interest rates, revise inflation forecast downwards to a similar extent as in the case of GDP forecast, as inflationary pressure is reduced through weaker demand and lower import prices. Another factor limiting inflation are lower energy commodity prices (expressed in American dollars) as compared to the previous forecasting round, driving down domestic energy prices. The CPI inflation data at the starting point of the projection (2012 Q1), point to a lower rise in core inflation and higher than expected in the March projection growth in food prices, which slightly changes the breakdown of inflation in the short term as compared to the previous forecasting round.

**Figure 4.24**

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



## 4.5. Forecast uncertainty sources

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

### External environment and exchange rate

External environment and, in particular, the method of addressing debt crisis in the euro area countries, remain the most important source of uncertainty about projection of inflation and GDP. Any further escalation of the crisis, causing increasing risk aversion, may result in further rise in interest on debt securities of some euro area countries. This process, apart from hindering the issuance of new debt and the rollover of the existing debt of these countries, may, one the one hand, lead to a more radical fiscal consolidation and thus further decline in GDP in the short term; on the other hand, it may contribute to the deterioration of liquidity position of some European banks. Simultaneous efforts to improve banks' solvency ratio can speed up deleveraging and help further reduce lending to the private sector (also by euro area banks with capital links to banks operating in Poland). A persisting weakness of the zloty as observed during the recent crisis could be a mitigating factor to the adverse consequences of the above mentioned scenario of developments in the euro area for the outlook for domestic growth. At the same time, weaker domestic currency would limit the decline in inflation resulting from 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 the probability of implementation of the next round of quantitative

**Figure 4.25**

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

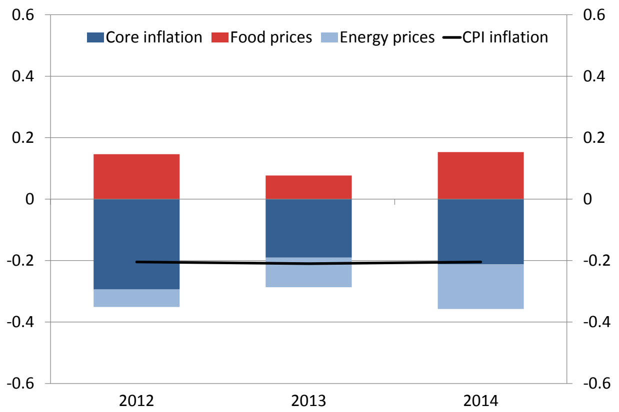



**Table 4.2**

Probability of inflation running:

| | below 1.5% | below 2.5% | below 3.5% | below the central projection | in the range (1.5-3.5%) |
|---|---|---|---|---|---|
| **12q2** | 0.00 | 0.00 | 0.18 | 0.47 | 0.18 |
| **12q3** | 0.00 | 0.01 | 0.14 | 0.47 | 0.14 |
| **12q4** | 0.02 | 0.16 | 0.49 | 0.47 | 0.47 |
| **13q1** | 0.05 | 0.22 | 0.52 | 0.47 | 0.47 |
| **13q2** | 0.18 | 0.44 | 0.72 | 0.47 | 0.54 |
| **13q3** | 0.24 | 0.50 | 0.76 | 0.48 | 0.52 |
| **13q4** | 0.26 | 0.51 | 0.76 | 0.48 | 0.51 |
| **14q1** | 0.35 | 0.61 | 0.83 | 0.49 | 0.48 |
| **14q2** | 0.41 | 0.67 | 0.86 | 0.50 | 0.45 |
| **14q3** | 0.44 | 0.70 | 0.88 | 0.51 | 0.44 |
| **14q4** | 0.45 | 0.70 | 0.88 | 0.52 | 0.43 |

easing being implemented by the Federal Reserve (the so-called QE3 programme).

It is estimated that the probability of the domestic GDP growth running below the July projection, amidst aggravated debt crisis in the euro area is similar to the probability of the path of this category running higher, in the case of faster-than-expected recovery in global demand.

### Internal 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 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.

### 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 future EU environmental policy, especially as regards the implemented Energy and Climate Package, aiming to reduce $CO_2$ emissions. There is no information about the price of $CO_2$ emission allowances, which may largely depend on the demand for emission rights, and therefore on economic activity of the EU countries. Moreover, the number of free allowances may be subject to change due to the fact that the European Commission has not yet decided on the derogation for the Polish energy sector. 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.

**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 | 3.9 | 2.7 | 1.8 |
| Food prices (% y/y) | 2.7 | 5.4 | 4.0 | 1.9 | 1.3 |
| Energy prices (% y/y) | 6.2 | 9.1 | 8.8 | 5.5 | 3.3 |
| Core inflation net of food and energy prices (% y/y) | 1.6 | 2.4 | 2.4 | 2.2 | 1.6 |
| GDP (% y/y) | 3.9 | 4.3 | 2.9 | 2.1 | 3.0 |
| Domestic demand (% y/y) | 4.6 | 3.6 | 2.3 | 1.2 | 2.8 |
| Individual consumption (% y/y) | 3.2 | 3.1 | 2.0 | 1.8 | 2.6 |
| Public consumption (% y/y) | 4.1 | -1.1 | 1.0 | 1.3 | 3.0 |
| Gross fixed capital formation (% y/y) | -0.2 | 8.1 | 4.8 | 0.1 | 2.0 |
| Contribution of net exports (percentage point y/y) | -0.7 | 0.6 | 0.7 | 0.9 | 0.2 |
| Exports(% y/y) | 12.1 | 7.5 | 4.0 | 3.1 | 5.3 |
| Imports (% y/y) | 13.9 | 5.8 | 2.4 | 1.0 | 4.9 |
| Gross wages (% y/y) | 4.0 | 5.2 | 5.1 | 4.8 | 5.6 |
| Total employment (% y/y) | 0.6 | 1.1 | 0.5 | -0.3 | -0.2 |
| Unemployment rate (%) | 9.5 | 9.6 | 9.8 | 10.0 | 10.1 |
| NAWRU (%) | 9.2 | 9.3 | 9.6 | 9.9 | 10.1 |
| Labour force participation rate (%) | 55.7 | 56.1 | 56.5 | 56.4 | 56.4 |
| Labour productivity (% y/y) | 3.3 | 3.2 | 2.4 | 2.4 | 3.2 |
| Unit labour costs (% y/y) | 0.6 | 1.9 | 3.8 | 2.6 | 2.3 |
| Potential output (% y/y) | 4.1 | 3.5 | 2.9 | 2.9 | 3.0 |
| Output gap (% of potential GDP) | -0.5 | 0.3 | 0.3 | -0.4 | -0.4 |
| Index of agricultural commodity prices (USD; 2010=1.00) | 1.00 | 1.18 | 1.06 | 1.02 | 1.00 |
| Index of energy commodity prices (USD; 2010=1.00) | 1.00 | 1.33 | 1.17 | 1.18 | 1.21 |
| Price level abroad (% y/y) | 0.7 | 1.1 | 1.4 | 1.5 | 1.7 |
| GDP abroad (% y/y) | 2.3 | 1.9 | 0.3 | 1.3 | 1.7 |
| Current and capita account balance (% GDP) | -2.8 | -2.1 | -2.1 | -1.3 | -1.6 |
| 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 FEBRUARY - MAY 2012

• **Date:** 4 April 2012

**Subject matter of motion or resolution:**
Resolution No. 1/2012 on approving the Annual Financial Report of the National Bank of Poland prepared as of 31 December 2011.

**Voting of the MPC members:**

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

- **Date:** 4 April 2012

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

**MPC decision:**
Motion did not pass.

**Voting of the MPC members:**

**For**: Z. Gilowska
A. Glapiński
A. Kaźmierczak

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

- **Date:** 8 May 2012

**Subject matter of motion or resolution:**
Resolution No. 2/2012 on the evaluation of the activities of the NBP Management Board as regards the implementation of the monetary policy guidelines for the year 2011.

**Voting of the MPC members:**

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

**Against:**

- **Date:** 8 May 2012

**Subject matter of motion or resolution:**
Resolution No. 3/2012 on approving the report on monetary policy implementation in 2011.

**Voting of the MPC members:**

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

- **Date:** 9 May 2012

**Subject matter of motion or resolution:**
Resolution No. 4/2012 on the level of the reference rate, lombard rate, deposit rate and rediscount rate of the National Bank of Poland.

**MPC decision:**
The MPC increased the interest rates by 0.25 percentage point.

**Voting of the MPC members:**

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

● **Date:** 22 May 2012

**Subject matter of motion or resolution:**
Resolution No. 5/2012 on approving the report on the operations of the National Bank of Poland in 2011.

**Voting of the MPC members:**

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

**Against:**