

Inflation Report

March 2013

National Bank of Poland
Monetary Policy Council

Warsaw, March 2013

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 21 February 2013.

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	5
1. External environment of the Polish economy	9
1.1. Global economic activity.....	9
Box 1. External adjustments in the euro area member states	12
1.2. Inflation developments abroad	18
1.3. Monetary policy abroad and international financial markets	19
Box 2. Can macroprudential policy prevent imbalances in the monetary union?	22
1.4. Global commodity markets.....	24
2. Domestic economy.....	27
2.1. Inflation developments.....	27
2.1.1. Consumer prices	27
2.1.2. Core inflation	28
2.1.3. Producer prices in industry.....	29
2.1.4. Import prices	29
2.1.5. Inflation expectations.....	30
2.2. Demand and output.....	31
2.2.1. Consumption demand	33
2.2.2. Investment demand	33
2.2.3. Government demand	35
2.2.4. Exports and imports	37
Box 3. Geographical structure of Polish exports.....	39
2.2.5. Output	42
2.3. Financial situation in the enterprise sector	43
2.4. Labour market.....	44
2.4.1. Employment and unemployment.....	44
2.4.2. Wages and labour productivity	46
2.5. Financial markets and asset prices	47
2.5.1. Interest rates and financial asset prices	47
2.5.2. Exchange rate	49
2.5.3. Housing prices	49
2.6. Credit and money.....	50
2.6.1. Loans.....	50
2.6.2. Deposits and monetary aggregates.....	53
2.7. Balance of payments.....	54

3. Monetary policy in November 2012 - March 2013	57
4. Projection of inflation and GDP.....	69
4.1. Summary	70
4.2. External environment	72
4.3. Polish economy in the years 2013-2015	74
4.4. Current versus previous projection	82
4.5. Forecast uncertainty sources	85
5. The voting of the Monetary Policy Council members in October 2012 - January 2013	91

SUMMARY

In the second half of 2012, global economic activity remained low, although business climate indicators picked up somewhat towards the end of the year. In the euro area, recession went on but decrease in economic activity varied across the member countries. In Germany, GDP in the analysed period, in spite of having turned negative in 2012 Q4, remained higher than in the euro area countries most gravely affected by the debt crisis. This resulted primarily from favourable labour market conditions, including rising employment, falling unemployment rate and growing wages. In the United States, in turn, GDP growth – having accelerated temporarily in 2012 Q3 – fell to a level close to nought in 2012 Q4. On one hand, economic activity was further supported by consumption growth and robust rise in investment, but on the other hand, it was dragged by sharply declining government spending, mostly on defence, as well as the change in inventories. In most of the largest emerging economies, GDP growth slowed down in 2012 Q3, as demand from the advanced economies weakened. Available 2012 Q4 data suggest that the weakening of economic activity observed in the previous quarters has lost momentum. In particular, output growth in China accelerated, as domestic demand expanded faster than in the previous quarter.

In the recent months, weak demand growth prevailing in the global economy has been conducive to keep global inflation slightly below its long-term average. Energy price growth has slowed down, while food price growth has picked up – more substantially in the emerging than in the advanced economies. Taking into account different impact of the respective price categories on inflation in individual countries, these trends have translated into lower inflation in the advanced economies, and a slight rise in inflation in the largest emerging economies.

Since the November *Report*, major central banks have continued to ease their monetary policies, keeping interest rates at historically low levels, while extending the amount of their quantitative easing programmes or leaving it unchanged. At the same time, many central banks in the emerging economies and small advanced economies continued to ease their monetary policies or left their interest rates unchanged.

Since the previous *Report*, sentiment in the international financial markets continued to improve prompting an increase in demand for risky assets. These trends were reflected in share prices climbing further globally and CDS rates on Treasury bonds of the euro area member countries most severely affected by the debt crisis falling further and then stabilizing at a relatively low level. At the same time, falling risk aversion contributing to larger demand for high-yielding assets was reflected in a depreciation of the US dollar, the Japanese yen and the Swiss franc. The US dollar and the Japanese yen were dragged down, in particular, by the increase in quantitative easing in the United States and Japan. At the same time, the exchange rates of many emerging market currencies appreciated somewhat.

In Poland, the annual growth of consumer goods and services prices has been on a downward trend since July 2012. In December, it reached a level close to the NBP target (it amounted to 2.4%) and in January 2013 it dropped to 1.7%. Since the publication of the previous *Report*, declining inflation was supported by weaker demand and cost pressures in the economy, decrease in energy price growth as well as zloty exchange rate stronger than a year ago. Along with deteriorating business conditions and weakening inflationary pressure, expectations of financial sector analysts concerning inflation over the

12-month horizon were gradually revised downward, reaching 2.2% y/y in February 2012. At the same time, inflation expectations of enterprises and households decreased as well.

In the second half of 2012, the annual GDP growth continued to slow down – to 1.4% y/y in 2012 Q3 and 0.8% y/y in 2012 Q4. It was dampened by further decline in domestic demand caused by falling investment as well as – in Q4 – by decreasing consumption, combined with the persistently negative contribution of inventories. On the other hand, output growth was supported by relatively high – though gradually fading – improvement in net exports.

Slowdown in the domestic economy in the second half of 2012 was accompanied by stagnation in the number of persons working in the economy and a further decline in employment growth in the enterprise sector, which fell below zero in Q4. Stagnating growth in the number of persons working in the economy, coupled with rising activity rate, translated into further rise in the unemployment rate. Data on wage growth and unit labour costs point to a lack of wage pressure in the economy. In the second half of 2012, wage growth weakened both in the whole economy and in the enterprise sector. At the same time, growth in unit labour costs in the economy, despite some rise in Q4, remained lower than its long-term average.

Since early November 2012, the Monetary Policy Council decreased the NBP reference rate on four occasions by a total of 1 percentage point, down to the 3.75%¹. Between early November 2012 and late December 2012, yields on Polish security bonds were falling driven primarily by improving global situation and search for yield in the global financial markets as well as expectations of a reference rate cut in Poland. However, in January and February 2013, the yields increased again. Share prices on the Warsaw Stock Exchange (WSE) were affected by changes in sentiment in the global financial markets and deteriorating economic growth outlook in Poland. This was reflected in worse performance of the companies listed on the WSE. Following a rise in late 2012, in January and February 2013, stock market indices declined steadily.

After the appreciation in the last two months of 2012, the zloty depreciated against the euro in early 2013. The zloty was weighed down by, in particular, releases of weaker than expected data on economic activity in Poland. Given the depreciation of the save heaven currencies amidst fading risk aversion, the zloty appreciated against the US dollar and the Swiss franc in the period under review.

Since the previous *Inflation Report*, lending growth has decelerated. In 2012 Q4 corporate debt declined driven by decrease in investment loans and a further drop in short-term loans. At the same time, housing loans continued to decelerate, while consumer loans kept decreasing. Broad money growth declined slightly as deposits of both enterprises and households slowed down. Growth in the total value of households' financial assets accelerated fuelled by higher inflow of assets to the investment funds in 4Q 2012.

The second half of 2012 saw an improved balance on current and capital account which was related to a further slowdown in the domestic economy. The improvement was primarily driven by a reduction in the current account imbalance, largely due to narrowing of the trade deficit. In the analysed period, a

¹ The cut-off date for the data in *March Report* was 21 February 2013. At the meeting held on 6 March 2013, the Monetary Policy Council decided to decrease the reference rate by 0.50 percentage points to 3.25%. Information about this decision is included in Chapter 3 of the *Report*.

surplus in the financial account rose, which was to a large extent driven by the inflow of portfolio capital.

The *Inflation Report* is structured as follows: in Chapter 1 economic developments in the external environment of the Polish economy are presented in the context of their impact on inflationary developments in Poland. Those developments as well as domestic factors affecting them are discussed in Chapter 2. *Minutes of the Monetary Policy Council decision-making meetings* held in November 2012–February 2013 together with the *Information from the meeting of the Monetary Policy Council* in March 2013 are presented in Chapter 3. Minutes from the MPC meeting held in March will be published on 21 March 2013 and so will be included in the next *Report*. MPC voting records in the period October 2012–January 2013 can be found in Chapter 5. Moreover, Chapters 1 and 2 of this *Report* include three boxes: "External adjustments in the euro area member states", "Can macroprudential policy prevent imbalances in the monetary union?" and "Geographical structure of Polish exports".

Chapter 4 of the *Report* presents the projection of inflation and GDP based on the NECMOD model, which is one of the inputs into the Council's decision-making process on the NBP interest rates. In line with the March projection based on data available up to 14 February 2013 (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 1.3–1.9% in 2013 (compared to 1.8–3.1% in the November projection) and 0.8–2.4% in 2014 (as against 0.7–2.4%) and 0.7–2.4% in 2015. In turn, with a 50-percent probability the March projection sees the annual GDP growth in the range of 0.6–2.0% in 2013 (compared to 0.5–2.5% in the November projection), 1.4–3.7% in 2014 (as against 1.1–3.5%) and 1.9–4.4% in 2015.

Chapter 1

EXTERNAL ENVIRONMENT OF THE POLISH ECONOMY

1.1. Global economic activity

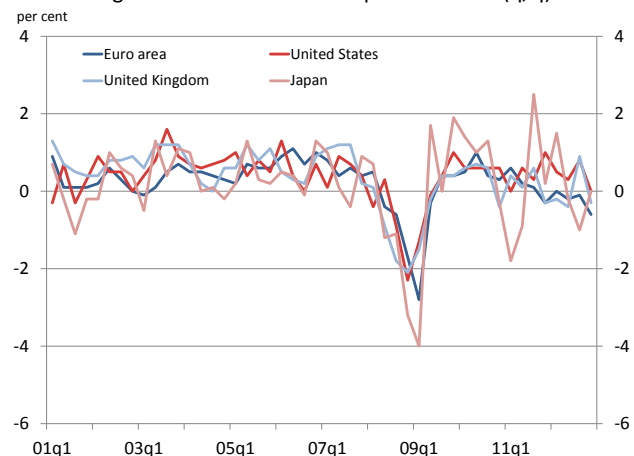
In the second half of 2012, global economic activity remained low, although business climate indicators picked up somewhat towards the end of the year (Figure 1.1, Figure 1.2, Figure 1.9)². Recession went on in the euro area, while growth in the United States – having accelerated temporarily in 2012 Q3 – fell to a level close to zero in 2012 Q4. With regard to the largest emerging economies, available 2012 Q4 data suggest that the GDP growth slowdown observed in the previous quarters has levelled off.

In the period under review, global economic activity continued to vary across the advanced as well as the emerging economies. In particular, output growth in Germany and the United States, despite a slowdown observed in 2012 Q4, remained higher than in the euro area countries most affected by the debt and competitiveness crisis (including Italy and Spain).

In the United States, GDP growth dropped to a little below zero in 2012 Q4 (compared with 0.8% q/q in 2012 Q3; Figure 1.1)³. It was further supported by an increase in consumption and

Figure 1.1

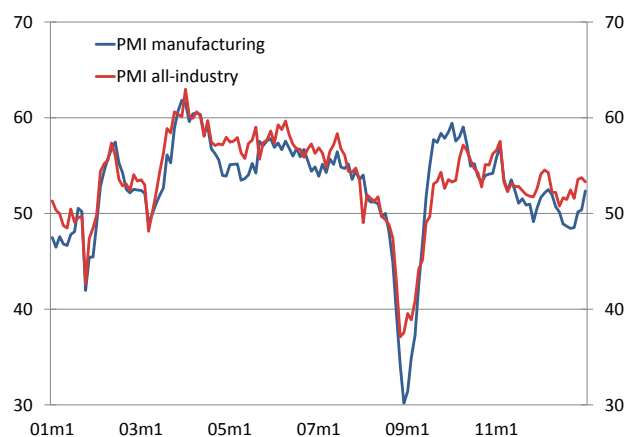
Economic growth in selected developed countries (q/q).



Source: Eurostat data.

Figure 1.2

Global economy PMI index.



Source: Ecwin.

² The quarterly growth figures presented in this chapter have been seasonally adjusted.

³ In annualised terms, GDP growth in 2012 Q4 amounted to -0.1% q/q as compared with 3.1% q/q in 2012 Q3.

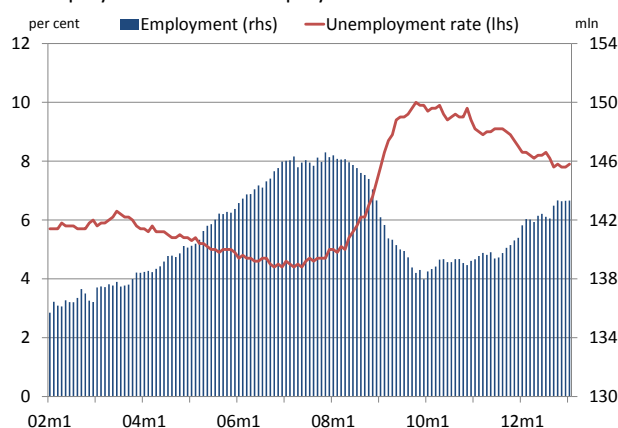
robust investment growth. On the other hand, GDP growth was dragged by sharply declining government spending, mostly defence spending, as well as the change in inventories. Another negative contribution to GDP growth, if smaller in terms of impact, came from net exports.

Moderate economic activity in the United States was also confirmed by monthly data incoming in 2012 Q4 and the beginning of 2013, including sluggish growth in retail sales and industrial output. At the same time, consumer confidence, following a marked dip at the end of 2012 – caused probably by uncertainty surrounding the scale of fiscal tightening in the coming year – improved somewhat in January and February 2013, propped up by stronger assessments of economic outlook. The gradual improvement in the labour market (though the unemployment rate persisted markedly above its pre-crisis level; Figure 1.3) and a rebound in property market prices, supported by the quantitative easing of monetary policy implemented by the Federal Reserve (see Chapter 1.3. *Monetary policy abroad and international financial markets*) have emerged as positive signs for demand in the economy in recent period.

In the euro area, GDP growth remained negative in the second half of 2012. In 2012 Q3, it was running at -0.1% q/q, to subsequently drop further, according to preliminary figures, to -0.6% q/q in 2012 Q4, (as compared with -0.2% q/q in 2012 Q2; Figure 1.4)⁴. In Q3, GDP growth was adversely affected by a further decline in investment. Private and public consumption continued to stall, with their contributions to GDP growth standing at close to zero. Yet the strongest downward pressure on output growth was the change in inventories. In contrast, net exports made a positive contribution to GDP

Figure 1.3

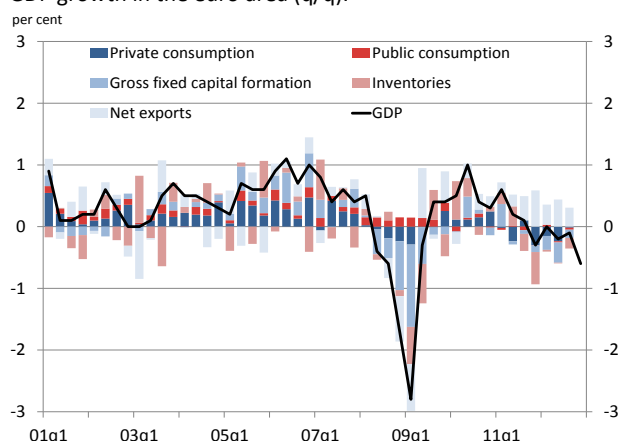
Unemployment rate and employment level in United States.



Source: BLS.

Figure 1.4

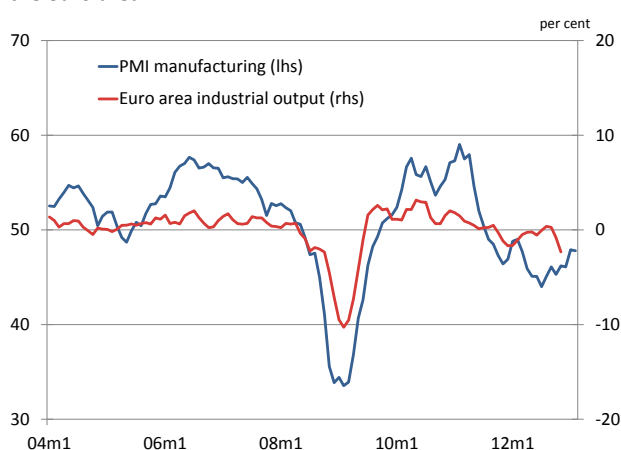
GDP growth in the euro area (q/q).



Source: Eurostat data.

Figure 1.5

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



Source: Eurostat data, Markit.

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

⁴ Manufacturing PMI for the euro area, despite some increase in the recent months, indicated that the recession continued at the beginning of 2013. Among euro area countries, improvement in business conditions at the beginning of 2013 was visible especially in Germany, where manufacturing PMI in February exceeded the level indicative of recession (50) and amounted to 50.1.

growth, with both exports and imports expanding, although the latter at a slower pace.

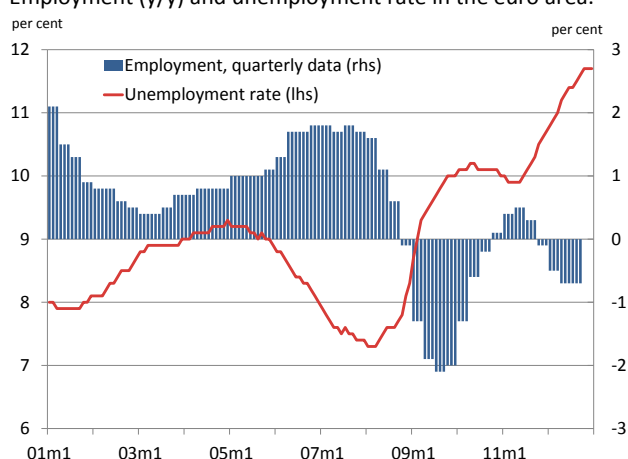
In 2012 Q4, consumer demand probably remained weak, as indicated by a substantial drop in retail sales. Household demand was impaired by high unemployment rate, which, in spite of having stabilised in terms of euro area average, continued to rise in the countries hardest hit by the debt crisis (Figure 1.6). At the same time, the decline in industrial output deepened (Figure 1.5).

As in the previous quarters, economic activity in the second half of 2012 varied across the euro area countries. In Germany, GDP in the analysed period, in spite of having turned negative in 2012 Q4, remained higher than in the euro area countries most severely affected by the debt crisis. This resulted primarily from favourable labour market conditions, including rising employment, falling unemployment rate and growing wages.

In large euro area economies affected by the debt and competitiveness crisis, i.e. Italy and Spain, recession continued in the second half of 2012. According to the available data, the 2012 Q3 demand in these economies was adversely affected by lower consumer spending of households (related to the further deterioration of labour market conditions and weak consumer sentiment) and falling public consumption (particularly in Spain, which was driven by public finance adjustment). Weak consumer demand combined with modest capacity utilisation and high uncertainty prevailing in the economy led to a further decline in investment. In turn, GDP growth in these countries was supported by net exports, which, in the case of Spain, resulted from strong exports growth (amidst a certain improvement in the economy's competitiveness due to, in particular, a decline in unit labour costs in recent quarters; Box 1 *External adjustments in*

Figure 1.6

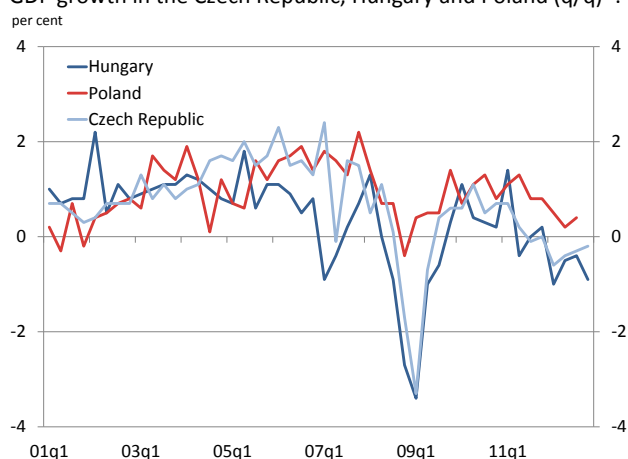
Employment (y/y) and unemployment rate in the euro area.



Source: Eurostat data.

Figure 1.7

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

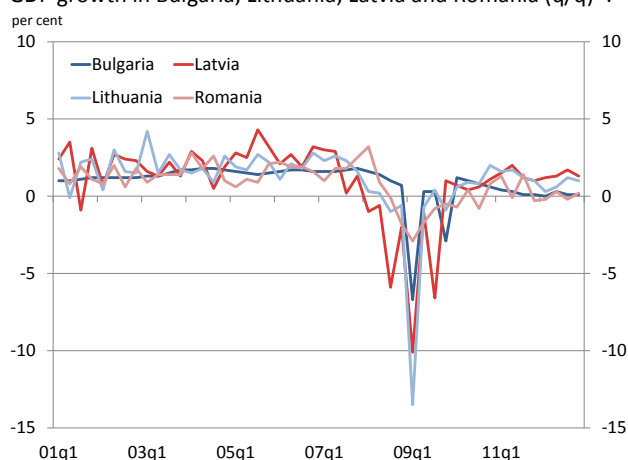


Source: Eurostat data.

*2012 Q4 – preliminary data.

Figure 1.8

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



Source: Eurostat data.

*2012 Q4 – preliminary data.

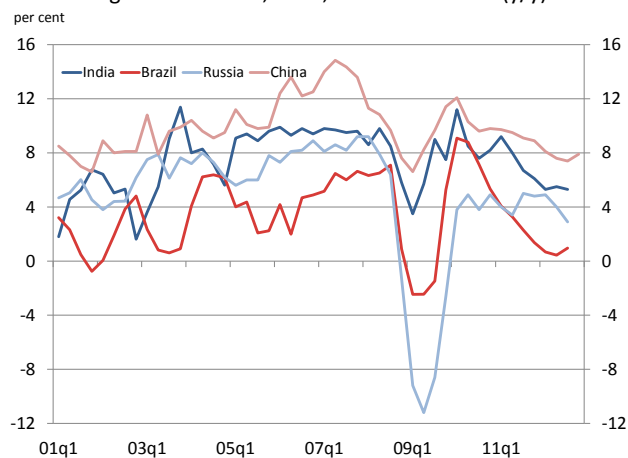
the euro area member countries), and in the case of Italy – mainly from decreasing imports.

GDP growth was also diversified in new European Union member states remaining outside the euro area (Figure 1.7, Figure 1.8). In the Czech Republic and Hungary, it continued to run at negative rates, and in 2012 Q3 was dragged by a fall in investment and consumption; in Hungary – also by lower exports. In turn, Latvia and Lithuania experienced relatively strong GDP growth. Available data on 2012 Q3 indicate that in Latvia it was supported by expanding external demand and rising exports, whereas in Lithuania – by rising exports and the impact of a one-off factor (a record-high grain harvest).

In most of largest emerging economies, GDP growth slowed down in 2012 Q3 (in China, India and Russia), as demand from the advanced economies weakened. Only Brazil saw its growth pick up somewhat, while remaining low relative to its long-term average (Figure 1.9). Available 2012 Q4 data suggest that the weakening of GDP growth observed in the previous quarters has lost momentum. In particular, output growth in China accelerated, as domestic demand expanded faster than in the previous quarters.

Figure 1.9

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



Source: Reuters and OECD data.

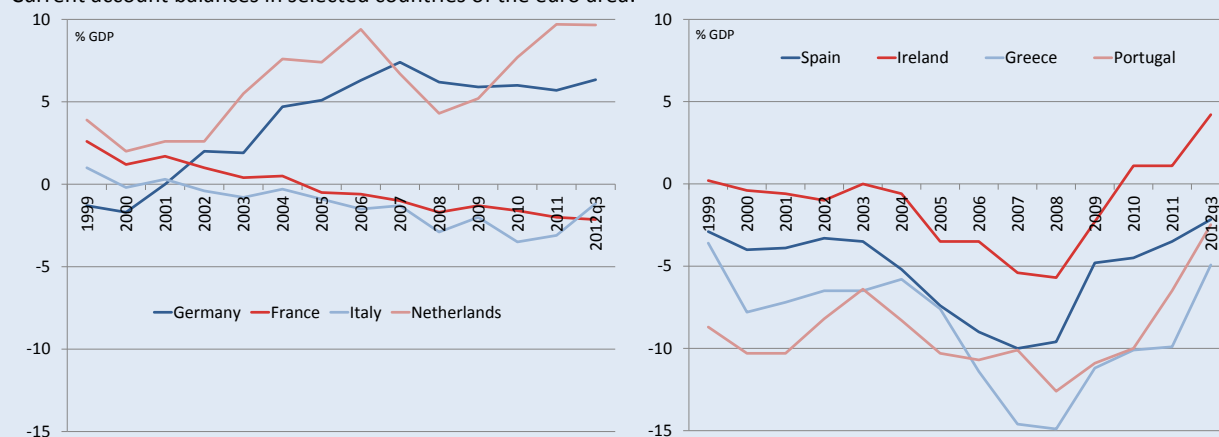
Box 1. External adjustments in the euro area member states

Intra-euro area current account divergences widened considerably in the period between the creation of the Economic and Monetary Union and the onset of the global economic crisis. Large deficits in Greece, Portugal, Spain and – to a lesser extent – Ireland, together with a gradual deterioration in the current account balances of France and Italy, coincided with the accumulation of sizeable surpluses in Germany, the Netherlands, Luxembourg and Finland (Figure R.1.1).

Current account deficits and surpluses are not necessarily a sign of macroeconomic imbalances. They may stem from factors such as different expectations regarding future incomes or returns on domestic and foreign investment. However, in some euro area countries large current account deficits have to a large extent indeed reflected mounting economic, financial or fiscal imbalances⁵.

Figure R.1.1

Current account balances in selected countries of the euro area.



Source: Eurostat, SDW, ECB

The 2012 Q3 data relate to the cumulative current account balance for the four quarters.

The above factors contributed to a various degree to the changes in current account balances of the respective euro area countries. The deficit countries do not constitute a homogeneous group and need to be assessed separately when trying to identify their problems. Yet, the sources of mounting external imbalances in countries like Spain and Ireland, Portugal and Greece or Italy and France seem to bear significant pairwise similarity. In Spain and Ireland, growing current account deficits were fuelled by the credit boom and the property market bubble, which translated into an excessively large role of the construction sector in the economy and sharply rising imports. Despite a fast growth in both wages and prices, a decline in these countries' export shares in world trade was still moderate as compared with other advanced economies. This suggests a relatively high non-price competitiveness of Spanish and Irish exports. In Greece and Portugal – the economies which joined the euro area at a relatively low development level and with various structural deficiencies (including weak export base) – large current account deficits were recorded already in 1999. They reflected chronic public sector deficits combined with a high negative balance of private savings and investment. The adoption of a common currency, which eliminated the perceived exchange rate risk and squeezed the perceived credit risk premium, probably only delayed the adjustment process, magnifying its future scale. Also gradual deterioration in the current account balances of France and Italy can be

⁵ The roots of these imbalances can be tracked to – firstly – deepening of financial integration coupled with over-optimistic growth expectations, which had translated into lower credit risk perception for the euro area member countries. In the countries with a relatively low per capita GDP or low per capita capital stock these factors led to a decline in cost of external finance below the interest rate prevailing before their accession to the monetary union. Secondly, these imbalances were aggravated by external shocks such as the growing role of China and other emerging economies in the world trade, tighter integration of the Central and East European countries into the European Union as well as rising commodity prices in the global markets (Chen et al. 2012). Thirdly, mounting imbalances in the deficit economies were additionally compounded by their structural flaws (for example, lack of a developed home rental market in Spain, low export base and unfavourable product structure of exports in Portugal and Greece; in those countries as well as Italy and France ineffective mechanisms of wage bargaining coordination and indexation). Fourthly, the market forces as well as euro area economic governance structure proved ineffective in terms of preventing the build-up of imbalances in the member states.

put down to structural problems, such as considerable rigidities in their labour and product markets. Institutional weaknesses translated into deteriorating cost and non-price competitiveness of their exports, which led to a sharp drop in its share in the world's trade after 1999.

The global financial crisis, through changes in the valuation of the credit risk, first with regard to financial institutions and subsequently – after disclosure of the information on the scale of the government deficit and public debt in Greece – to governments, led to rapid changes in market perception of imbalances in the euro area countries. These changes resulted in an outflow of private capital from the deficit countries, which forced adjustment of their imbalances. The implications of private capital outflow were mitigated by financial support provided to the deficit countries through the official sector⁶.

The adjustment of imbalances in the euro area – termed "the great rebalancing" – is a multi-faceted process. It comprise deleveraging of the private sector, fiscal consolidation, the so-called internal devaluation and structural reforms, which are supposed to support sustained productivity growth of the deficit economies⁷.

Between 2008 and 2012 Q3, a considerable improvement was recorded in the ratio of current account balances to GDP, amounting to 10 percentage points in Ireland, Greece and Portugal and 7 percentage points in Spain. Since the first half of 2011, a gradual improvement has also been observed in the current account balance in Italy, while gradual deterioration of France's current account balance has slowed down. However, while Ireland has recorded current account surpluses since the second half of 2010, deficits persist in the remaining countries. In particular, taking into account a sharp drop in domestic demand, the current account deficit in Greece remains relatively high (4.9% of GDP in in 2012 Q3). Moreover, the European Commission's autumn forecasts indicate that amongst the deficit countries, only Spain and Ireland will attain a surplus by 2014.

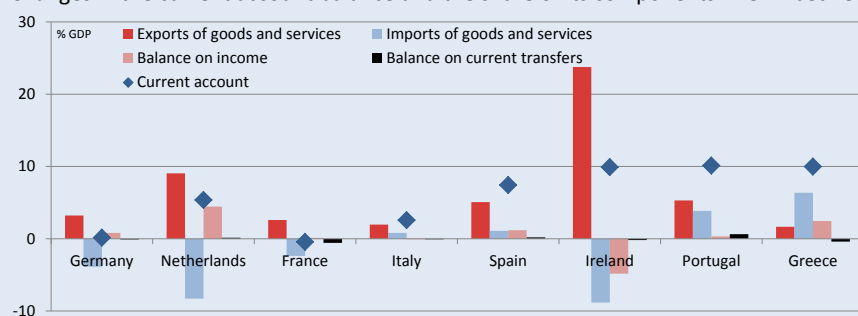
The improvement in the current account balances is mainly driven by trade adjustments (Figure R.1.3). Yet, there are significant differences across countries as regards the relative role of changes in exports and imports. A relatively rapid switch from a growth model based on domestic demand and extensive credit growth to an export-driven growth model was observed in Ireland, which can be explained by the country's very high degree of openness and a competitive structure of exports. A relatively strong growth in the exports of goods and services also plays an important role in the adjustment of current account imbalances in Spain and Portugal. Likewise, the improvement in the current account balance in Italy observed between 2010 and 2012 was mainly accounted for growing exports. Yet, in the recent quarters these adjustments were mostly made through import reduction. In Greece, on the other hand, shrinking current account imbalance is the result of strong decline in the imports of goods related to the collapse of domestic demand.

⁶ In the case of Greece, Ireland and Portugal, this support predominantly took the form of loans from the European Financial Stability Fund (guaranteed by the euro area member states) and from the International Monetary Fund, granted under the adjustment programmes. An important role in mitigating adjustments in the euro area was also played by the liquidity-providing operations of the European Central Bank.

⁷ Internal devaluation involves adjustments which are aimed to bring similar effects as those caused by the depreciation of the nominal exchange rate, i.e. decline in relative prices and labour costs and creation of appropriate shifts of production factors between tradable and non-tradable sectors.

Figure R.1.2

Changes in the current account balance and the share of its components in GDP between 2008 and 2012 Q3.

**Source:** Eurostat.

The 2012 Q3 data relate to the four-quarter cumulated sum of the current account balance.

When assessing the sustainability of adjustments we may observe, on the one hand, that as the cyclical position of the deficit countries is generally worse than that of countries being their trading partners, in the case of economic recovery imports may be expected to grow in deficit economies leading to further worsening of their current account balances⁸. On the other hand, as factors being the underlying cause of accumulation of imbalances have faded away (including such factors as excessively fast growth of domestic demand fuelled by lending and driven by excessive optimism about macroeconomic stability of the deficit economies), the observed decline in domestic demand and imports in those economies may prove permanent. Nevertheless, this also suggests that without strengthening the supply side of these economies, which would translate into sustainable improvement in productivity and competitiveness, differences across euro area countries in terms of GDP per capita may deepen. Particularly, the deficit countries may see persisting unfavourable phenomena (such as high unemployment), which have emerged as a result of adjustments of the previously observed imbalances. Growing economic heterogeneity across euro area member states poses a challenge not only to the common monetary policy but also to the region's political cohesion.

Table R.1.1

Net international investment position and foreign assets and liabilities of selected euro area countries (% of GDP).

	Net international investment position		Assets	Liabilities
	1999	2011	2011	
Germany	5	33	217	184
the Netherlands	-8	36	446	410
Italy	-5	-21	109	130
France	-8	-16	No data available	No data available
Spain	-32	-92	108	209
Ireland	-8	-96	1643	1793
Greece	-33	-86	101	187
Portugal	-32	-105	170	275

Source: Eurostat.

An important issue in debates on external imbalances of the euro area member states is the imbalance in terms of stocks (rather than flows). As a result of accumulation of high current account deficits, net international investment position of Portugal, Greece and Spain reached a level that poses a risk for long-term external solvency of these economies and that is likely to adversely affect their growth prospects. Similarly, in Ireland net foreign liabilities reached a very high level; however, in this case this was primarily the result of unfavourable changes in the valuation of foreign assets and liabilities rather than accumulation of current account deficits. Despite a marked reduction in current account deficits between 2008 and 2012, most deficit economies experienced further increase

⁸ According to the OECD estimates, in 2012 current account balances adjusted for cyclical factors were lower than those observed; this difference ranged from 0.6 percentage points in Italy to 2.7 percentage points in Ireland.

in their negative net international investment positions (net IIPs). In countries which recorded a decline in their negative net IIPs, this drop was largely an effect of falling value of domestic debt securities held by non-residents (Table R.1.1). Strongly negative and deteriorating net IIP leads to widening income account deficits, which hampers current account adjustments and translates into unfavourable growth outlook for both gross national income and domestic demand.

In order to prevent further accumulation of foreign net liabilities or to reduce them, countries with large negative net IIPs have to hold appropriately high primary current account balances. Adjustments of current account imbalances largely based on reductions in domestic demand and imports, reduce the chance of generating primary balances that would allow to reduce foreign indebtedness to a safe level. It should be mentioned that the primary balance in Greece remains considerably below the level ensuring stabilization of the net IIP of this country as of the end of 2011. In turn, Ireland, Spain and Portugal have already achieved primary balances ensuring gradual improvement in their net IIP. However, only in Ireland primary balance is high enough to bring, within 20 years, the negative net IIP to a relatively safe level of -50% of GDP (Table R.1.2).

Table R.1.2

Primary current account balances (% of GDP).

	Primary current account	Primary balance stabilizing net IIP at its 2011 level	Primary balance which reduces net IIP to -50% of GDP over 20 years
Spain	0.0	-1.2	1.0
Ireland	23.1	18.5	21.4
Greece	-2.8	0.6	2.1
Portugal	1.7	-0.1	2.5

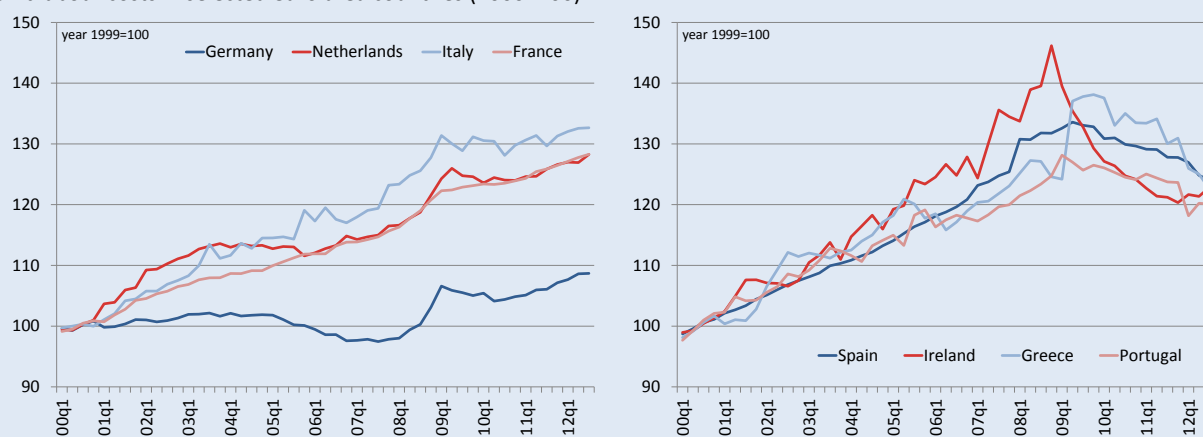
Source: European Commission (2012a), Eurostat.

Current account adjustments or, in other words, changes in the balance of saving and investment, require, for the most part, relative price and cost adjustments. As there is no possibility for members of the currency union to resort to nominal currency devaluation, the so-called internal devaluation is the available tool. Since 2009, Ireland, Greece, Portugal and Spain have seen a decline in unit labour costs (ULC) in the economy (until Q3 2012 ULC fell as compared to their maximum level by a total of 10% in Ireland, 11% in Greece, 7% in Spain and 6% in Portugal). However, while in Spain and Ireland considerable adjustments of ULC took place already before 2012, in Greece they occurred largely in most recent quarters (Figure R.1.4). In 2012, as compared to 36 developed economies, ULC in Spain, Ireland, Greece and Portugal were lower than in 1999. In Greece and, to a lesser extent, in Portugal ULC adjustments were driven by declining wage levels, whereas in Spain and Ireland - primarily by growing productivity, being largely the result of employment cuts in the economy. Against this background, persistent growth in ULC in France and Italy is a negative sign from the point of view of reduction of current account imbalances in the euro area (Figure R.1.5).

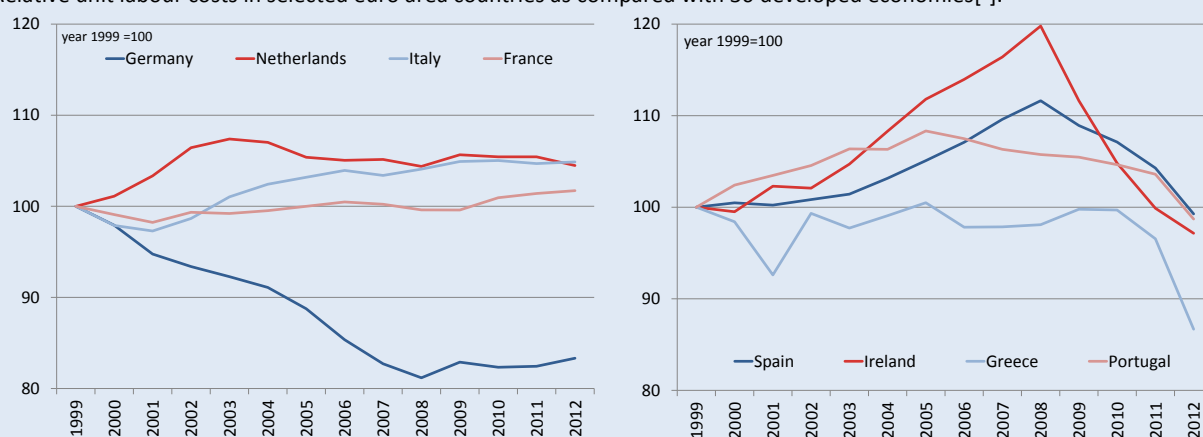
Comparing ULC changes with development of export deflators in the deficit countries shows that decline in the former one results in falling labour share in the sector's value added and, consequently, growing profitability of corporates which, in the medium term, should help to improve cost- and non-cost competitiveness of exports. At the same time, the impact of depreciation of real exchange rate driven by relative price adjustments on trade surplus in individual countries will depend on the structure of exports in a particular economy. In the short term, stronger effects may be expected in countries specializing in the manufacturing of low-technology goods, whose competitiveness is largely determined by prices (Wierds 2012). In recent quarters, acceleration in the fall of ULC in Greece, a country specializing in manufacturing of such goods, may consequently have a positive impact on growth of its exports in the near term.

Figure R.1.3

Unit labour costs in selected euro area countries (2000=100).



Source: Statistical Data Warehouse, European Central Bank, (in case of Greece – NBP seasonal adjustment).

Figure R.1.4Relative unit labour costs in selected euro area countries as compared with 36 developed economies⁹.

Źródło: Ameco.

*Data for 2012 are the European Commission forecasts of February 2013.

Structural reforms are an important aspect of adjustment in countries which have accumulated the largest macroeconomic imbalances. Such reforms are especially wide-ranging in countries being under economic adjustment programmes. Reforms in the labour and product markets are also an instrument of imbalance adjustment in Italy and Spain. At the same time, it should be pointed out that in France an agreement on labour market reforms was reached, which, if implemented, might support competitiveness of the country's exports by changing the relation between remuneration of production factors to the benefit of the profit share. Yet, although in the short term structural reforms may contribute to improving current account balance by reduced imports, their positive impact on exports of the deficit economies might be expected only in the longer term.

To sum up, Greece, Spain, Portugal and Ireland saw major adjustments in their current accounts and relative prices. Yet, large stock imbalance, namely high public and private sector debt and high external indebtedness remain a major challenge, posing a risk for their macroeconomic stability. Reduction of accumulated debt will be a long-lasting process, adversely affecting economic growth in those countries in the coming years. At the same time, in the absence of relative price adjustments in France and Italy, which could help to halt long-term trend of falling competitiveness of their economies, this trend remains a risk factor for the euro area's economic growth.

⁹ ULC in 36 advanced economies has been calculated with weights reflecting the share of the respective partners in a country's exports. The weights are adjusted to account for the so-called third market effects, i.e. to capture competition faced in foreign markets from both domestic producers and exporters from third countries ("double export weighting").

Selected literature:

Chen R., Milesi-Ferretti G.M., Tresselt T., (2012), *External Imbalances in the Euro Area*, IMF Working Papers 12/236, September.

A Team of the Working Group on Econometric Modelling of the European System of Central Banks, (2012), *Competitiveness and external imbalances within the Euro Area*, European Central Bank, Occasional Paper Series No. 139, December

European Commission, (2012a), *The dynamics of international investment positions*, Quarterly Report on the Euro Area, Volume 11, No. 3, October.

European Commission (2012b) *European Economic Forecast. Autumn 2012*, 7.

Wierds P., van Kerkhoff H., de Haan J., (2012), *Trade Dynamics in the Euro Area: The role of export destination and composition*, DNB Working Paper No. 354, October.

1.2. Inflation developments abroad

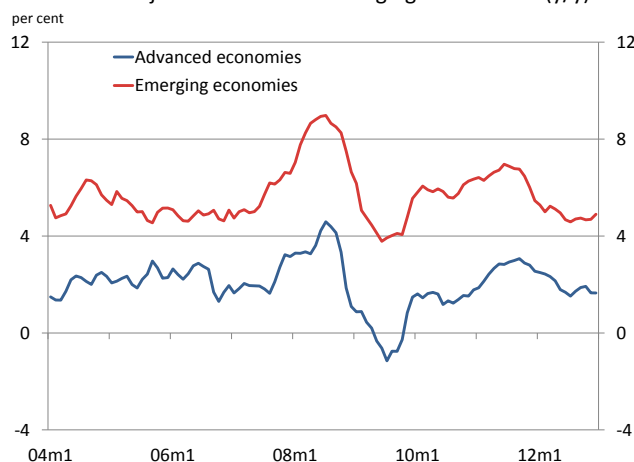
Weak demand prevailing in the global economy in the recent months has been conducive to keep global inflation slightly below its long-term average. In this period, energy price growth has slowed down, in contrast to food price growth, which has picked up, more substantially in the emerging than in the advanced economies. Taking into account different impact of the respective price categories on inflation in individual countries, these trends have translated into lower inflation in the advanced economies, and a slight rise in inflation in the largest emerging economies (Figure 1.10).

Since the previous *Report*, inflation in the United States and the euro area has declined (Figure 1.11). In the United States, it stood at 1.6% y/y in January 2013 (compared with 2.2% y/y in October 2012), while in the euro area, it reached 2.0% y/y, according to preliminary data (against 2.5% in October 2012). In both economies, the fall in inflation was driven by a flatter rise in energy prices, including fuel prices (in the euro area, additionally supported by the appreciation of the euro). Steeper food price growth worked in the opposite direction and core inflation remained stable¹⁰.

In the emerging economies, inflation edged up on the back of a sharper rise in food prices, which have a significant weight in consumer price indices in this group of countries. Changes in food price growth translated into CPI

Figure 1.10

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

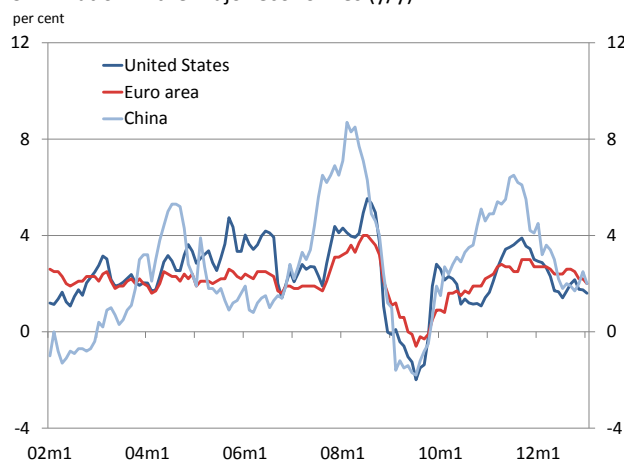


Source: IMF, OECD, Ecowin data, NBP calculations.

*Weighted average inflation in the advanced and key emerging ones (accounting for 80% of the GDP in this group of countries in 2011). Country groups in accordance with the IMF division. Weights adopted for the respective countries are based on their GDPs.

Figure 1.11

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



Source: OECD, Eurostat data.

¹⁰ In the United States, core inflation dropped only slightly (down to 1.9% y/y in January 2013 compared with 2.0% y/y in October 2012). In the euro area, it persisted at 1.6% y/y between September and December 2012.

fluctuations in China: after a temporary rise in 2012 Q4, its CPI index fell back to a moderate level in January 2013.

In Central and Eastern European countries, in turn, a temporary hike in inflation in 2012 Q3 has been followed by a decrease in CPI index in the recent months (Figure 1.12). Sinking headline inflation has been driven primarily by lower core inflation observed amidst an economic slowdown. Lower inflation rates in the region's economies have also been supported by decelerating energy price growth. Additionally, the annual CPI index in the Czech Republic and Hungary dropped in January 2013 as a result of the waning statistical base effect related to VAT rates hikes at the beginning of 2012. In some economies of the region, however, inflation has been fuelled by the rising rate of food price growth.

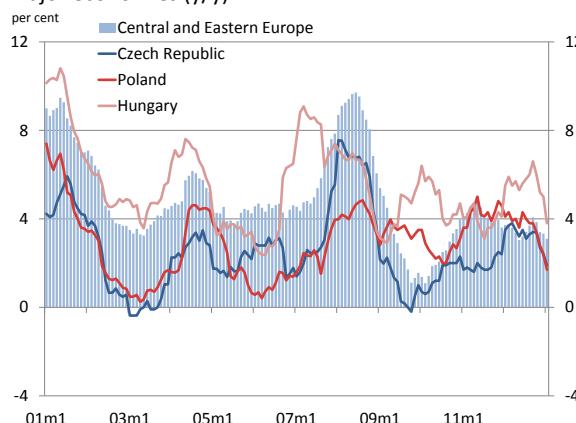
1.3. Monetary policy abroad and international financial markets

Since the previous *Report*, major central banks have continued to ease their monetary policies, keeping interest rates at historically low levels, while extending the amount of their quantitative easing programmes or leaving it unchanged (Figure 1.13, Figure 1.14).

The Fed left its interest rates at the previous level. In December 2012, it declared that the short-term interest rates should be close to zero (0.00-0.25%) as long as the unemployment rate remained above 6.5%, inflation forecast for the next 1-2 years stayed below 2.5% and long-term inflation expectations were anchored. Thereby the Fed modified its previous declaration of keeping rates at a very low level for an extended period¹¹. Moreover, the Fed's programme of extending the average maturity of the Treasury bonds held (the so-called *Operation Twist*) was

Figure 1.12

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

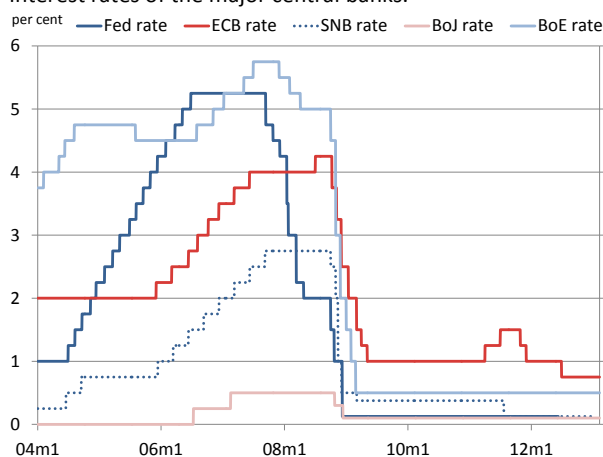


Source: Statistical offices' data.

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

Figure 1.13

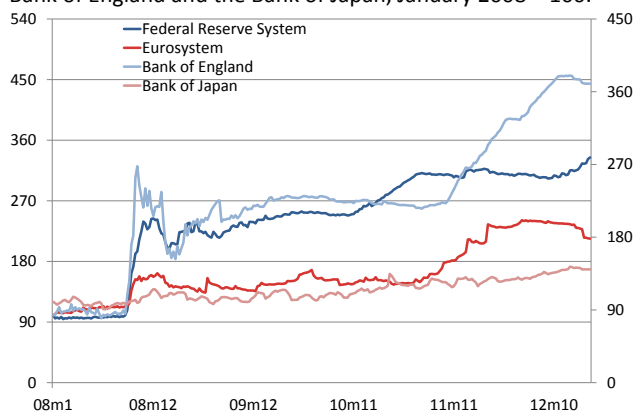
Interest rates of the major central banks.



Source: Central banks' data.

Figure 1.14

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



Source: Central banks' data, NBP calculations.

¹¹ Until 12 December 2012, the Fed declared it would keep low interest rates until at least mid-2015.

completed in December 2012. At the same time, the Fed decided that under the new asset purchase programme launched in September 2012 it will additionally purchase Treasury bonds, at a pace of USD 45 billion per month¹². Thus, the monthly limit for purchases under this programme rose to USD 85 billion.

The ECB did not change its short-term interest rates in the analysed period either, leaving the rate on refinancing operations at 0.75% and the deposit rate at 0.00%. Moreover, the ECB declared readiness to implement the programme of purchase of Treasury securities of the countries most severely affected by the debt crisis. It also continued its programme of covered bond purchases.

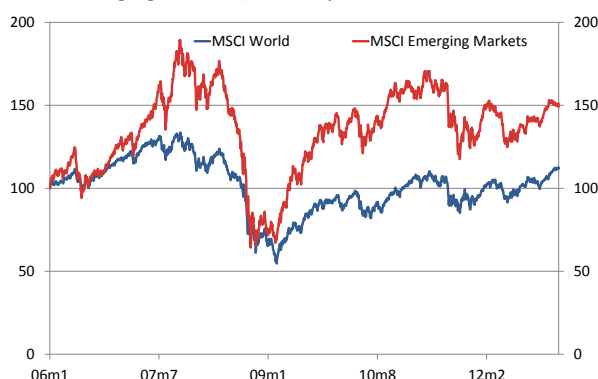
Also the Bank of England left its short-term interest rates unchanged, with the main interest rate at 0.50%. The scale of its asset purchase programme was preserved at GBP 375 billion.

Similarly, the Bank of Japan kept its short-term interest rates unchanged (0.00-0.10%). At the same time, in December 2012 the scale of combined asset purchases was increased by JPY 10 trillion, up to JPY 101 trillion as at the end of 2013. In January 2013 it decided to buy a monthly JPY 13 trillion worth of assets starting from the beginning of 2014 with no completion date announced¹³. To justify further monetary expansion, in January 2013, the inflation target was raised from 1% to 2%¹⁴.

The Swiss National Bank (SNB) maintained the band for the 3-month LIBOR rate fluctuations at

Figure 1.15

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



Source: Reuters data, NBP calculations.

Figure 1.16

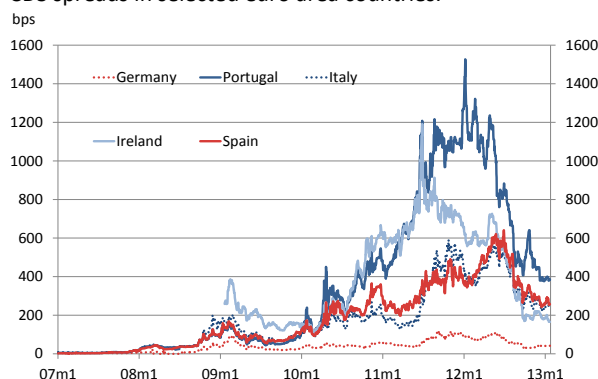
Stock market indices in Germany (DAX 30), Japan (Nikkei 225) and the United States (S&P 500), January 2004 = 100.



Source: Reuters data.

Figure 1.17

CDS spreads in selected euro area countries.



Source: Bloomberg data.

¹² The initial monthly limit for the new programme announced in September 2012 was USD 40 billion. This programme initially was limited to purchases of mortgage-backed securities (MBSs) guaranteed by government-sponsored agencies (see Box: *Quantitative easing programmes of the major central banks* in the November 2012 *Inflation Report*). The programme has no target amount. However, according to some members of the Federal Open Markets Committee (the Fed's monetary policy decision-making body), the programme should be completed by the end of 2013.

¹³ As the Bank of Japan, unlike the Fed and Bank of England, does not reinvest the expiring bonds, the value of asset purchase programme in 2014 will probably rise by a net amount of JPY 10 trillion.

¹⁴ In February 2012, the Bank of Japan introduced its *price stability goal*, defining the target annual CPI level as positive, yet no higher than 2%. At the same time, the temporary target was set at 1% (see Box 1 *Introduction of inflation targets in the United States and Japan* in the *Inflation Report* of July 2012). In January 2013, though, the Bank of England decided to introduce their *price stability target* at 2%.

0.00-0.25%. At the same time, the SARON deposit rate¹⁵ stood at a level close to, or slightly below, zero. Moreover, the SNB declared its readiness to further carry out unlimited currency interventions aimed to protect the Swiss franc exchange rate ceiling at 1.20 EUR/CHF.

Many central banks in the emerging economies and small advanced economies continued to ease their monetary policies or left their interest rates unchanged¹⁶.

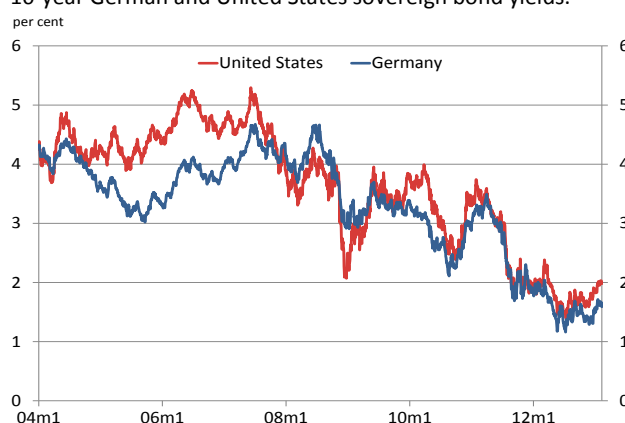
Since the previous *Report*, sentiment in the international financial markets continued to improve on the back of releases of somewhat better-than-expected economic data, both in developed and emerging economies, announcement of structural and institutional reforms in the euro area, and additional quantitative easing by major central banks. This prompted an increase in demand for risky assets. The above trends were reflected in share prices climbing further globally. Yet, the increase in stock indices came to a halt in the first two months of 2013, particularly in emerging markets (Figure 1.15, Figure 1.16).

Slight improvement in economic outlook and the announcement of structural and institutional reforms in the euro area also contributed to a significant reduction of the credit risk perception for euro area member countries most severely affected by the debt crisis. This was reflected in CDS rates on their Treasury bonds falling further and then stabilizing at a relatively low level (Figure 1.17).

Amidst lower risk aversion, yields on the securities considered safe by investors (American and German Treasury bonds) edged up somewhat, yet are still close to their historical lows (Figure 1.18).

Figure 1.18

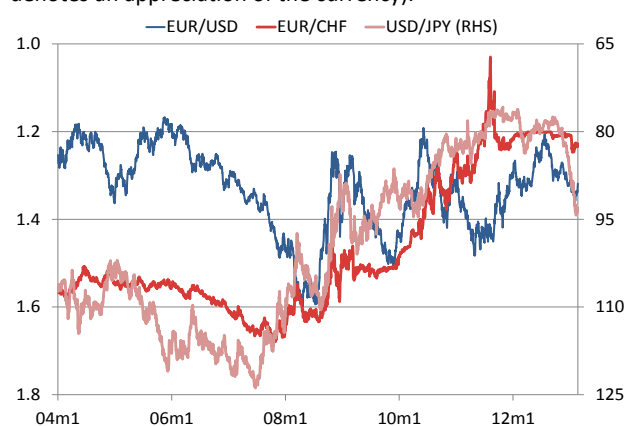
10-year German and United States sovereign bond yields.



Source: Reuters data.

Figure 1.19

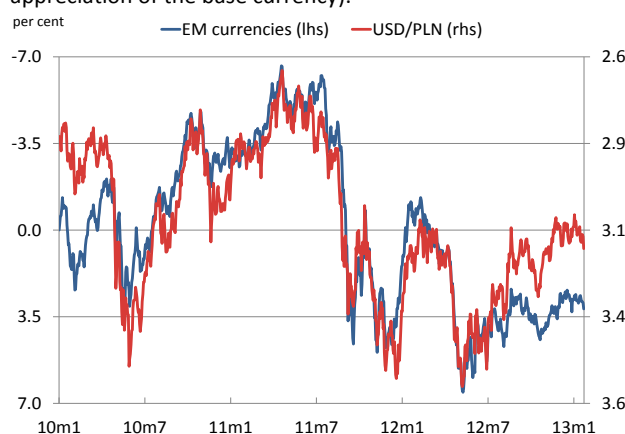
The EUR/USD, EUR/CHF and USD/JPY exchange rates (increase denotes an appreciation of the currency).



Source: Reuters data.

Figure 1.20

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



Source: NBP calculations based on Bloomberg data.

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

¹⁵ Swiss Average Overnight Rate.

¹⁶ With the exception of the Central Bank of Uruguay, which raised interest rates by 0.25 percentage points in December 2012.

At the same time, falling risk aversion contributing to larger demand for high-yielding assets was reflected in a depreciation in the US dollar, Japanese yen and the Swiss franc. Thus, the Swiss franc exchange rate against the dollar appreciated slightly away from the SNB's ceiling of 1.20 EUR/CHF (Figure 1.19). Depreciation of the US dollar and the Japanese yen was supported in particular by the an increase in quantitative easing in the United States and Japan. At the same time, the exchange rates of many emerging market currencies appreciated somewhat (Figure 1.20).

Box 2. Can macroprudential policy prevent imbalances in the monetary union?

In the period between the creation of the euro area and the onset of the global economic crisis, macroeconomic imbalances gradually built up between particular countries of the monetary union. Experience with mounting imbalances, along with the present difficulties in effecting adjustments necessary to reduce these imbalances, has urged economists to seek effective tools for increasing macroeconomic stability of economies within the monetary union. In this context, the economists of the National Bank of Poland have analysed the possibility of applying an appropriately designed macroprudential policy.¹⁷

The pre-crisis imbalances mounting between the respective euro area countries were located – apart from external imbalances (see: Box 1. *External adjustments in the euro area member states*) – also in the housing market¹⁸. Between 1999 and 2006, investment in the housing sector doubled in Greece, Ireland, Portugal and Spain (further referred to as the peripheral countries), while remaining largely stable in other euro area countries (further referred to as the core countries). At the same time, a sharp rise in mortgage lending and house prices in the peripheral countries fuelled a consumer boom, accelerating GDP growth in those countries. A sharp reversal followed when the bubble in the property market burst, precipitating a GDP decline in the peripheral markets, eroding banks' financial standing and fuelling tensions in the financial markets.

The main reason behind mounting imbalances in the housing market in the peripheral countries was the decline in interest rates combined with easier access to cross-border borrowing resulting from those countries' accession to the euro area. As other sources of imbalance, literature indicates asymmetric macroeconomic shocks, which affected the peripheral and the core countries to a different degree.

Under a monetary union, the build-up of the above mentioned imbalances could not have been prevented with standard economic policy instruments. Interest rates of the European Central Bank are set for the entire euro area, without a possibility of adjustment to the country-specific conditions. Moreover, countries cannot resort to a nominal exchange rate devaluation, a measure used on several occasions before the euro area was created in order to adjust the competitiveness of some economies.

Additionally, the build-up of imbalances in property market was conducive to mounting imbalances in other

¹⁷ M. Brzoza-Brzezina, M. Kolasa, K. Makarski, (2013) *Macroprudential policy and imbalances in the euro area*, NBP Working Paper No. 138.

¹⁸ Housing market imbalances were only one sort of pre-crisis imbalances affecting the euro area. Other ones included external imbalances and public sector imbalances.

sectors, in particular – in public sector. Boom in housing market temporarily increased to a large extent the revenues of the public sector. On the one hand, it created an illusion of soundness in public finance. On the other hand, however, it was an incentive to increase public expenditure leading to build-up of imbalances.

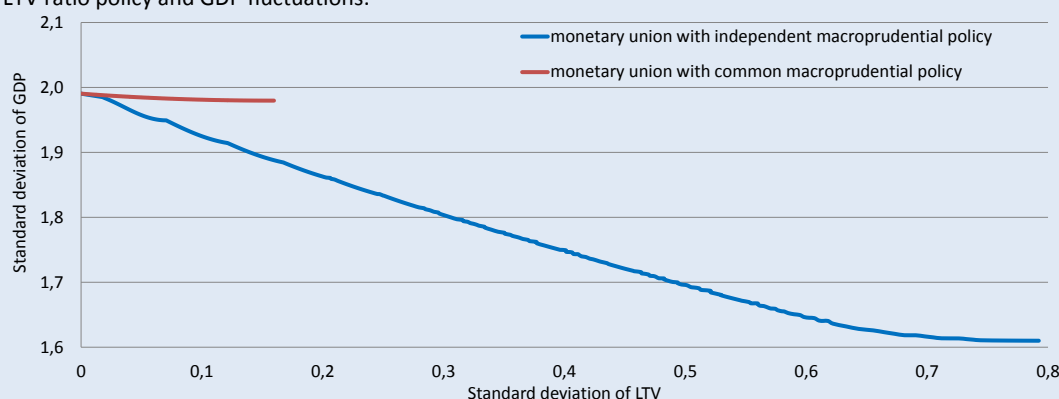
In case of imbalances in the public finance, the use of fiscal policy was constrained in times of economic slowdown due to high indebtedness of the peripheral countries¹⁹.

The search for instruments which would be effective in stabilizing business cycle and could be used under a monetary union, has prompted economists to consider the possibility of employing macroprudential policy. To examine this possibility, a dynamic stochastic general equilibrium macroeconomic model of the peripheral and core countries was built. The model is rooted in the new Keynesian tradition, with heterogeneous economic agents, nominal rigidities, a banking sector extending regulated mortgage-backed loans and a monetary policy based on the Taylor rule. The model is used to analyse the efficiency of a macroprudential policy based on the maximum loan-to-value (LTV) ratio for mortgage loans (the ratio of the volume of the loan to the value of the mortgage).

Two scenarios were considered in the model - a monetary union with an independent LTV policy (whereby a homogeneous area-wide short-term interest rate policy is combined with a country-specific LTV policy) and a monetary union with a common LTV policy (i.e. whereby a uniform short-term interest rate policy is combined with a uniform LTV policy).

Figure R.2.1

LTV ratio policy and GDP fluctuations.



Source: M. Brzoza-Brzezina, M. Kolasa, K. Makarski, (2013) Macroprudential policy and imbalances in the euro area, NBP Working Paper No. 138.

GDP fluctuations are measured as the standard deviation of the GDP from the exponential trend.

LTV fluctuations are measured as the standard deviation of LTV changes $\Delta LTV_t = LTV_t - LTV_{t-1}$.

The main finding of the study can be summarised as follows: active macroprudential policy based on the LTV ratio can significantly reduce business cycle fluctuations in the monetary union peripheral countries (Figure R.2.1.) only when the LTV ratio is in line with a country's specific conditions. The extent of GDP stabilisation depends on the degree of the LTV ratio volatility that can be accepted by decision-makers. The more active the macroprudential policy (meaning higher LTV ratio volatility), the greater the possible reduction in GDP fluctuations. In the case of a uniform macroeconomic policy for the entire monetary union, the decline in GDP variability is only marginal.

The selected instrument of macroprudential policy (an active LTV policy) can thus be used to prevent the build-up of imbalances in the housing markets of the monetary union member countries, which cannot conduct an independent short-term interest rate policy. Yet, only country-specific macroprudential policy can be successful in stabilizing business cycle fluctuations²⁰.

¹⁹ It has to be noted that imbalances occurring in the respective sectors of the economy may affect the intensity of turmoil observed in other sectors. For example, a sharp drop in property market prices may lead to higher public debt and, in consequence, to a fiscal crisis, as has recently been observed in Spain.

²⁰ The above conclusion is drawn on the basis of the model which is designed to investigate the impact of macroeconomic policy (conducted with the help of an exogenous LTV ratio) on the macroeconomy. As such, it does not exhaust all the issues related to macroprudential policy. Moreover, the study does not aim at analysing the interactions between the financial sector and the fiscal sphere, which is why it does not include the fiscal sector.

1.4. Global commodity markets

In 2012 Q4 the situation in the global commodity markets continued to be influenced by concerns about the outlook for global economic growth, although downward pressure on commodity prices was curbed by the US dollar depreciation. As a result, the majority of commodity prices were stable. At the beginning of 2013, along with a certain rise in optimism in the global financial markets, prices of some commodities slightly increased.

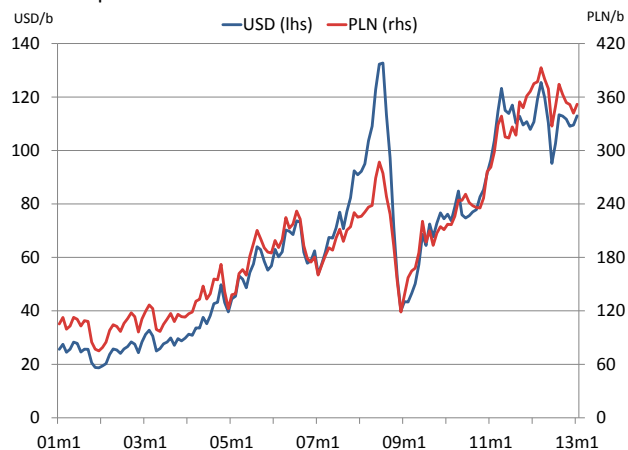
Crude oil prices in 2012 Q4 were relatively high (Figure 1.21). Persistence of relatively high crude oil prices was a result of, on the one hand, supply disturbances (mainly in non-OPEC countries²¹), and on the other hand, a relatively high growth in demand for oil in the emerging economies²². At the beginning of 2013, crude oil prices increased slightly, which was driven by improvement in the sentiment in the global asset markets, connected, in particular, with a deal reached by the US Congress to avoid the so-called “fiscal cliff”.

Since the previous *Report*, coal prices increased a bit (Figure 1.22). At the same time, following a slight growth at the beginning of the analysed period, natural gas prices returned to their 2012 Q3 level. Changes in natural gas prices might have been related to the previously observed developments in crude oil prices which fed through into gas prices with a certain time lag²³.

Following strong fluctuations in 2012 Q3, being, in particular, the result of drought in the central and western part of the United States, food

Figure 1.21

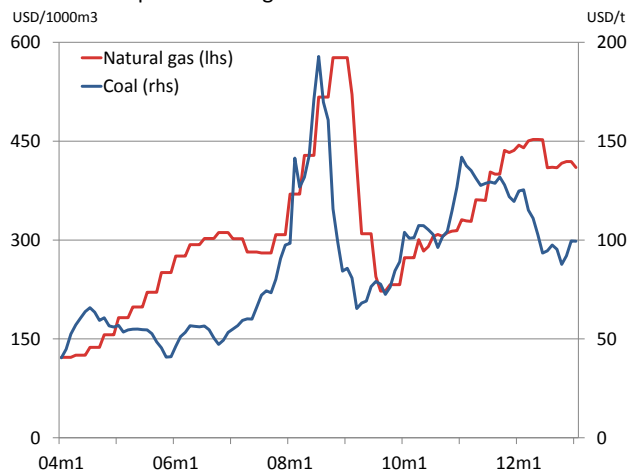
Brent oil prices in USD and PLN.



Source: US Energy Department data, NBP calculations.

Figure 1.22

Gas and coal prices in the global markets.



Source: IMF data.

²¹ Disturbances in crude oil supplies in non-OPEC countries in 2012 Q4 were primarily the result of civil war escalation in Syria and the lack of agreement between Sudanese states as regards resumption of crude oil transit from Republic of South Sudan. At the same time, lower crude oil supply growth in the OPEC countries was driven by falling oil production in Iran.

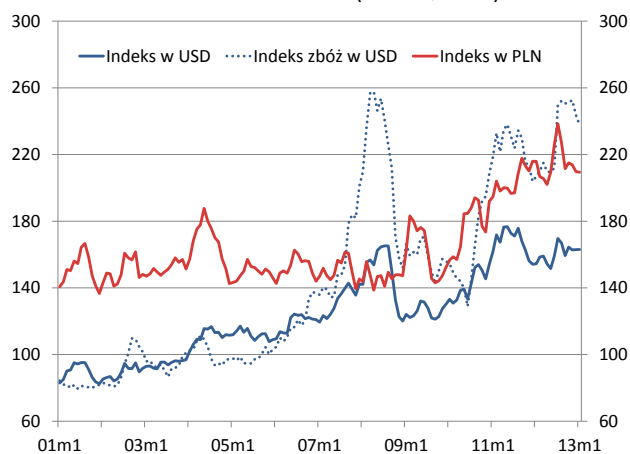
²² Growth in crude oil and oil product consumption accelerated in particular in China.

²³ In the absence of data on wholesale gas prices in Poland, gas prices presented in this chapter refer to the prices of Russian natural gas in the German market.

prices in the global agricultural markets stabilized at a relatively high level (Figure 1.23).

Figure 1.23

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



Source: IMF data, NBP calculations.

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

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

Chapter 2

DOMESTIC ECONOMY

2.1. Inflation developments

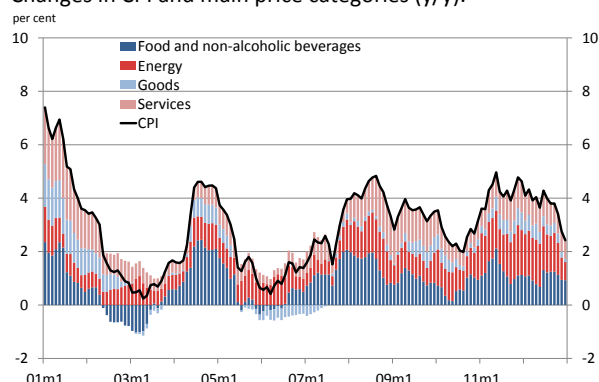
2.1.1. Consumer prices

The annual growth in consumer goods and services prices in Poland has been on a downward trend since July 2012. As a result, inflation in October 2012 ran below the upper limit for deviations from the NBP inflation target, to reach the level close to the target in December (2.4%) and to drop to 1.7% in January 2013 (according to the preliminary data of the Central Statistical Office – GUS; Figure 2.1)²⁴.

Decline in inflation, including core inflation in 2012 Q4, was supported by weaker demand pressure in the economy, which is suggested by decreasing consumer demand. The annual growth in crude oil prices, lower than in the corresponding period of 2011, and declining coal prices in the global markets (in year-on-year terms; see Chapter 1.4 *Global commodity markets*) were also conducive to inflation decline. These factors, combined with zloty exchange rate depreciation on its 2012 Q4 level, considerably dragged down energy price growth (in particular, prices of fuels and heating fuel) in

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).

	2005	2006	2007	2008	2009	2010	2011	2012
CPI (%)	2.1	1.0	2.5	4.2	3.5	2.6	4.3	3.7
Food and non-alcohol. beverages (pp)	0.6	0.2	1.3	1.6	1.0	0.7	1.3	1.0
Energy (pp)	0.8	0.8	0.6	1.3	0.8	1.0	1.5	1.4
Goods (pp)	0.1	-0.4	0.0	0.2	0.4	0.3	0.5	0.4
Services (pp)	0.6	0.4	0.7	1.2	1.2	0.6	1.0	0.9

Source: GUS data, NBP calculations.

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

²⁴ The data on inflation in January 2013 may be revised as a result of changes in the CPI basket introduced by GUS at the beginning of each year. Due to preliminary nature of the data, GUS did not publish information on changes in all components of the CPI basket. Therefore, a more in-depth analysis of the January price changes in particular groups will be presented in the subsequent *Inflation Report*.

the domestic market²⁵. Zloty exchange rate appreciation in the analysed period also translated into weaker price growth of certain goods (See Chapter 2.1.2. *Core inflation*) and a drop in producer prices, thus weakening cost pressure in the economy (see Chapter 2.1.3 *Producer prices in industry*). The decline in the annual inflation in the analysed period was also driven by rising supply of the majority of food products in the domestic market, driving down their price growth²⁶.

Declining inflation in January 2013 was in the first place the result of lower growth in energy prices, both administered prices (decrease in natural gas prices, lower increase in electricity prices than a year ago) and market prices (falling fuel prices). Inflation was also curbed, although to a lesser extent, by lower growth in food prices than in the previous month.

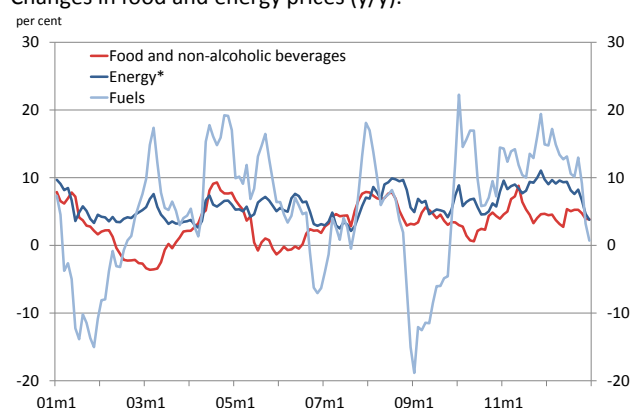
2.1.2. Core inflation

Since the previous *Inflation Report*, the decline in CPI inflation was accompanied by a drop in all core inflation measures (Figure 2.4). The inflation rate net of food and energy prices followed a downward trend from the beginning of 2012 and decreased to 1.4% in December 2012.

Apart from declining consumer demand, the waning of the adverse base effects in certain categories of goods and services, were factors behind the decrease in core inflation. In particular, a drop was seen in the price growth of medicinal and pharmaceutical products, supported by the waning effect of the surge in prices of reimbursement drugs in November and December 2011. The decline was also seen in the administrative prices of transportation services, which was driven by the waning effect of the increase in prices of railway tickets as of

Figure 2.2

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

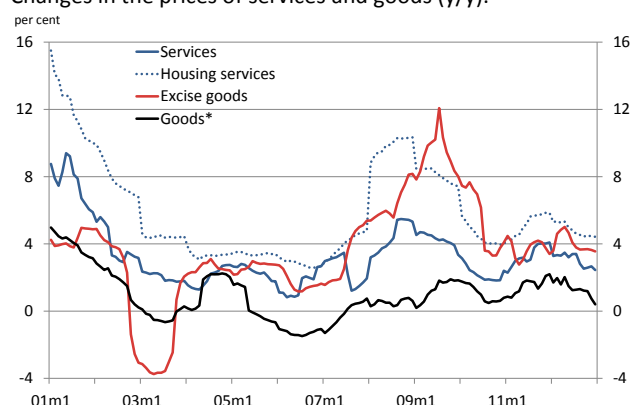


Source: GUS data, NBP calculations.

* The category of energy includes energy products (electricity, gas, heating, fuel) and engine fuels (for private means of transport).

Figure 2.3

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

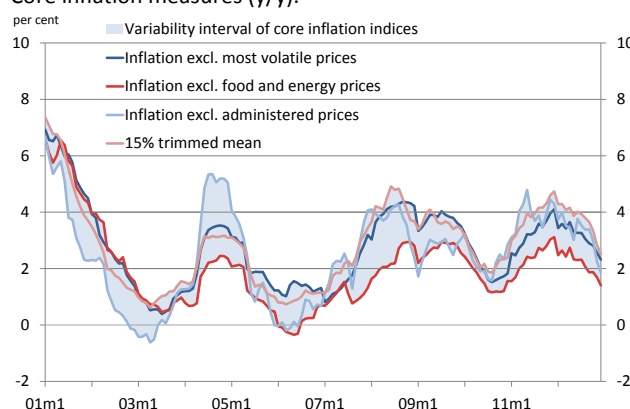


Source: GUS data, NBP calculations.

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

Figure 2.4

Core inflation measures (y/y).



Source: GUS data, NBP calculations.

²⁵ The decline in the annual energy price growth was also driven by a strong fall in liquid gas prices related to the waning of the adverse base effect (considerable rise in liquid gas prices in 2011 Q4).

²⁶ 2012 Q4 saw a rise in the supply of cereals, milk, sugar and fruit in the domestic market.

October 2011. The decline in core inflation – similarly to CPI inflation – was also caused by the exchange rate of the zloty being stronger than a year ago and driving down the prices of imported goods.

According to the NBP's preliminary estimates²⁷, in January 2013 core inflation net of food and energy prices ran at the level close to one recorded in December.

2.1.3. Producer prices in industry

Producer prices in industry (PPI) declined in 2012 Q2 by 0.1% (as compared to a 2.8% rise in the previous quarter; Figure 2.6)²⁸. Decline in the annual PPI index was mainly the result of lower prices in industrial manufacturing and was related to stronger than a year ago zloty exchange rate in 2012 Q4.

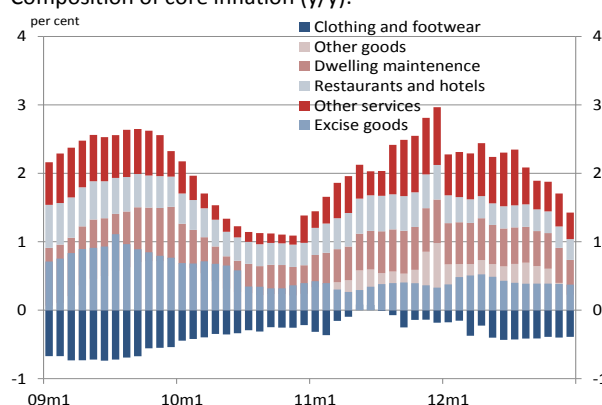
The annual PPI growth in the domestic market declined in 2012 Q4 to 1.3% (from 3.2% in the previous quarter), and in the export goods market went down to -2.9% (from 1.6%). Stronger decline in the more import-intensive export sector was driven by higher price sensitivity to zloty exchange fluctuations in this sector.

2.1.4. Import prices

The annual growth in import prices expressed in PLN in 2012 was on a gradual decline: from 12.1% in 2012 Q1 to 4.3% in 2012 Q3 (Figure 2.7). This was the effect of a gradual deceleration of growth in world trade prices which fell to negative levels in 2012 Q2 and Q3

Figure 2.5

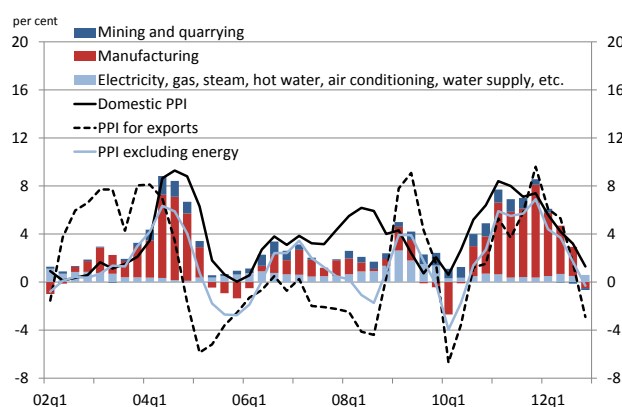
Composition of core inflation (y/y).



Source: GUS data, NBP calculations.

Figure 2.6

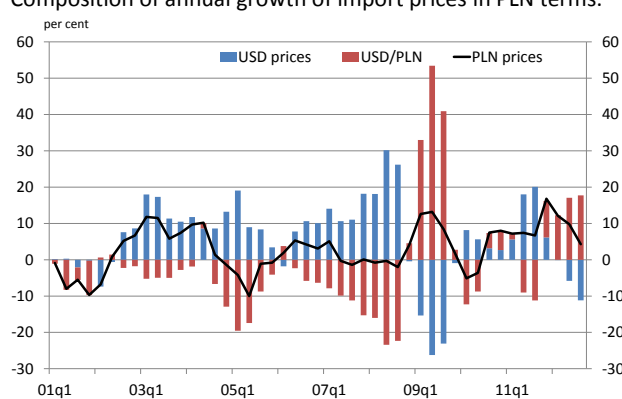
Composition of annual growth of total PPI by sections of industry, domestic PPI, PPI for exports and PPI excluding energy.



Source: GUS data.

Figure 2.7

Composition of annual growth of import prices in PLN terms.



Source: GUS and CPB data, NBP calculations.

²⁷ Final data on inflation net of food and energy prices in January 2013, together with other core inflation measures, will be released by the NBP in March 2013, after the GUS publication of revised data on inflation and new CPI basket weights.

²⁸ In January 2013, PPI declined to -1.2% y/y as compared to -1.1% y/y in the preceding month, which was driven by slower price growth in the section "generation and supply of electricity, gas, steam and hot water" and faster decline in the prices in mining and extraction, along with slower decline in industrial manufacturing.

(Figure 2.8). Moreover, zloty exchange rate in 2012 Q2 and Q1 was weaker than a year ago.

2.1.5. Inflation expectations

Since the previous *Report*, along with deteriorating business conditions and weakening inflationary pressure, expectations of financial sector analysts concerning inflation over the 12-month horizon were gradually revised downward, reaching 2.2% y/y in February 2012 i.e. running close to the inflation target (Figure 2.9). At the same time, the average annual inflation in 2013 as forecasted by the analysts has plunged (to 1.9% from 2.6%). In turn, according to their 2014 and 2015 forecasts, inflation stabilized at the level close to the inflation target (at 2.6% and 2.7% respectively).

Similar expectations of the average annual inflation in 2013 and 2014 are suggested by the findings of the December 2012 Macroeconomic Survey of the NBP.²⁹ The median of central point forecasts by the responding experts stands at 2.2% for 2013 and 2.6% for 2014. Similar figures result from the aggregated probabilistic forecast (calculated by aggregating individual interval forecasts). According to that forecast inflation in 2013 and 2014 will reach 2.3% and 2.7% respectively. At the same time, the likelihood of the average annual inflation running within the band of deviations from the inflation target i.e. 1.5% -3.5% has not changed substantially as compared with the September 2012 survey and continues to run at approx. 80% in 2013 and 70% in 2014 (Table 2.2).

In 2012, inflation expectations of enterprises over the 12-month horizon were gradually revised downwards to approx. 2.5% in 2012 Q4.

Figure 2.8

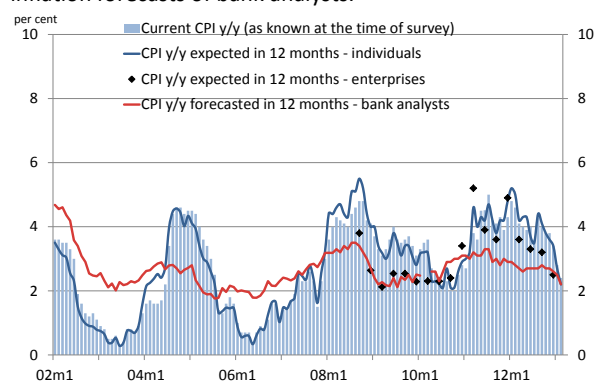
World trade prices and prices of imports to Poland (in USD).



Source: GUS and CPB data, NBP calculations.

Figure 2.9

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



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

Table 2.2

Forecasts of CPI inflation derived from individual interval forecasts (in %).

Horizon	Median	50% probability	90% probability	Probability of 1.5-3.5% range
2013	2.3	1.9-2.8	1.0-3.8	81%
2014	2.7	2.0-3.4	1.0-4.8	67%

Source: NBP Survey of Professional Forecasters, December 2012.

²⁹ The NBP Survey of Professional Forecasters is conducted once in a quarter. It involves experts from financial institutions, research centres as well as employee and employer organisations. Their forecasts are formulated in probabilistic terms, which allows to take account of various economic development scenarios and assess the compatibility of forecasts. Detailed presentation of the survey results – see <http://amakro.nbp.pl>.

Decline in inflationary expectations at the end of the year was the result of the change in current inflation as known to enterprises at the time of the survey rather than the change in the structure of response to the survey question³⁰.

Downward trend was also seen in inflation expectations of individuals. In February 2013, they decreased to 2.2% as compared to 5.2% in January 2012. Downward revision in inflationary expectations of individuals was mainly driven by declining current inflation known to respondents at the time of the survey. The improved structure of responses to the survey question had a relatively minor impact on the individuals' expectations.

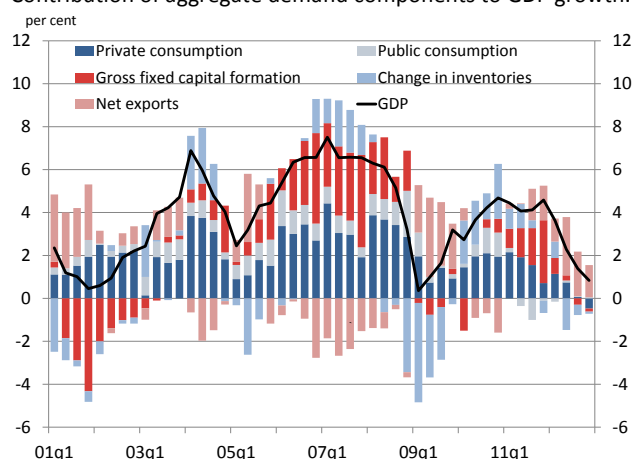
2.2. Demand and output

In the second half of 2012, the annual GDP growth continued to slow down. According to GUS estimates, output growth fell to 1.4% y/y in 2012 Q3 and 0.8% y/y in 2012 Q4 (against 2.3% y/y in 2012 Q2; Figure 2.10, Table 2.3)³¹. NBP estimates show quarter on quarter GDP growth persisting at low levels i.e. 0.2% in 2012 Q3 and 0.4% in 2012 Q4 (against 0.1% in 2012 Q2; data seasonally adjusted).

GDP growth was dampened by further contraction in domestic demand (which shrank by 0.7% y/y in 2012 Q3 and Q4, as compared with a decline of 0.4% in 2012 Q2) driven by sinking investment as well as – in Q4 – consumption, combined with the persistently negative contribution of inventory to GDP growth. In the second half of 2012, output growth was additionally supported by relatively

Figure 2.10

Contribution of aggregate demand components to GDP growth.



Source: GUS data.

³⁰ The survey question addressed to enterprises is formulated in relation to current inflation. In the last survey its wording was as follows: "In October 2012, the CPI indicator (inflation) stood at 3.4% in annual terms. According to your enterprise, in the coming 12 months the prices: (1) will rise at a faster pace than before, (2) will rise at the same pace, (3) will rise at a slower pace, (4) will remain unchanged, (5) will fall, (6) I don't know".

³¹ The estimate of GDP and its components in 2012 Q4 is implied from the preliminary 2012 GDP estimate by GUS.

high – though gradually decreasing – improvement of net exports.

Consumer demand weakened considerably in the second half of 2012. Slower private consumption growth was the effect of the increasingly tight labour market and the sustained prevalence of weak consumer confidence, which was accompanied by slower growth in credit to households. Public consumption, in turn, rose only marginally in the second half of 2012 (by 0.2% y/y in 2012 Q3 and 0.3% y/y in 2012 Q4 as against 0.5% y/y in 2012 Q2), which was related to measures aimed at curbing the general government deficit. As a consequence, total consumption growth decreased to 0.1 % y/y in 2012 Q3 and -0.6% y/y in 2012 Q4 (as compared with 1.0% y/y in 2012 Q2).

In the second half of 2012, investment was observed to contract again, dragged by a sharp decline in public investment, amidst slowly rising corporate and household investment. At the same time, the contribution of change in inventories to GDP growth increased slightly while remaining negative.

In the second half of 2012, exports continued to expand, albeit at a slower rate (0.7% y/y in 2012 Q3 and Q4, compared with 2.6% y/y in 2012 Q2). Imports, on the other hand, continued to decline (at the rate of 3.7% y/y in Q3 and 2.7% y/y in 2012 Q4 as opposed to 3.1% y/y in 2012 Q2) on the back of shrinking domestic demand³². Falling imports, combined with the sustained rise in exports, translated into a positive contribution of net exports to GDP growth amounting to 2.1 percentage points in 2012 Q3 and 1.5 percentage points in 2012 Q4 (as against 2.7 percentage points in 2012 Q2).

Table 2.3

GDP growth (y/y).

	2008	2009	2010	2011	2012			
					q1	q2	q3	q4
% GDP	5.1	1.6	3.9	4.3	3.6	2.3	1.4	0.8
Private consumption (%)	5.7	2.1	3.2	2.5	1.7	1.2	0.1	-0.9
Public consumption (%)	7.4	2.1	4.1	-1.7	-0.8	0.5	0.2	0.3
Gross fixed capital formation (%)	9.6	-1.2	-0.4	9.0	6.0	1.3	-1.5	-0.5
Inventory increase (percentage points)	-1.1	-2.4	2.0	0.4	0.8	-1.5	-0.5	-0.1
Net exports (percentage points)	-0.6	2.7	-0.7	0.9	1.1	2.7	2.1	1.5

Source: GUS data.

³² The data presented are based on the National Accounts as compiled by GUS (in PLN) and may differ from those quoted in Chapter 2.2.4 *Exports and imports*, which takes into account seasonally adjusted GUS data on external trade (in EUR).

2.2.1. Consumption demand

In 2012 Q4, consumer demand decreased. Private consumption contracted by 0.9% y/y (as against a rise of 0.1% y/y in 2012 Q3; Figure 2.11)³³. According to NBP estimates, private consumption growth in quarter on quarter terms declined to -0.3% in 2012 Q4 (as against 0.0% in 2012 Q3; data seasonally adjusted). Savings rate rose slightly in 2012 Q3 (Figure 2.12)³⁴.

The decline in consumption demand in 2012 Q4 is also reflected in a significant drop in the annual retail sales growth in this period³⁵. Considerably weaker sales were observed in the categories of vehicles and motorcycles on the one hand and furniture, electronics and household appliances on the other. This can possibly result from households' decisions to withhold major purchases during a downturn³⁶.

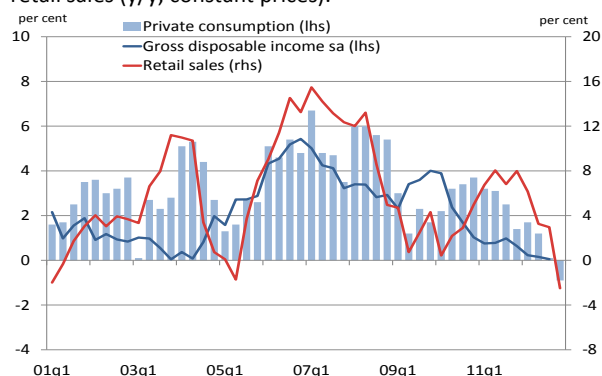
The decrease in consumption in 2012 Q4 was related to slower wage growth and stagnant employment (see Chapter 2.4 *Labour market*), mounting concerns about unemployment (Figure 2.12) as well as slower growth in household credit (see Chapter 2.6 *Credit and money*).

2.2.2. Investment demand

In 2012 Q4, investment in the economy decreased again, although less steeply than in 2012 Q3. The annual growth in gross fixed capital formation amounted to -0.5% y/y in 2012 Q4 (as compared to -1.5% y/y in 2012 Q3),

Figure 2.11

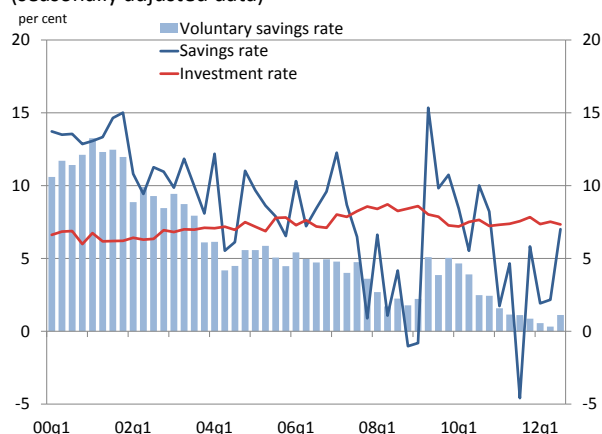
Growth of private consumption, gross disposable income and retail sales (y/y, constant prices).



Source: GUS data, NBP calculations.

Figure 2.12

Savings rate* and investment rate in the household sector (seasonally adjusted data)

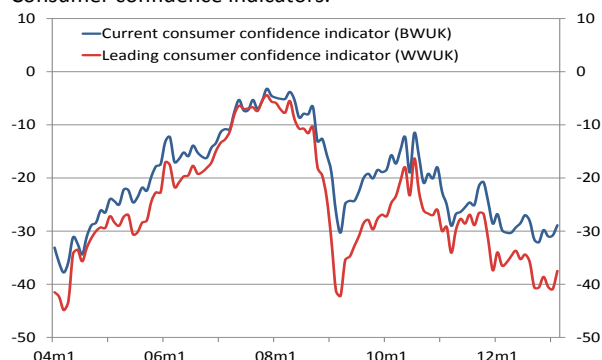


Source: GUS data, NBP calculations.

*The voluntary savings rate does not include households' savings in the Open Pension Funds.

Figure 2.13

Consumer confidence indicators.



Source: GUS and NBP data.

³³ The estimate of private consumption in 2012 Q4 is implied from the preliminary 2012 GDP estimate by GUS.

³⁴ NBP data on savings in the first three quarters of 2012 differ from the GUS data due to the revision of the data on social security contributions.

³⁵ The data on retail sales published on a monthly basis refer to sales by firms with a workforce of more than 9 persons. Total retail sales data (which also include sales by firms employing 9 persons or less) are published only on an annual basis. Available on a monthly basis are also data on turnover in retail trade, covering all businesses. Yet, these data are less correlated with consumption than retail sales. Hence, this Report refers to the monthly retail sales data.

³⁶ Based on seasonally adjusted data. Postponement of major purchases is also visible in the GUS economic conditions survey.

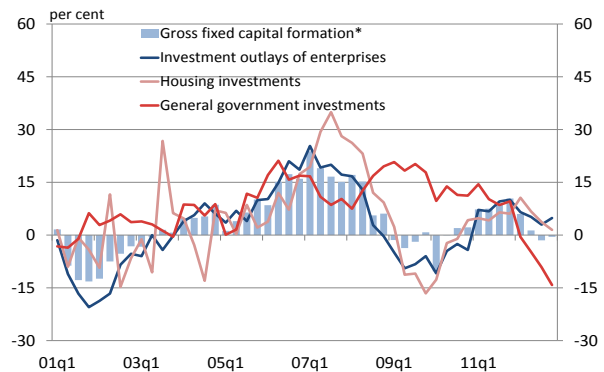
while in quarterly terms, according to the NBP estimates, it stood at 0.5% q/q (as against -0.4% q/q)³⁷.

According to NBP estimates, public sector investment continued to decline steeply in 2012 Q4, which was related to the continued process of fiscal tightening (Figure 2.14; see Chapter 2.2.3. *Government demand*). At the same time, the decline in investment was mitigated by increasing corporate investment outlays. There was also a rise, if only a slight one, in households' investment spending. The increase in housing investment could have resulted from the termination – scheduled for the end of the year – of the government *Family on its Own* programme of subsidising housing loans (see Chapter 2.5.3. *Housing prices*).

Information received since the previous *Report* suggest that the outlook for corporate investment remains bleak, which is reflected, in particular, in sinking capacity utilisation (Figure 2.16). Discouraging investment prospects have also been confirmed by the NBP business climate surveys, which once again show a decline in the percentage of businesses planning to launch major investment projects within the next 12 months. Forecasts for the following quarter equally indicate a possible decline in corporate investment – the investment continuation index has decreased and the percentage of firms planning to embark on new investment projects in 2013 Q1 has remained low (at the moment, both indicators are running at levels below their long-term averages; Figure 2.15). During the course of 2012, the increasingly steeper decline in the total cost estimate value of newly launched investment projects may be yet another indicator of shrinking investment³⁸.

Figure 2.14

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

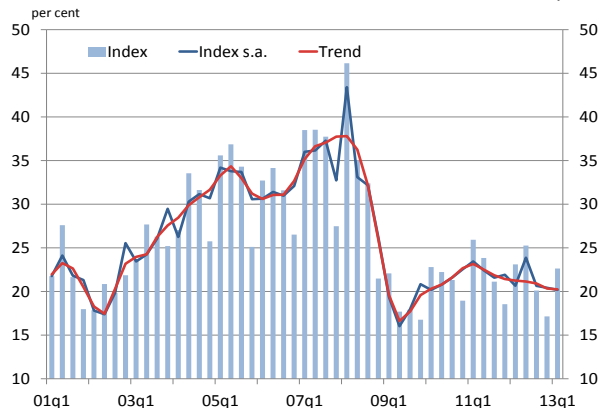


Source: NBP estimates.

*GUS data (not seasonally adjusted).

Figure 2.15

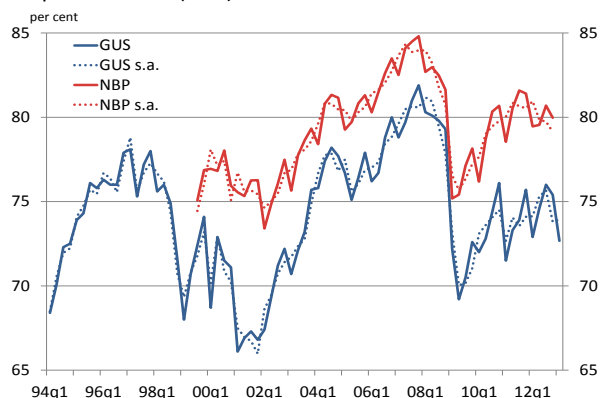
New investment index (percentage of enterprises planning to start new investments within a quarter).



Source: NBP business conditions survey.

Figure 2.16

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



Source: GUS data, NBP survey of business conditions.

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

³⁷ 2012 Q4 gross fixed capital formation estimate is implied from the preliminary 2012 GDP estimate published by GUS.

³⁸ The latest available data relate to 2012 Q3.

The main reason why companies are withholding investment is their concern about future demand. Moreover, a substantial proportion of enterprises report financing problems as the reason behind the lack of investment plans for 2013. Financing difficulties may result from the deteriorating financial situation of companies (new investments continue to be financed from firms' own funds, see Chapter 2.3. *Financial situation in the enterprise sector*) and with the tightening in lending conditions for corporates (see Chapter 2.6. *Money and credit*; Figure 2.17).

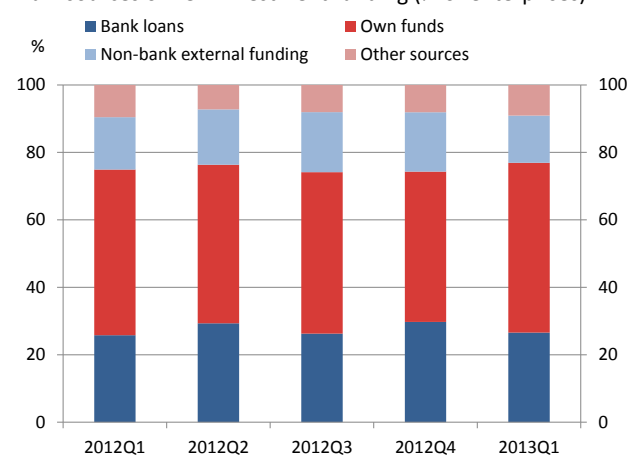
2.2.3. Government demand

2012 saw the continuation of the process of the public finance imbalance reduction. According to available forecasts, the general government deficit decreased from 5.0% of the GDP in 2011 to around 3.5% of the GDP. Compared to 2011, the structure of fiscal adjustments changed. While the 2011 tightening involved, above all, increases in taxation and lower current spending, in 2012 it relied heavily on reduction in public investment, both at the central and local government levels. In economic literature, this budgetary item is considered to be associated with a higher value of the so-called fiscal multiplier. Such change in the structure of adjustment may suggest a relatively stronger than in 2011 impact of fiscal consolidation on economic activity. Public debt in relation to GDP decreased to around 53% at the end of 2012; this reduction was substantially facilitated by the appreciation of the zloty³⁹.

According to preliminary data, the 2012 budget deficit amounted to approx. PLN 30.6 billion, thus below the ceiling of PLN 35 billion set forth in the Budget Act. The lower than planned deficit was made possible by cutbacks in government spending, in particular towards the

Figure 2.17

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



Source: NBP business conditions survey.

³⁹ Thus public debt did not exceed 55% of the GDP in 2012, i.e. the so-called second prudential threshold set forth in the *Act on Public Finance*.

end of the year, as well as unplanned non-tax revenue. At the same time, tax revenue fell considerably short of the budgeted amount, which resulted from weakening of domestic demand.

After the first three quarters of 2012, local government units recorded a surplus of PLN 7.1 billion, i.e. PLN 3.9 billion more than in 2011. At the same time, according to NBP monetary statistics, increase in local government debt owed to banks amounted to PLN 2.0 billion in the entire year 2012, i.e. was PLN 7.3 billion lower than in the previous year. It can be inferred from the above figures that local government deficit had gone down considerably on its 2011 figure, mainly due to lower capital spending by local government units.

Also, the deficit of the Social Insurance Fund narrowed in 2012, partly due to the increase in the disability contribution implemented as of February 2012. However, the Social Insurance Fund continued to run up debt owed to the Treasury and to draw on the Demographic Reserve Fund (PLN 2.9 billion). On the other hand, the Labour Fund and the National Health Fund posted financial results similar to those seen in 2011.

The process of reducing the public finance imbalance can be expected to continue – in structural terms – into 2013. Yet its scale will be considerably smaller than in the two previous years. Lower government deficit will be supported by, in particular, changes in the excise and personal income taxes, proceeds from sale of CO₂ emission allowances and the upholding of the temporary expenditure rule combined with a wage freeze in the government sector. Furthermore, gross capital formation by the public sector can be expected to decrease. Local government units will reduce their capital expenditure in line with the applicable fiscal rules but also because the EU funds available under Regional Operational Programmes within

the 2007-2013 perspective have already been drawn down considerably. Furthermore, National Road Fund outlays on construction of national roads and motorways will decline, as most of the investments projects implemented in 2011-2012 have been completed. At the same time, amidst the expected economic slowdown, there is a risk that the measures listed above will be insufficient to improve the public finance balance relative to its 2012 level.

2.2.4. Exports and imports

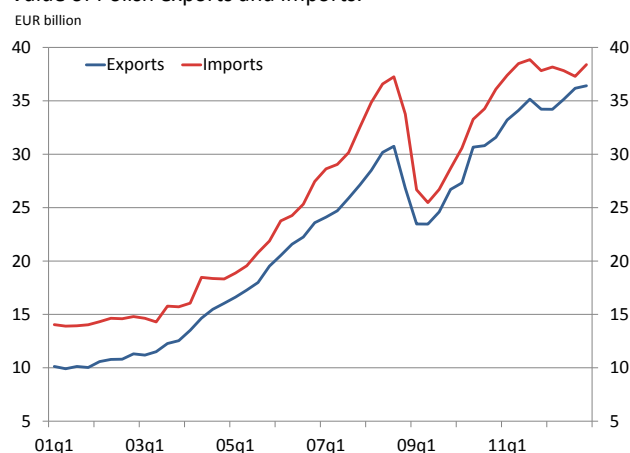
In 2012 Q3, foreign trade activity persisted at low levels⁴⁰. Exports growth remained relatively low (2.9% in 2012 Q3 as against 3.1% in 2012 Q2) and decline in imports deepened (to -4.0% y/y as against -1.7% y/y in 2012 Q2; Figure 2.18).

In 2012 Q3, exports growth was dragged by the further decline in the sales to the euro area countries (a fall of 1.8% y/y compared with a fall of 0.4% in 2012 Q2; Figure 2.19). The decrease in exports to the euro area resulted primarily from a further drop in sales of intermediate goods, which might have been driven by lower turnover within regional supply chains. Amidst euro area consumption demand contracting further, consumer goods exports also decreased slightly.

While exports to the euro area continued to fall, sales to Poland's remaining trade partners grew at a steady rate (by 6.3% y/y in 2012 Q2 and Q3). Exports growth was maintained despite slower sales to non-euro area EU member states, mainly owing to accelerating sales to the CIS countries (an increase of 23.0% y/y compared with 15.2% y/y in 2012 Q2). Exports to the CIS countries are supported by the relatively robust business conditions in these countries.

Figure 2.18

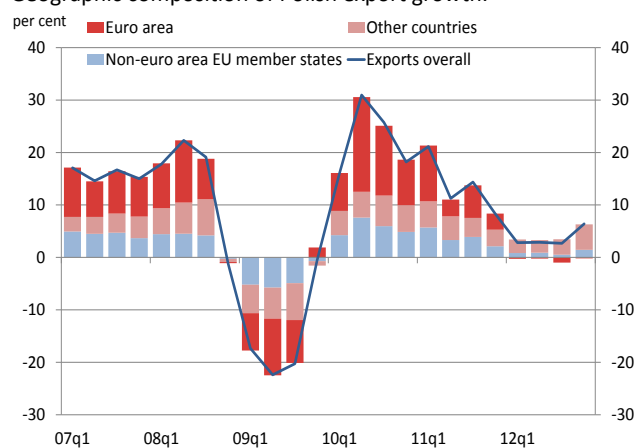
Value of Polish exports and imports.



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

Figure 2.19

Geographic composition of Polish export growth.



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

⁴⁰ The analysis of the value of Polish exports and imports in this subsection is based on the seasonally adjusted GUS data on external trade (expressed in EUR).

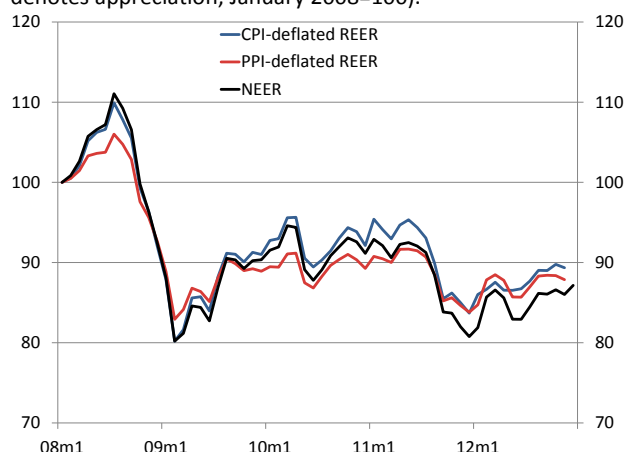
In 2012 Q3, the decline in imports deepened. The slump was observed across all main categories of goods. A particularly sharp drop in imports of final goods could have been triggered by a decrease in investment and inventories and weaker private consumption. In turn, falling exports of intermediate goods resulted from weakening economic activity at home and slowing exports growth.

In 2012 Q4, exports picked up (to 6.4% y/y) and imports slightly increased (by 1.5% y/y). However, the recovery in external trade in 2012 Q4 resulted to a large extent from significant increase in turnover in October 2012 on the back of seasonal and one-off factors⁴¹. Stronger exports growth was driven by accelerating sales to the non-euro area countries, which was particularly marked with respect to the CIS countries, amidst a weaker decline in exports to the euro area countries. A certain rise in imports in 2012 Q4 resulted from higher imports of final goods combined with a flattening decline in intermediate goods imports, possibly linked to rising exports.

In the second half of 2012, the nominal and real effective zloty exchange rates appreciated on their 2012 Q2 levels (Figure 2.20). A stronger zloty entailed a certain reduction in margins on foreign sales. However, amidst a stable threshold exchange rate, the profitability of exports remained relatively high (Figure 2.21)⁴². Lack of significant reduction in exports profitability was also indicated by historically low percentage of enterprises pointing to the exchange rate as a barrier to growth⁴³.

Figure 2.20

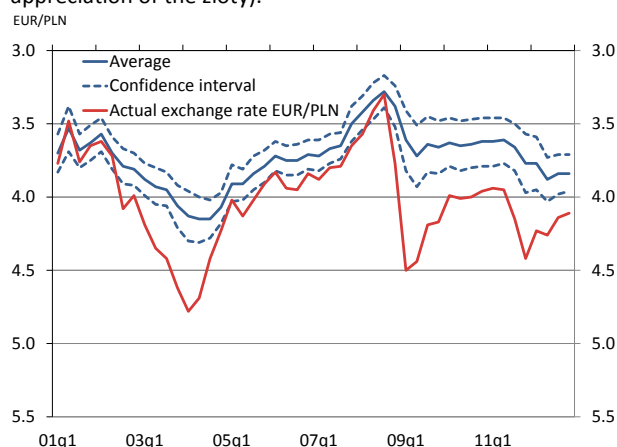
Zloty real and nominal effective exchange rate (increase denotes appreciation; January 2008=100).



Source: NBP and the European Commission data.

Figure 2.21

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)?"

⁴¹ The annual increase in external trade turnover in October 2012 was driven by a larger number of working days as compared with October 2011. Moreover, the accelerated exports growth resulted primarily from considerable rise in the sales of vessels.

⁴² *Economic climate in the enterprise sector in 2012 Q3 and forecasts for 2012 Q4*, NBP.

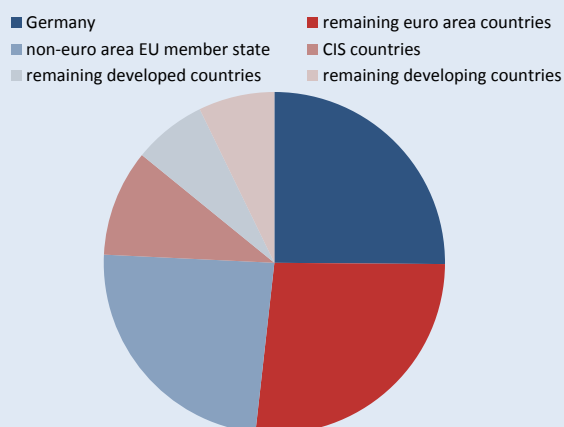
⁴³ *Economic climate in the enterprise sector in 2012 Q4 and forecasts for 2013 Q1*, NBP.

Box 3. Geographical structure of Polish exports

As domestic demand continues to shrink in Poland, the country's export performance is becoming increasingly important as a factor of overall economic growth. Given the diversified outlook for growth in Poland's trade partners, and hence their import demand, it may be helpful, while trying to predict future trends in the country's external sales, to analyse the geographical structure of its exports.

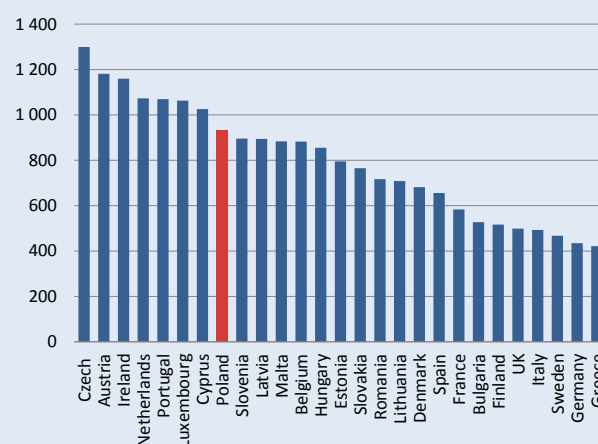
In 2012, the geographical structure of Poland's exports was dominated by the European Union countries which accounted for 75.8% of the country's external sales (Figure R.3.1)⁴⁴. Amongst these, members of the euro area played a major role, with a share in Poland's exports over twice as high as that of the remaining EU countries⁴⁵. This was partly due to a high concentration of exports to Germany (25.1% of Poland's external sales were destined for this country). It has to be noted, though, that Poland's subsequent export markets were Great Britain and the Czech Republic, neither of them belonging to the euro area (they accounted for 6.7% and 6.3% of Polish exports respectively). The second, after the European Union, important group of Polish export markets were the countries of the Commonwealth of Independent States (CIS)⁴⁶. In 2012, these partners received 10.1% of Polish exports, out of which more than a half (5.4%) was designated for Russia. Given the high concentration of the country's external sales in the EU and CIS countries, the remaining trade partners played a less significant role; amongst these, the share of the developed and developing countries was split almost equally (6.9% and 7.2% respectively).

Figure R.3.1
Structure of Polish exports in 2012



Source: OECD, Eurostat, GUS data.

Figure R.3.2
The HHI index of the geographical concentration of exports for EU countries in 2011



Source: OECD, Eurostat, GUS data.

Close trade ties with the member states and other markets of geographical proximity are also typical of the remaining EU countries. Moreover, exports of certain new EU member states (the Czech Republic, Hungary, Slovakia and Slovenia) and some small EU-15 economies (Austria, Luxembourg, the Netherlands) are, like Poland's,

⁴⁴ The 2012 figures are preliminary data. The source of data for EU countries is GUS, for remaining countries- Eurostat. The EU country group is considered to comprise, in the entire analysed period, all the current 27 Member States. Besides, all the Member States have been classified as developed countries.

⁴⁵ The euro area countries were considered to be, in the entire period under review, the current 17 members of the area.

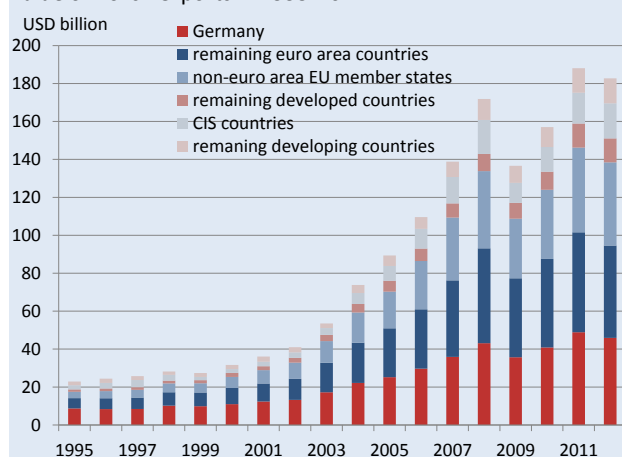
⁴⁶ This group comprised, in the entire period analysed: Armenia, Azerbaijan, Belarus, Georgia, Kazakhstan, Kyrgyzstan, Moldova, Russia, Tajikistan, Turkmenistan, Ukraine and Uzbekistan.

concentrated on the German market. In contrast, the exports of large EU-15 countries appear to be more diversified in terms of geographical structure. A comparison of the EU countries' geographical concentration of exports measured with the Herfindahl-Hirschman (HHI) index corroborates this observation (Figure R.3.2.)⁴⁷.

Between 1995 and 2012, the significance of external trade to the Polish economy grew significantly⁴⁸. As Poland's exports expanded robustly, certain changes to their geographical structure took place (Figure R.3.3). Between 1995 and 1999, large fluctuations were observed in the shares of the two major groups of Polish export partners (the EU and CIS countries), in part driven by considerable shifts in import demand from the CIS countries (Figure R.3.4). In the period of 2003-2012, in turn, the share of the EU countries in Poland's exports declined somewhat, amidst a concurrent rise in the role played by the CIS countries, mainly as a result of Russia's expanding share in Poland's export sales (from 2.8% to 5.4%). Some of the factors behind Russia's rising significance as an export partner included relocation, by multinational corporations, of production designated i.a. for the Russian market to Poland, as well as strong GDP growth in Russia in 2003-2008, significantly exceeding EU growth. The share of non-EU economies in Poland's exports changed only marginally in the period under review⁴⁹.

Figure R.3.3

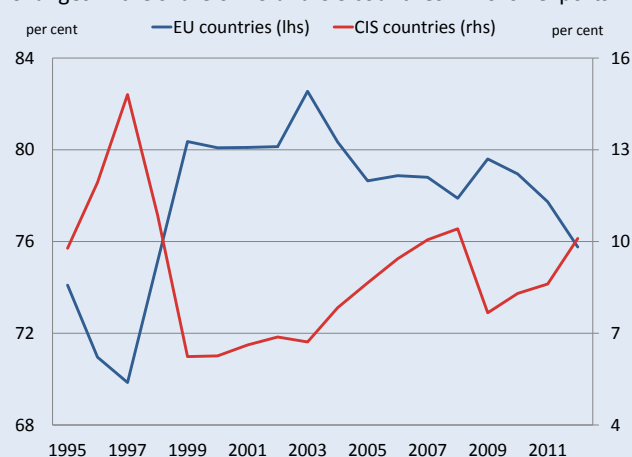
Value of Polish exports in 1995-2012



Source: OECD, Eurostat, GUS data.

Figure R.3.4

Changes in the share of EU and CIS countries in Polish exports



Source: OECD, Eurostat, GUS data.

⁴⁷ The Herfindahl-Hirschman (HHI) index is a measure of concentration used mainly to assess the force of competition in a given market. However, the index can be equally well used to measure the concentration of exports (see: Kellman, Shachmurove, 2011). The index is calculated as the sum of squares of the respective countries' shares in the exports of a given country. A higher value of the index denotes a higher geographical concentration of exports.

⁴⁸ The index of the economy's openness (computed as the ratio of exports and imports of goods and services (as of National Accounts) to GDP) rose from 44.2% in 1995 to 91.6% in 2011. The value of goods exports (in terms of current USD prices) increased in 1995-2012 period almost 8-fold.

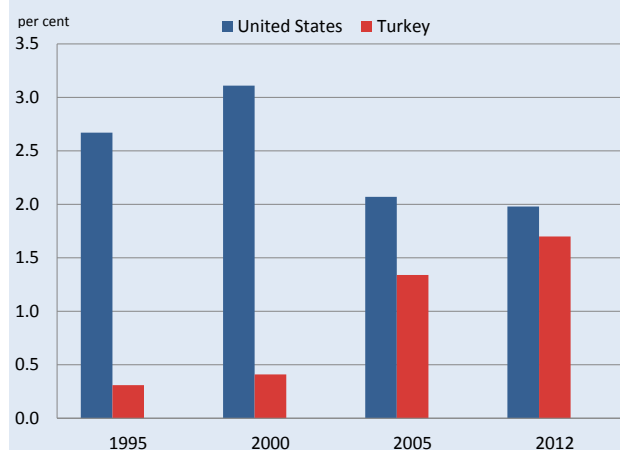
⁴⁹ The drop in the US share in Polish exports was accompanied by a rising share of Norway as well as, to a lesser extent, of Switzerland, Canada and Japan.

Between 1995 and 2012, the share of the remaining developing economies in Polish exports was relatively stable, which went against the trends observed in the global economy: since 2000 the share of the developing countries in global imports has risen significantly (from 15.8% in 2000 to 36.9% in 2011)⁵⁰. The increase was in part driven by the rising role of large, dynamically expanding Asian economies - China and India⁵¹. The two countries' share in trade with Poland also increased, yet remained relatively low (an increase from 0.44% in 2000 to 1.33% in 2012). Poland, however, was successful in expanding exports to less remote developing markets - besides the above mentioned CIS countries, the Turkish market gained in significance as a destination of Polish exports (the share of this economy in Polish exports caught up with that of the United States: Figure R.3.5)⁵².

The previously mentioned changes in the EU share in Poland's exports were combined with considerable shifts in the geographical breakdown of Polish exports within the group. In particular, the share of Germany, Poland's largest export partner, decreased (Figure R.3.6). The proportion of exports to this market shrank steadily between 1998 and 2008, dropping from 36.2% to 25.1%. In the entire period under analysis, exports to Germany rose more slowly than exports to the other trading partners of Poland, including the remaining EU countries. One of the factors behind this trend may have been the sinking demand for intermediate goods from Poland, as German firms shifted production abroad, coupled with slow domestic demand in Germany in the years 1998-2005. In 2009, under relatively strong business conditions in Germany, the share of this country in Polish exports picked up somewhat, to decrease again in the following years. As Germany's share in Polish exports declined, so did - notwithstanding a certain rise in the share held by the remaining euro area countries - the overall significance of the euro area as a recipient of Poland's exports (a drop from 61.1% in 1998 to 51.8% in 2012).

Figure R.3.5

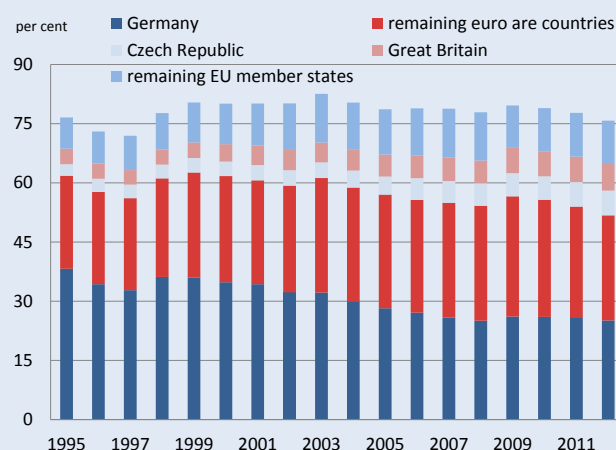
The shares of Turkey and the United States in Poland's exports



Source: OECD, Eurostat, GUS data.

Figure R.3.6

Structure of Polish exports to the European Union



Source: OECD, Eurostat, GUS data.

The declining role of the euro area countries as Poland's export partners in 1995-2012 was coupled with a rising share of the remaining EU member countries (from 14.8% to 24.0%), mostly on the back of rising exports to new EU member states (which do not belong to the euro area), especially to the Czech Republic. The share of the Czech market in Polish exports increased gradually between 1995-2012 (from 2.9% to 6.3%); a particularly sharp rise was observed directly after the accession of the Czech Republic and Poland to the EU. The increase in the share of Polish

⁵⁰ Due to lack of data for some of the developing countries, the share of the remaining developing countries in Poland's exports and global imports is estimated by subtracting the share of developed countries and CIS countries from 100%. The value of global imports in 2012 is not yet available.

⁵¹ The participation of China and India in global exports rose from 4.3% in 2000 to 12.1% in 2011.

⁵² Exports to the Turkish market could have been driven by increasing intensity of trade ties between Poland and Turkey (measured as the share of Polish exports in total Turkish imports) – related to the growing role of global value chains – as well as Turkey's dynamic growth in 2009-2011.

products in Czech imports could have partially stemmed from a boost in trade within the global value chains in Central Europe, as a consequence of foreign direct investment.

In sum, the structure of Polish exports remains dominated by the EU countries, with trade with Germany and other euro area countries maintaining a crucial role (although less prominent one than before), amidst a rising share of Great Britain and the Czech Republic. The second biggest recipient of Polish exports are the CIS countries. The remaining developed and developing countries play a less significant role in Polish exports, and their shares largely do not change. At the same time, NBP surveys suggest that the number of businesses planning to expand into new geographical markets is increasing, which can contribute to a greater diversification of Polish exports⁵³.

2.2.5. Output

In 2012 Q4, gross value added growth slowed down again (to 0.8% y/y from 1.4% registered in 2012 Q3), which resulted from weaker business conditions across all sectors (Figure 2.22)⁵⁴.

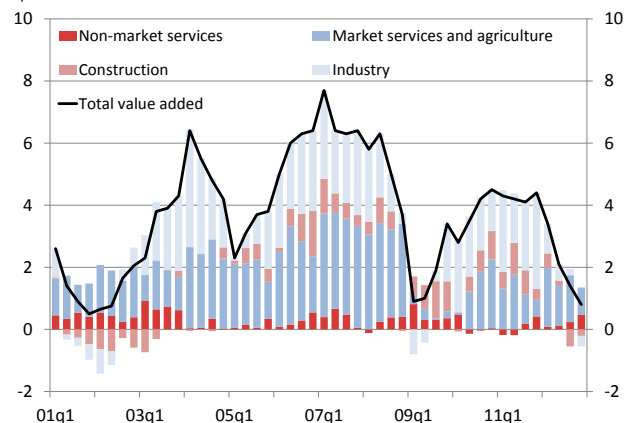
In 2012 Q4, industrial output declined, while orders continued to decrease and the PMI persisted at low levels. This suggests a marked weakening in business conditions in this sector (Figure 2.23)⁵⁵.

Similarly, data on construction suggest the already steep decline in this sector gathering speed. Both the output and order book in the sector continued to shrink considerably in 2012 Q4 (Figure 2.24)⁵⁶.

The service sector is also showing signs of a downturn. Wholesale sales contracted by 0.9% y/y (in nominal terms) in 2012 Q4, as against a rise of 1.8% in Q3. At the same time, there was a marked slowdown in retail sales in businesses employing more than 9 persons (see Chapter 2.2.2 *Consumption demand*)⁵⁷. Weaker growth was also observed in sales of transport services, amounting to 4.6% y/y (in real terms) in 2012 Q4 as compared with 10.0% y/y in 2012 Q3.

Figure 2.22

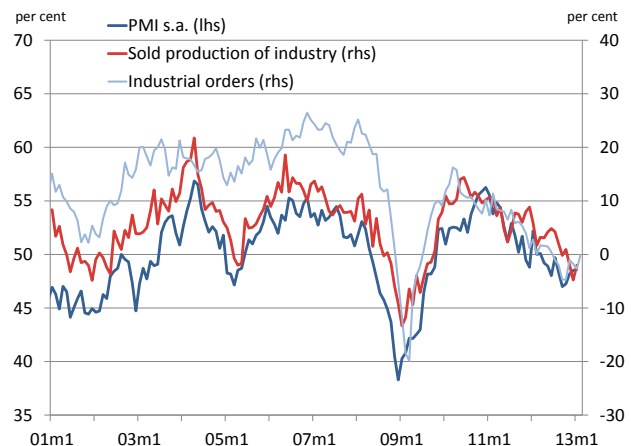
Sector contribution to annual growth of gross value added.



Source: GUS data, NBP calculations.

Figure 2.23

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



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

⁵³ *Economic climate in the enterprise sector in 2012 Q4 and forecasts for 2013 Q1*, NBP.

⁵⁴ Data on industrial output and orders, PMI, construction and assembly output and orders in construction sector are seasonally adjusted (NBP calculations).

⁵⁵ January 2013 data on PMI and industrial output as well as January and February 2013 data on industrial orders indicate a continuous decline in both industrial output and orders and the PMI persisted at low levels.

⁵⁶ Also January 2013 data on construction and assembly output as well as January and February 2013 data on orders in the sector indicate further declines in both categories.

⁵⁷ Monthly data on retail sales do not fully reflect total retail sales growth. See footnote 35.

The GUS forward-looking business climate indicators suggest the persistence of negative assessments of the economic outlook by businesses (Figure 2.25). Most indicators of future business conditions in the respective sections are running below their long-term averages.

2.3. Financial situation in the enterprise sector

In 2012 Q3, the financial situation of enterprises deteriorated only slightly compared with 2012 Q2. However, rising proportion of enterprises reporting both problems with demand barrier in 2012 Q4 and weaker assessments of their economic standing, suggest that firms' financial performance may have deteriorated further in the last quarter of 2012⁵⁸. At the same time, a slight expansion in market demand and a rise in orders expected by entrepreneurs in 2013 Q1 may have a mitigating effect on the observed adverse trends in early 2013.

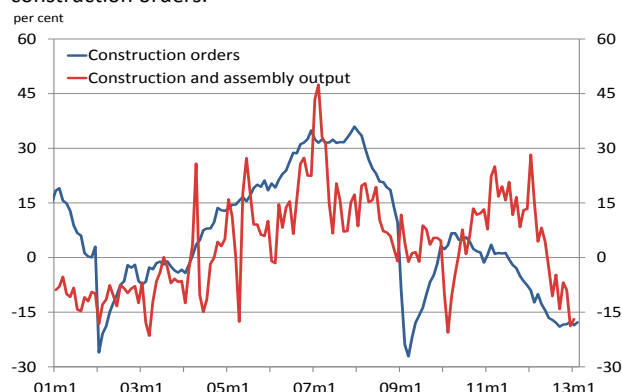
In 2012 Q3, total revenue growth in businesses slowed down somewhat. This was primarily caused by deceleration in external sales related to persisting sluggish demand from Poland's key trading partners, amidst a certain appreciation of the zloty on its 2012 Q2 level⁵⁹.

Similarly, growth of total costs weakened in 2012 Q3, moving roughly at the same rate as total revenue growth. Slower total cost growth took place on the back of a deceleration in all the key categories of costs.

A slight drop in firms' gross financial result in 2012 Q3 on its 2012 Q2 level, despite a certain rise in profits on sales and other operating activity, was driven by a loss recorded on

Figure 2.24

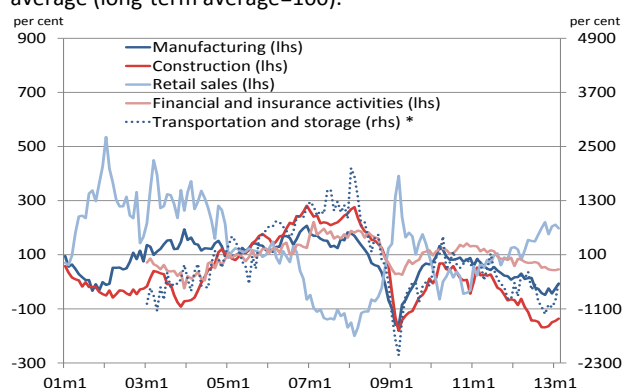
Annual growth of construction and assembly output and construction orders.



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

Figure 2.25

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



Source: GUS business tendency survey, NBP calculations.

*As the value of the indicator of transportation and storage is close to zero, the Figure presents its level instead of its changes against its long-term average.

Table 2.4

Selected financial efficiency ratios in the enterprise sector.

Per cent	2009	2010	2011				2012		
			q1	q2	q3	q4	q1	q2	q3
Sales profitability ratio	5.0	5.2	5.3	5.5	5.6	4.7	4.4	4.3	4.3
Net turnover profitability ratio	4.1	4.4	4.3	6.1	3.7	4.1	4.1	3.9	3.5
Total debt ratio (s.a.)	46.9	47.1	47.5	47.5	48.2	48.8	48.5	48.6	48.6
Gross profit to interest ratio	7.1	7.8	8.0	8.3	7.3	7.4	6.9	5.8	5.7
end of period data									
Liquidity ratio of the first degree	0.39	0.40	0.39	0.38	0.37	0.38	0.34	0.32	0.31

Source: GUS data.

⁵⁸ *Economic climate in the enterprise sector in 2012 Q4 and forecasts for 2013 Q1, NBP.*

⁵⁹ At the same time, in 2012 Q3 the zloty weakened on its 2011 Q3 level, yet the scale of this depreciation was smaller than that observed in 2012 Q2 versus the corresponding period of the previous year. NBP surveys indicate that the price competitiveness of Polish exports decreased in 2012 Q3 compared to 2012 Q2. See: *Economic climate in the enterprise sector in 2012 Q3 and forecasts for 2012 Q4, NBP.*

financial activity (Figure 2.27)⁶⁰. Poorer result on financial activity translated into a lower figure for net turnover profitability ratio, while sales profitability persisted at levels observed in 2012 Q2. The lower figure for the net turnover profitability ratio resulted from its decline amongst exporting enterprises, while in the group of non-exporters the ratio went up slightly (Figure 2.28). However, exporters' profitability was still substantially higher than that of non-exporters.

In 2012 Q3, the liquidity ratio of the first degree dropped slightly, yet the liquidity position of the corporate sector remained relatively sound. Businesses' weaker liquidity position resulted from slower growth in their cash holdings combined with lower investment in securities (Table 2.4). Moreover, liquidity declined only among large companies, whereas in the SME sector it did not change significantly compared to 2012 Q2. Yet, liquidity position of large firms remained better than that of small and medium-sized firms. According to NBP surveys, also in 2012 Q4 the liquidity of enterprises deteriorated slightly. However, the percentage of enterprises quoting liquidity or payment gridlocks as barriers to business remained below its long-term average⁶¹.

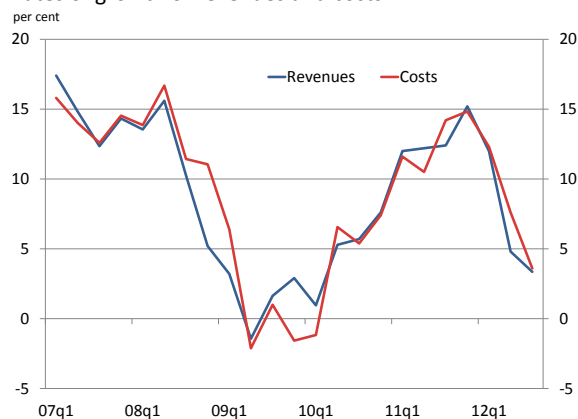
2.4. Labour market

2.4.1. Employment and unemployment

Slowdown in the domestic economy in the second half of 2012 was accompanied by stagnation in the number of persons working in the economy and a further decline in employment growth in the enterprise sector, which fell below zero in Q4 (Figure 2.29). Stagnating growth in the number of persons

Figure 2.26

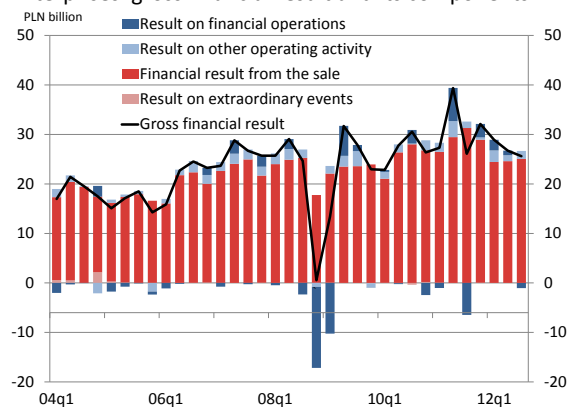
Rates of growth of revenues and costs.



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

Figure 2.27

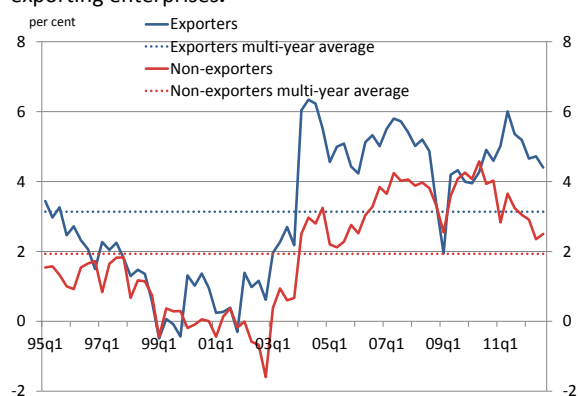
Enterprises' gross financial result and its components.



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

Figure 2.28

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



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

⁶⁰ The decline in the result on financial operations was driven mainly by the lower value of dividends paid in 2010 Q3 in comparison with 2012 Q2.

⁶¹ *Economic climate in the enterprise sector in 2012 Q4 and forecasts for 2013 Q1*, NBP.

working in the economy, coupled with rising activity rate, translated into further rise in the unemployment rate.

According to the Labour Force Survey (LFS) data, in 2012 Q3 and Q4, the number of working persons increased by 0.2% y/y and by 0.1% y/y respectively (as compared to 0.2% y/y in 2012 Q2). The highest growth continued to be recorded in the number of persons employed in services (1.2% y/y in 2012 Q4 and 1.0% y/y in 2012 Q3), where economic activity remained higher than in other production sectors. In turn, the number of persons employed in industry, following a temporary rise of 0.1% y/y in Q3, went down by 0.9% y/y in Q4 which may be attributed to further slowdown in this sector. At the same time, in line with the long-term trend, the number of persons working in agriculture continued to fall (drop of 3.4% y/y and 2.3% y/y in Q3 and Q4 respectively).

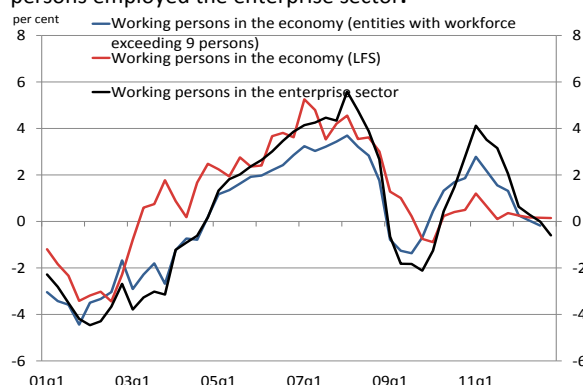
In the enterprise sector, the annual employment growth in 2012 Q3 decelerated to zero (as compared to 0.3% y/y in 2012 Q2). At the same time, data on 2012 Q4 and January 2013 point to declining employment in year-on-year terms (decline of 0.6% y/y in 2012 Q4 and 0.8% y/y in January 2013).

According to NBP economic climate surveys, although the employment forecast indicator for 2013 Q1 has slightly increased as compared to the previous quarter, it still suggests that more enterprises intend to reduce employment rather than increase it⁶².

In the second half of 2012, the number of the economically active followed an upward trend which was driven by increased activity of pre-retirement age persons. The number of the economically active went up by 0.8% y/y in Q3 and by 0.5% y/y in Q4 (as compared to 0.7% y/y

Figure 2.29

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

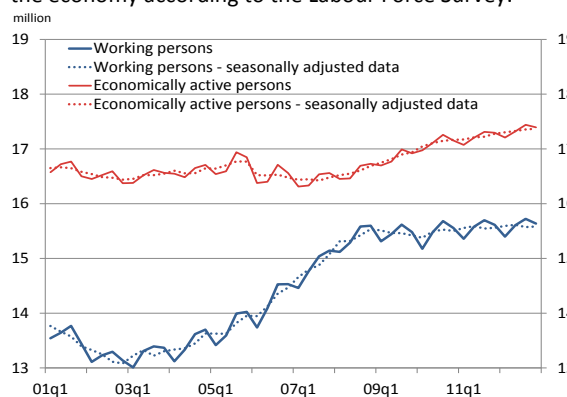


Source: NBP calculations based on GUS data.

* The adjustment of the LFS statistics for the results of the 2011 National Census in GUS publications refers to the period starting in 2010 Q1. To preserve data comparability, earlier data presented in the graphs in this Chapter have been corrected by the NBP.

Figure 2.30

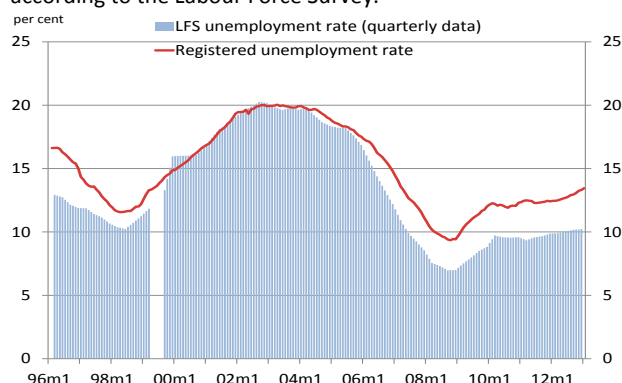
Number of working persons and the economically active in the economy according to the Labour Force Survey.



Source: NBP calculations based on GUS data.

Figure 2.31

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.

⁶² Economic climate in the enterprise sector in 2012 Q4 and forecasts for 2013 Q1, NBP.

rise in 2012 Q2; seasonally adjusted data; Figure 2.32).

As employment growth in the economy was close to zero, further increase in labour supply translated into higher than a year ago LFS unemployment rate which stood at 10.2% in 2012 Q3 and Q4 (as compared to 10.0% in 2012 Q2; seasonally adjusted data; Figure 2.31; Figure 2.32).

Data released by employment offices point to a further rise in the unemployment rate at the end of 2012 and at the beginning of 2013. In January 2013, the registered unemployment rate stood at 14.2%, as against 13.2% in January 2012. According to NBP estimates, the probability of losing a job increased considerably in the recent months, which was accompanied by a certain rise in the likelihood of finding a job.

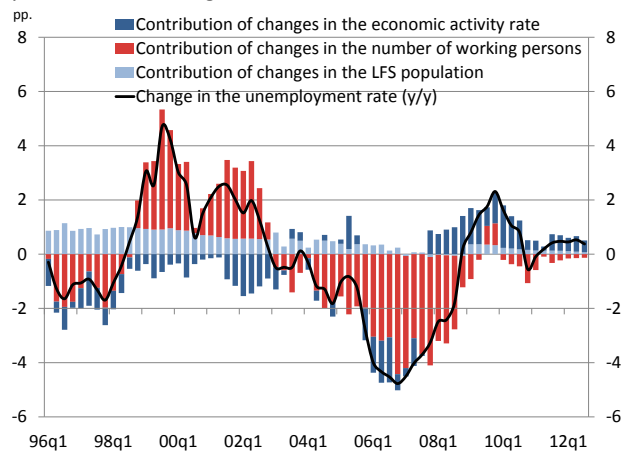
2.4.2. Wages and labour productivity

Data concerning wage growth and unit labour costs point to the lack of wage pressure in the economy. In the second half of 2012, wage growth weakened both in the economy and in the enterprise sector. Growth in unit labour costs in the economy, despite a certain rise in Q4, in the second half of 2012 remained lower than its long-term average.

Further slowdown in wage growth in the economy in the second half of 2012, including in the corporate sector, was driven by persistently rising labour supply and continuing low labour demand. In Q4 wage growth in the economy reached 2.9% y/y (as compared to 2.8% y/y in Q3) and in the corporate sector stood at 2.8% y/y (as compared to 2.7% y/y in Q3; Figure 2.33). According to the data on the corporate sector in January 2013, wage growth remained low also at the beginning of 2013.

Figure 2.32

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

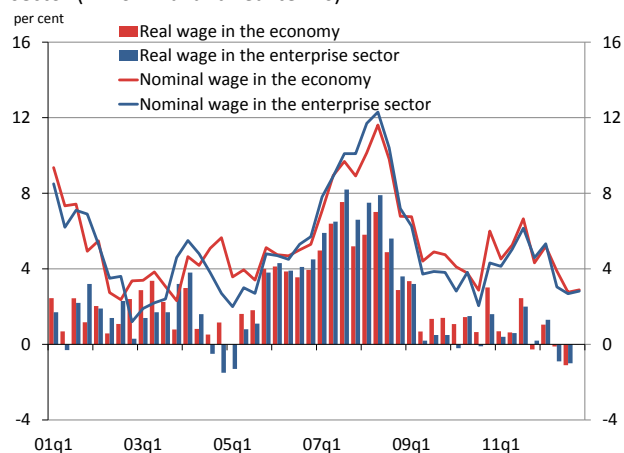


Source: GUS data, NBP calculations.

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

Figure 2.33

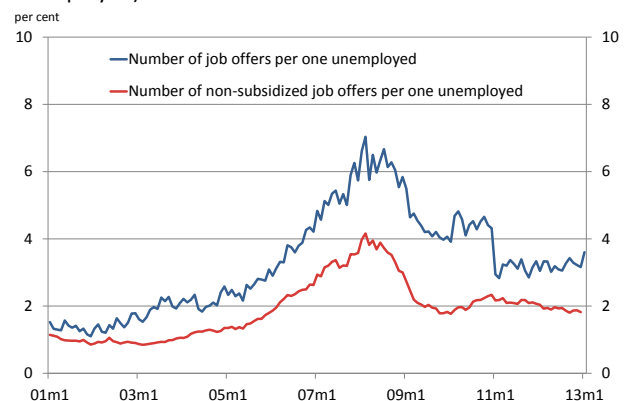
Annual wage growth in the economy and in the enterprise sector (in nominal and real terms).



Source: NBP calculations based on GUS data.

Figure 2.34

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



Source: NBP calculations based on GUS data.

The lack of wage pressure is also confirmed by NBP economic climate surveys. According to them, in 2013 Q1 the number of enterprises planning wage increases has declined, and the average projected wage increase is lower than in the previous quarter⁶³. Moreover, the market tensions index (number of job offers per one unemployed person) has remained at the level close to its long-term average, limiting the risk of mounting wage pressure (Figure 2.34).

Along with falling GDP growth, 2012 Q3 and Q4 recorded a decline in labour productivity growth (Figure 2.35). Yet, as the fall in wage growth was more pronounced than the decline in labour productivity, growth in unit labour costs in 2012 Q3 also decreased (down to 1.5% y/y from 1.7% y/y in 2012 Q2). Along with wage growth stabilization at a low level and a further decrease in productivity growth in Q4, growth in unit labour costs accelerated (up to 2.2% y/y), albeit remained below its long-term average. Also monthly data on industrial enterprises point to a growth in unit labour costs in 2012 Q4 which, however, levelled off at the beginning of 2013. Yet, growth in unit labour costs in industry in 2012 Q4 was primarily driven by lower labour productivity growth (as a result of minor employment adjustments to reduced production), and, to a lesser extent, certain wage growth (Figure 2.36).

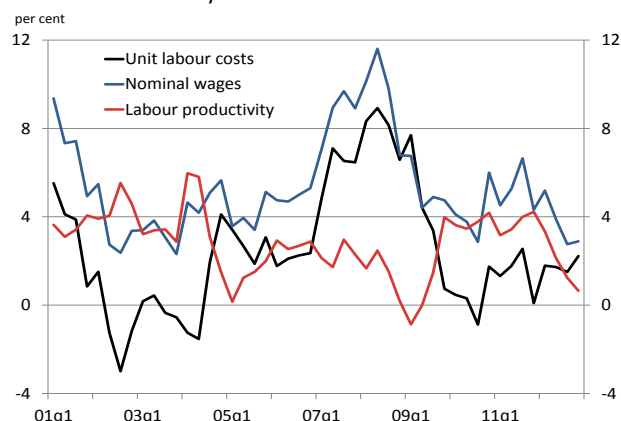
2.5. Financial markets and asset prices

2.5.1. Interest rates and financial asset prices

Since early November 2012, the Monetary Policy Council has decreased the NBP reference rate on four occasions by a total of 1 percentage

Figure 2.35

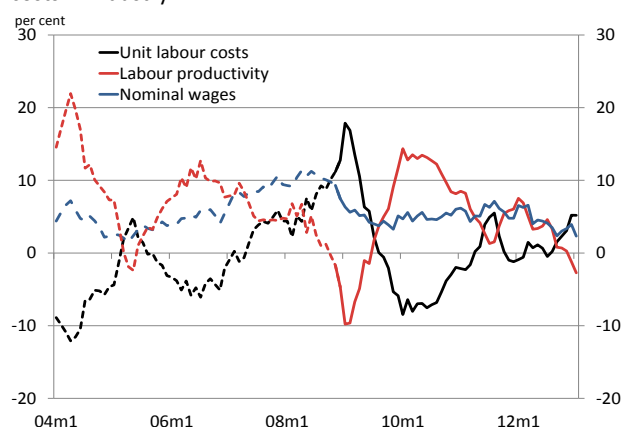
Annual growth in labour productivity, wages and unit labour costs in the economy.



Source: NBP calculations based on GUS data.

Figure 2.36

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

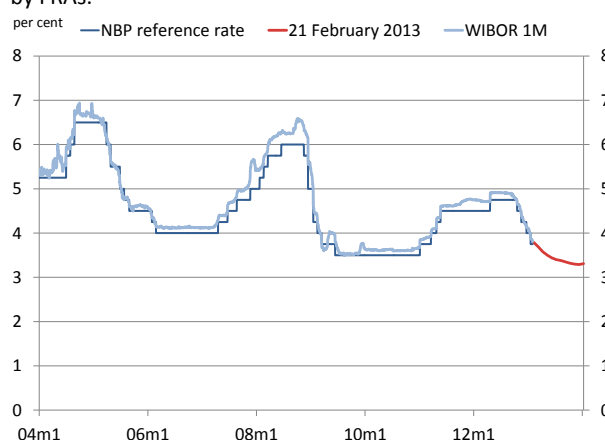


Source: NBP calculations based on GUS data.

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

Figure 2.37

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



Source: NBP calculations based on Reuters data.

⁶³ Economic climate in the enterprise sector in 2012 Q4 and forecasts for 2013 Q1, NBP.

point, down to the 3.75%⁶⁴. This was followed by a decline in short-term interest rates, including WIBOR 1M, which fell by 0.96 percentage points (Figure 2.37).

Expectations for further monetary policy easing were reflected in falling FRA quotes. On 21 February 2013, FRA quotes suggested that the short-term interest rates may fall further, by 0.50 percentage points over the following 12 months (Figure 2.37). According to the Reuters pool of 1 February 2013, in turn, the current cycle of interest rate cuts is expected to come to an end in March 2013, with the reference rate reaching 3.50%.

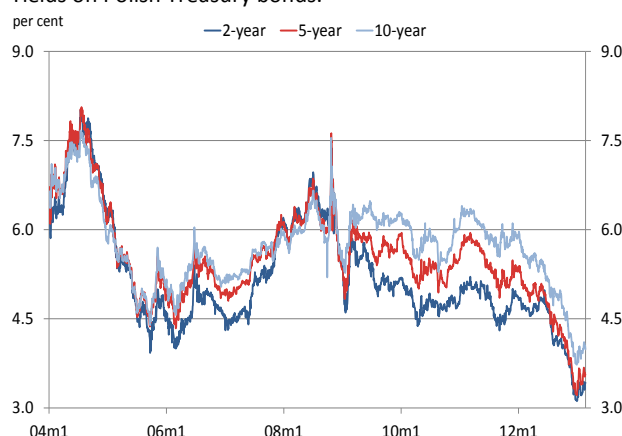
Expectations of a lower NBP reference rate were also reflected in falling short-term interest rates. Since early November 2012, WIBOR 3M has fallen by 0.98 percentage points.

Between early November 2012 and late December 2012, yields on Polish security bonds were falling to temporarily reach historical lows, which was primarily driven by improving global situation and search for yield in the global financial markets (see Chapter 1.3 *Monetary policy abroad and international financial markets*) as well expectations of reference rate cut in Poland. However, in January and February 2013, the yields slightly increased (Figure 2.38).

The assessment of low credit risk by investors also put an upward pressure on government bond prices. CDS rates for Poland are lower than the average for the emerging economies and close to those recorded in some major euro area countries (Figure 2.39). According to the National Securities Depository, the exposure of non-residents to Treasury securities issued on the domestic market reached an all-time high in January 2013 (Figure 2.40).

Figure 2.38

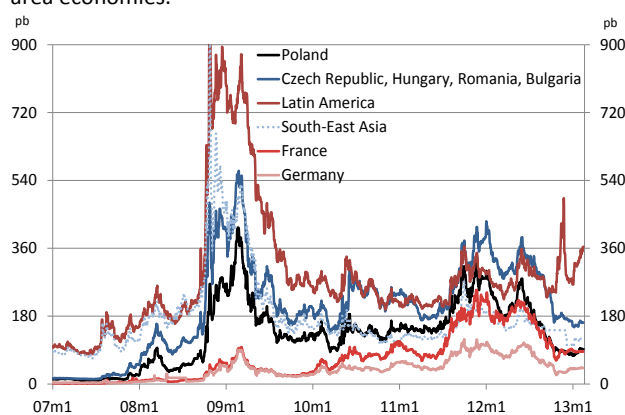
Yields on Polish Treasury bonds.



Source: Reuters data.

Figure 2.39

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

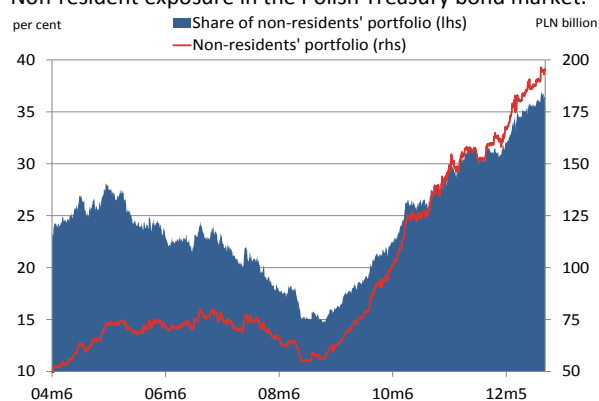


Source: Bloomberg data.

The indices are GDP-weighted aggregates.

Figure 2.40

Non-resident exposure in the Polish Treasury bond market.



Source: National Depository for Securities (KDPW) data.

⁶⁴ The cut-off date for the data in March Report was 21 February 2013. At the meeting held on 6 March 2013, the Monetary Policy Council decided to decrease the reference rate by 0.50 percentage points to 3.25%. Information about this decision is included in Chapter 3 of the Report.

Share prices on the Warsaw Stock Exchange (WSE) were affected by the sentiment in the global financial markets and deteriorating outlook for economic growth in Poland. This was reflected in worse performance of the companies listed on the WSE. Following a rise observed in late 2012, in January and February 2013, stock market indices declined steadily (Figure 2.41).

2.5.2. Exchange rate

Following the appreciation observed in the last two months of 2012, the zloty depreciated vis-à-vis the euro in early 2013. The zloty was weighed down by, in particular, the release of weaker than expected data on economic activity in Poland. At the same time, given the depreciation of the save heaven currencies amidst fading risk aversion (see Chapter 1.3 *Monetary policy abroad and international financial markets*), the zloty appreciated against the US dollar and the Swiss franc in the period under review⁶⁵.

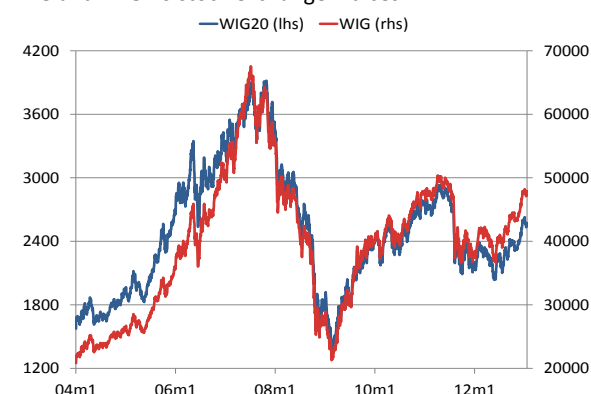
Since the beginning of November 2012, the nominal zloty exchange rate has weakened by 1.0% against the euro, while simultaneously gaining on the Swiss franc and the US dollar by, respectively 0.9% and 0.5% (Figure 2.42).

2.5.3. Housing prices

Similarly to the previous quarter, in 2012 Q4 prices in both the primary and secondary housing markets in Poland were on the decline due to considerable oversupply of unsold home construction contracts and limited demand (Figure 2.43)⁶⁶.

Figure 2.41

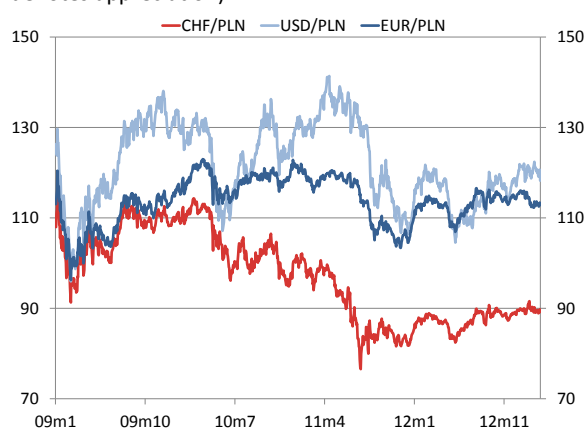
WIG and WIG 20 stock exchange indices.



Source: Reuters data.

Figure 2.42

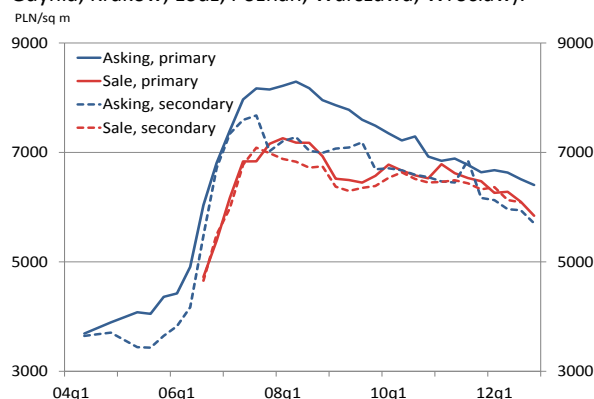
Nominal exchange rate of the Polish zloty against the euro, the Swiss franc and the US dollar (January 2004=100; increase denotes appreciation).



Source: Reuters data.

Figure 2.43

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



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

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

⁶⁵ This section covers the situation in the zloty market between 1 November 2012 and 21 February 2013.

⁶⁶ More information on the condition of the Polish housing market may be found in *Report on home prices and the situation on the residential market in Poland in 2012 Q3*, and *Report on the situation in the Polish residential and commercial real estate market in 2011*, available on the NBP website (www.nbp.pl, in Polish only).

In 2012 Q4 home sales hit their record high over the past three years, which was the result of real estate developers' decisions taken in 2007-2008 and, to a certain extent, changes in the primary market regulations in the first half of 2012.⁶⁷ At the same time, there was a decline in the number of new investment projects launched in the housing sector (Figure 2.44).

High supply of housing was accompanied by an intertemporal shift in demand resulting from the termination of the government-subsidized housing scheme *Rodzina na swoim* (*Family on their own*) at the end of 2012. Yet, as this one-off effect fades, the number of housing units put on the market in the coming quarters will again exceed the number of sold housing, which is likely to lead to further decline in home prices.

2.6. Credit and money

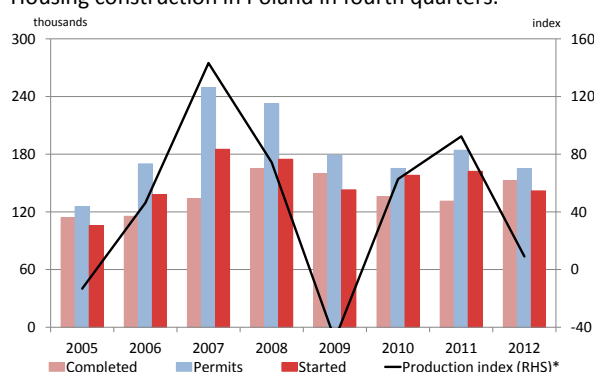
2.6.1. Loans

Since the previous *Inflation Report*, lending growth has decelerated⁶⁸. In 2012 Q4 the total amount of indebtedness declined by monthly average of PLN 0.1 billion as compared to monthly average growth of PLN 4.2 billion in 2012 Q1-Q3⁶⁹. Average growth in debt in 2012 Q4 stood at 5.1% y/y as against 8.1% y/y in the first three quarters of 2012⁷⁰.

In 2012 Q4 corporate debt declined, to reach PLN 257.0 billion in December 2012. In 2012 Q4

Figure 2.44

Housing construction in Poland in fourth quarters.

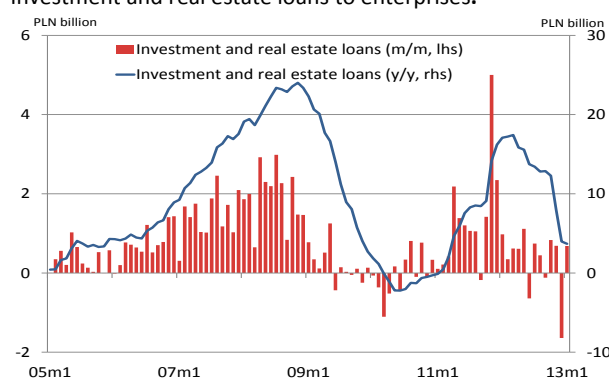


Source: NBP calculations on the basis of GUS data.

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

Figure 2.45

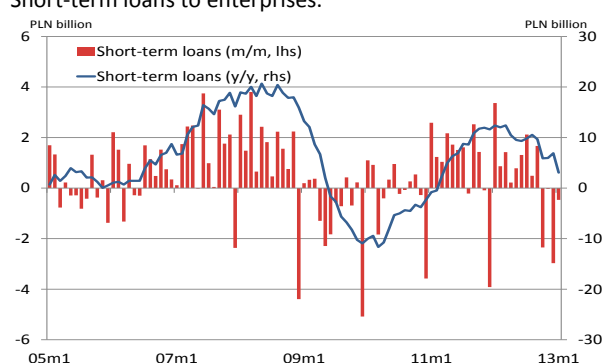
Investment and real estate loans to enterprises.



Source: NBP data.

Figure 2.46

Short-term loans to enterprises.



Source: NBP data.

⁶⁷ The act of 16 September 2011 on the Protection of Home Buyers Rights, which entered into force on 28 April 2012, obliges real estate developers to conclude agreements with banks on opening escrow accounts which means that developers will receive the funds paid by buyers with a delay (see *Home prices in the Inflation Report - July 2012*).

⁶⁸ Data concerning growth in assets and liabilities presented in this chapter refer to transactional changes. In the case of corporates, the size of both lending and deposits are subject to strong seasonal variations (in December and January, in particular), therefore average monthly increases in corporate loans and deposits are compared against corresponding periods of subsequent years.

⁶⁹ These data refer to lending to the non-financial sector, non-monetary financial institutions, local government units and social insurance funds. In January 2013 liabilities of the above-mentioned entities increased considerably (by PLN 7.7 billion), mainly due to growth in liabilities of non-monetary financial institutions. At the same time average liabilities growth remained at similar level as in 2012 Q4 and amounted to 4.9% y/y.

⁷⁰ In this chapter, average growth shall be understood as the average of 12-month increases.

corporate debt posted an average monthly decrease of PLN 1.6 billion, whereas in 2011 Q4 the average monthly growth in corporate debt had stood at PLN 3.2 billion. As a result, average growth in corporate debt in 2012 Q4 slowed down to 6.9% y/y from 12.9% y/y in the corresponding period of 2011 (Figure 2.45, Figure 2.46)⁷¹.

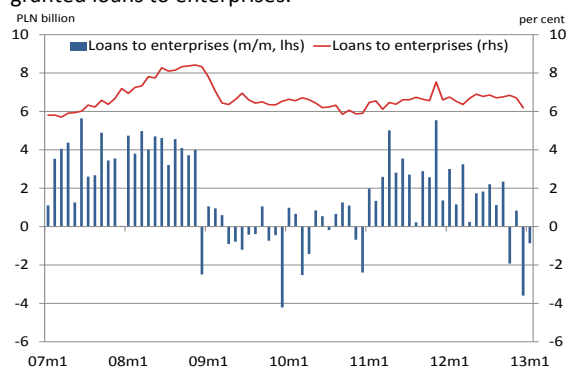
Deceleration in corporate lending in 2012 Q4 was driven by decrease in investment loans and a further decline in short-term loans⁷². The tightening of lending conditions declared by banks in 2012 Q4, mainly with regard to non-interest credit cost, might have contributed to the slowdown in corporate lending⁷³. However, in view of the effected interest rate cuts, increased credit margins did not translate into higher interest rates on corporate loans, which declined markedly in December 2012 (by 0.5 percentage point; Figure 2.47, Figure 2.48).

The tightening of lending policy affected mostly the small and medium-sized enterprise sector. Also the decline in demand for long-term credit was more pronounced among small and medium-sized enterprises. As a result, growth in lending to the SME sector in October-November 2012 was slightly lower than that to large enterprises⁷⁴. In 2013 Q1, both banks and enterprises expect a further decrease in demand for credit among large companies, whereas their forecasts of credit demand among small and medium-sized enterprises diverge⁷⁵.

In 2012 Q3, the total foreign debt of enterprises went up by EUR 1.1 billion as compared to 2012

Figure 2.47

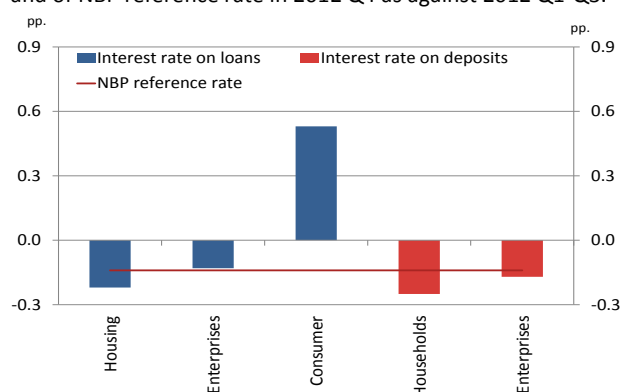
Monthly increases and average interest charged on newly granted loans to enterprises.



Source: NBP data.

Figure 2.48

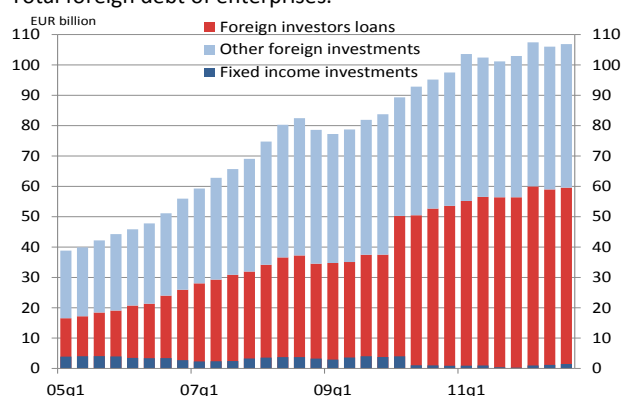
Change of the average interest rates on loans and deposits and of NBP reference rate in 2012 Q4 as against 2012 Q1-Q3.



Source: NBP data.

Figure 2.49

Total foreign debt of enterprises.



Source: NBP data.

⁷¹ In January 2013 corporate liabilities decreased by PLN 0.9 billion, whereas in the corresponding period of 2011 it increased by PLN 3.0 billion. The average growth in corporate liabilities continued to slow down and in January 2013 stood at 3.3% y/y as against 15.4% y/y in January 2012.

⁷² Despite a seasonal tendency to a sharp increase in short-term corporate loans in January, in the first month of 2013 these loans decreased by PLN 0.5 billion (whereas in January 2012 they increased by PLN 3.4 billion). Corporate investment loans grew by PLN 0.7 billion, but their growth continued to decelerate and reached 2.9% y/y as against 6.6% y/y in 2012 Q4.

⁷³ *Situation in the credit market. Results of the Senior Loan Officer Opinion Survey, 2013 Q1, NBP*

⁷⁴ Data on loans to large enterprises and SMEs are based on the NBP's statistics: *Bank sector loans and advances*.

⁷⁵ While enterprises expect the demand for credit in SME sector to increase, banks forecast its decline, particularly pronounced in case of long-term loans. *Economic climate in the enterprise sector in 2012 Q4 and forecasts for 2013 Q1, NBP. Situation in the credit market. Results of the Senior Loan Officer Opinion Survey, 2013 Q1, NBP*

Q2 and stood at EUR 108.3 billion (Figure 2.49). Foreign debt growth accelerated to 6.6% y/y (from 3.7% y/y in 2012 Q2).

In December 2012, the total household debt reached PLN 538.1 billion, of which housing loans constituted PLN 323.6 billion. Average monthly increases in housing loans in 2012 Q4 diminished slightly as compared with 2012 Q1-Q3 and amounted to PLN 1.1 billion (as compared to PLN 1.4 billion respectively, Figure 2.50). Average growth in housing loans continued to decline and stood at 5.5% y/y in Q4 (as compared to 7.9% y/y in 2012 Q1-Q3)⁷⁶.

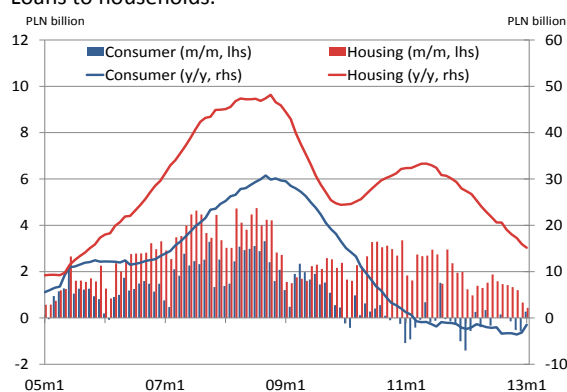
Slowing growth in PLN-denominated housing loans was accompanied by the rising surplus of foreign currency debt repayments over the amount of newly granted loans of this type⁷⁷.

The decline in the growth of housing loans in 2012 Q4 might have been driven by the tightening of lending policy in this segment as declared by banks. Despite a certain increase in credit margins, interest rate cuts effected in November and December translated into a slight decline in interest on housing loans in 2012 Q4 (Figure 2.48, Figure 2.51). Termination of the Government's housing programme *Family on their own* contributed to a temporary growth in demand for housing loans at the end of 2012. However, the scale of this growth was curbed by the deteriorating economic situation of households (see Chapter 2.2.2 *Consumer demand* and Chapter 2.5. *Asset markets*).⁷⁸

Household debt resulting from consumer loans – after a certain rise in 2012 Q3 – declined again in 2012 Q4. The scale of the average monthly decline was similar to that recorded in the first half of 2012 (it reached PLN 0.4 billion in Q4 as

Figure 2.50

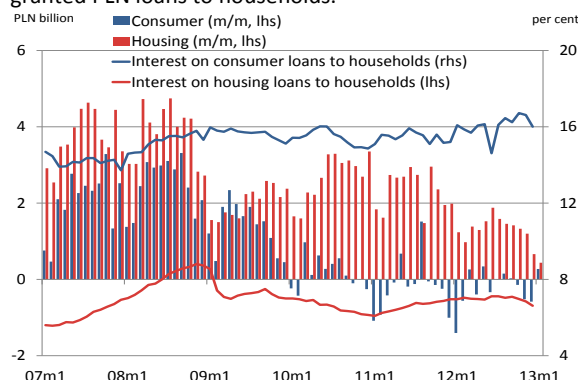
Loans to households.



Source: NBP data.

Figure 2.51

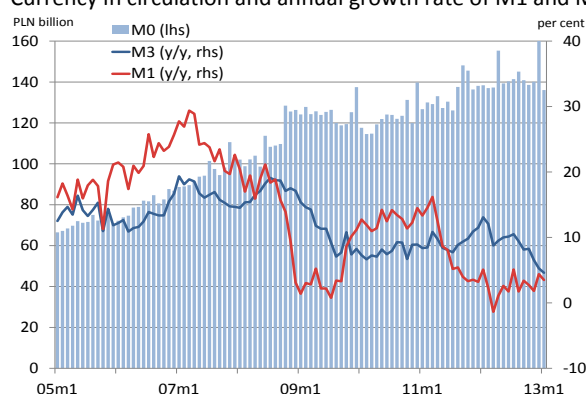
Monthly growth and average interest charged on newly granted PLN loans to households.



Source: NBP data.

Figure 2.52

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



Source: NBP data.

⁷⁶ In January 2013 the increase in housing loans declined significantly as compared to 2012 Q4 and amounted to PLN 0.4 billion. As a result its growth rate kept on declining (down to 4.8% y/y).

⁷⁷ The average growth in housing loans in PLN and in foreign currency in 2012 Q4 amounted to 18.1% y/y and -3.0% y/y respectively (against 18.8% y/y and -1.2% y/y in 2012 Q3).

⁷⁸ *Situation in the credit market. Results of the Senior Loan Officer Opinion Survey, 2013 Q1, NBP.*

compared to the average monthly drop of PLN 0.3 billion in the first two quarters of 2012). The annual consumer credit growth in 2012 Q4 amounted to -2.4% y/y as compared to -1.6% y/y in 2012 Q1-Q3 (Figure 2.50)⁷⁹. Further decline in consumer loans might have been driven by both weakening demand resulting from deteriorating economic situation of households (see Chapter 2.2.2. *Consumer demand*) and tightening of credit conditions declared by banks. Increase in credit margins led to higher interest rates on consumer loans despite the cuts in policy interest rates (Figure 2.48)⁸⁰.

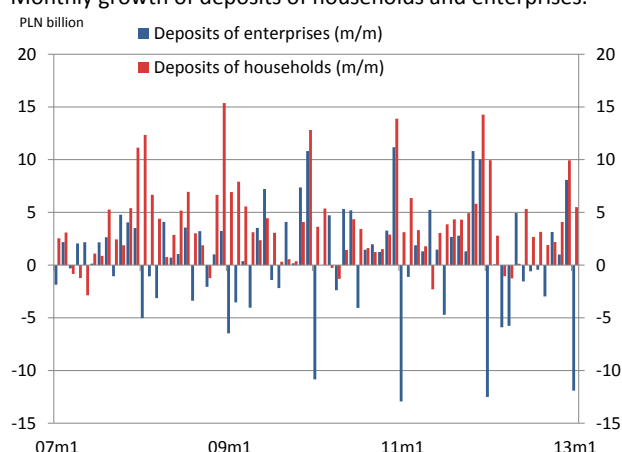
2.6.2. Deposits and monetary aggregates

In 2012 Q4, growth of broad money slowed down slightly and amounted to 6.7% y/y on average, remaining above the nominal GDP growth (Figure 2.52)⁸¹.

In 2012 Q4, corporate deposits increased by a monthly average of PLN 4.1 billion, to reach PLN 187.8 billion in December 2012⁸². At the same time, growth in deposits in 2012 Q4 was considerably lower than in the corresponding period of the previous year (when the average monthly growth stood at PLN 7.4 billion) which could have been driven by worsening financial situation of corporates (see Chapter 2.3. *Financial situation in the corporate sector*). Average growth in deposits in 2012 Q4 was negative and amounted to -4.0% y/y as against

Figure 2.53

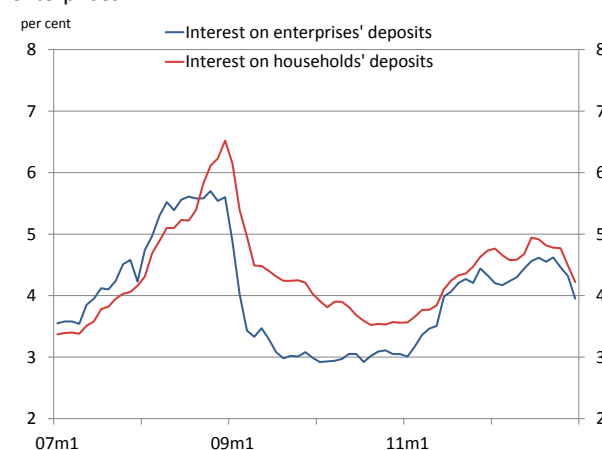
Monthly growth of deposits of households and enterprises.



Source: NBP data.

Figure 2.54

Average interest charged on deposits of households and enterprises.



Source: NBP data.

⁷⁹ In January 2013 consumer loans to households increased slightly (by PLN 0.3 billion), what curbed the decline of debt arising from these loans (in January 2013 its growth rate amounted to -1.1% y/y).

⁸⁰ As a reason for tightening the credit conditions for consumer loans considerable number of banks indicated the heightened risk relating to future economic situation, with fewer banks (as compared to the previous quarter) pointing to worsening quality of consumer loan portfolio. *Situation in the credit market. Results of the Senior Loan Officer Opinion Survey, 2013 Q1, NBP.*

⁸¹ In January 2013 growth of broad money slowed down to 4.6% y/y.

⁸² It should be emphasized that growth in corporate deposits at the end of the calendar year and their decline at the beginning of the year are typical phenomenon.

the average growth of 9.7% y/y in 2011 Q4 (Figure 2.53, Figure 2.55)⁸³.

Since the previous *Inflation Report*, growth in the total value of households' financial assets has accelerated to 6.3% y/y in 2012 Q4 as compared to the average growth of 5.1% y/y posted in the first three quarters of 2012⁸⁴. Growth in the value of households' financial assets was fuelled by an increasing value of assets in investment funds, which resulted from higher inflow of assets to the funds as compared to the first three quarters of 2012 and better performance of the Polish stock market in the last two months of 2012. Increase in value of households' financial assets was also driven by continued growth, albeit at slower pace, in household deposits (Figure 2.53)⁸⁵. The decelerating growth in household deposits may have been related to worsening economic situation of households and a certain drop in interest rates on deposits (Figure 2.54, Figure 2.55).

2.7. Balance of payments

Compared to the corresponding period of 2011, the second half of 2012 saw improved balance on current and capital account which was associated with a further slowdown in the domestic economy⁸⁶. The improvement was primarily driven by a reduction in the current account imbalance, largely due to improvement in trade balance. The analysed period also recorded a rise in surplus in the financial account, which was to a large extent driven by the inflow of portfolio capital.

Figure 2.55

Annual growth of bank deposits of households and enterprises.

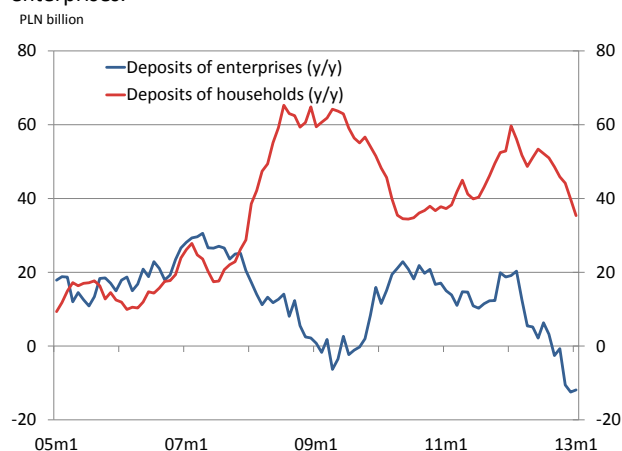
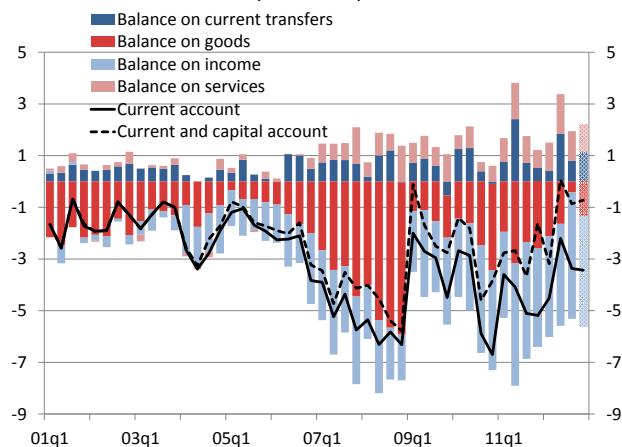


Figure 2.56

Current account balance (in EUR bn).



⁸³ In January 2013 corporate deposits declined significantly (by PLN 11.9 billion as against a drop of PLN 12.5 billion in corresponding period of 2011). As a result, the annual growth rate of these deposits decreased further (down to -6.3% y/y).

⁸⁴ The total of financial assets referred to above covers both deposits with maturities up to 2 years and deposits with maturities of over 2 years, not included in M3 aggregate. In January 2013, the growth in total value of households' financial assets was similar to that in 2012 Q4 (6.2% y/y).

⁸⁵ Growth in household deposits in January 2013 decreased further (annual growth rate of these deposits amounted to 7.3% y/y).

⁸⁶ Data on current, capital and financial accounts are based on quarterly data until 2012 Q3 and monthly data for October-December 2012.

The current account deficit decreased markedly in the second half of 2012 (in 2012 Q3 and Q4 it amounted to EUR 3.4 billion as against EUR 5.1 and 5.2 in 2011 Q3 and Q4 respectively). The current account imbalance was mitigated by a considerably lower trade deficit (Figure 2.56).

The trade deficit stood at EUR 0.4 billion in 2012 Q3 and at EUR 1.4 billion in 2012 Q4 (as compared to EUR 2.3 and 2.6 billion in 2011 Q3 and Q4 respectively). The reduction was driven by slow import growth amidst weakening domestic demand and still moderate export growth.

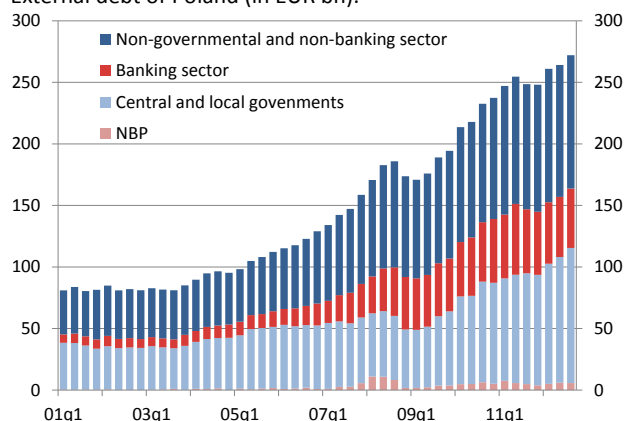
The increase in the positive balance on services and improvement in the current transfers account also contributed to narrowing current account imbalance. On the other hand, growing deficit in the income account in the second half of 2012 was conducive to deepening current account deficit. Yet, the scale of its deepening was moderate.

The capital account surplus grew somewhat in the second half of 2012. This rise was driven by higher inflow of funds related to the settlement of the implemented investment projects co-financed with the EU funds in 2012 Q3 (Figure 2.56).

A surplus in the financial account in the second half of 2012 increased as compared to the second half of 2011. This was driven by a sharp rise in the surplus in 2012 Q3 (up to EUR 4.4 billion as compared to EUR 1.1 billion in 2011 Q3) amidst a certain decline in surplus in 2012 Q4 (down to EUR 1.8 billion – based on preliminary monthly data – as compared to EUR 3.2 billion in 2011 Q4). Inflow of foreign portfolio investment, largely intended for the purchase of Treasury bonds, was a significant factor behind growing surplus in the financial

Figure 2.57

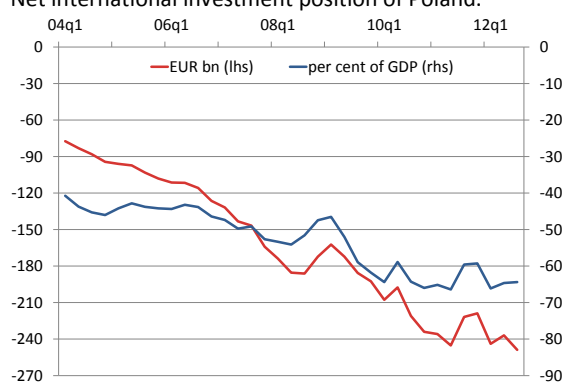
External debt of Poland (in EUR bn).



Source: NBP data.

Figure 2.58

Net international investment position of Poland.



Source: NBP data.

account⁸⁷. At the same time, in the analysed period the inflow of foreign direct investment to Poland declined.

In 2012 Q3 saw an improvement in some of Poland's external imbalance indicators (Table 2.5). In particular, the deficit on the current and capital account in relation to GDP narrowed markedly. On the other hand, the foreign debt to GDP ratio deteriorated.

Table 2.5

Selected indicators of external imbalances.

	2008	2009	2010	2011				2012		
				q1	q2	q3	q4	q1	q2	q3
Current account balance/GDP (in %)	-6.6	-3.9	-5.1	-5.3	-5.5	-5.2	-4.9	-5.1	-4.6	-4.1
Current and capital account balance/GDP (in %)	-5.4	-2.3	-3.3	-3.6	-3.8	-3.5	-2.9	-3.0	-2.3	-1.5
Trade balance/PKB (in %)	-5.8	-1.7	-2.5	-2.6	-3.0	-2.9	-2.7	-2.8	-2.4	-1.8
Gross foreign direct investment /current account deficit (in %)	43	77	58	61	70	83	76	34	36	28
Gross foreign direct investment/curr ent and capital account deficit (in %)	51	132	90	89	102	125	127	58	72	75
Official reserve assets in terms of monthly imports of goods and services	3.3	5.3	5.4	5.5	5.4	5.2	5.2	5.1	5.6	5.6
Foreign debt/GDP (in %)	48	62	67	68	69	67	67	71	72	73
Short-term foreign debt /official reserve assets (in %)	106	88	83	89	87	79	73	75	70	68
Net international investment position/GDP (in %)	-48	-62	-66	-65	-66	-60	-59	-66	-65	-67
Foreign debt with maturity up to one year / official reserve assets (in %)*	167	152	123		121		119		145	136

Source: NBP data.

*Data available on 6 month basis.

⁸⁷ Increase in the financial account surplus was also driven by a considerable growth in the balance of "other investment" item – liabilities standing at close to zero in 2012 Q3, while significantly negative in 2011 Q3. Permanent outflow of foreign deposits from the banking sector in 2012 Q3 was offset by the inflow of loans to both the banking and central government sectors.

Chapter 3

MONETARY POLICY IN NOVEMBER 2012 - MARCH 2013

At the meetings in October 2012 – March 2013 the Monetary Policy Council decreased NBP interest rates on five occasions, in total by 1.5 percentage points. At the meetings in October and December 2012 as well as January and February 2013 the Council decided to decrease the NBP interest rates by 0.25 percentage points on each occasion. At the meeting in March 2013 the Council decreased the NBP interest rates by 0.50 percentage points to the level: reference rate to 3.25% on an annual basis, lombard rate to 4.75% on an annual basis, deposit rate to 1.75% on an annual basis, rediscount rate to 3.50% on an annual basis.

What follows in the next part of the chapter are the previously published *Minutes of the Monetary Policy Council decision-making meetings* held in November, December 2012 and January, February 2013 as well as the *Information from the meeting of the Monetary Policy Council* in March 2013. *Minutes of the MPC decision-making meeting* in March will be published on 21 March, and after that included in the next *Report*.

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

At its meeting, the Monetary Policy Council discussed the current and future monetary policy decisions against the background of the results of the November inflation and GDP projection as well as current and expected macroeconomic developments in Poland and abroad.

While analysing the external conditions, it was noted that data incoming recently pointed to a lack of improvement in macroeconomic developments in the euro area. However, few Council members drew attention to the fact that economic outlook for Germany, Poland's major trading partner, remains favourable compared to other countries of the euro area (owing to strong economic ties between Germany and hitherto faster-growing emerging economies). At the same time, some Council members emphasized that the external conditions influenced the Polish economy not only via trade channel. Accordingly, the adverse conditions in the euro area may have a much stronger dampening impact on the economic activity in Poland than would follow from solely trade channel.

When discussing the current developments in Poland and their outlook, it was highlighted that a decline in industrial output and retail sales as well as a deeper decrease in construction and assembly pointed to more pronounced economic slowdown than previously anticipated.

It was stressed that the NBP November projection implied risk of persistent economic slowdown. It was pointed out that the currently forecast GDP growth for the next years runs below the July projection. This downward revision was due to lower investment and consumption forecast. The Council concluded, in line with the projection, that both factors will contribute to lower than previously expected GDP growth.

According to the Council, low consumption growth will result from tepid household disposable income growth and limited room for a further fall in the savings rate, related i.a. to limited lending. The disposable income growth will be curbed due to the ongoing deterioration in labour market conditions along with lower remittances to Poland from migrants abroad. It was emphasized that, in the previous stage of the global financial crisis, favourable financial conditions of households supported continued growth in their consumption and helped to absorb shock of increased costs of servicing their foreign currency loans resulting from zloty depreciation. It was also highlighted that in 2009 consumption growth was strengthened by fiscal loosening, while in the coming quarters the fiscal tightening will likely continue.

Turning to investment activity, in the Council's opinion, adverse demand outlook, deteriorating business sentiment and termination of EU financial perspective 2007-2013 will hamper investment growth. However, few Council members pointed to currently still favourable liquidity position of enterprises, which could trigger corporate investment growth should the demand outlook improve.

Few Council members assessed that the economic growth in 2012 could be lower than implied in the NBP November projection. At the same time, other Council members stressed that over the previous 20 years similar slowdown episodes had been relatively short-lived and that the magnitude of the current slowdown compared to the previous ones – though stronger than expected – had been so far relatively shallow. Few Council members claimed that the steady improvement in the external environment of the Polish economy, assumed for the coming years in the NBP November projection and in external forecasts, would support a gradual recovery in Polish foreign trade, and consequently a gradual recovery in the domestic economic growth.

While discussing current inflation developments, it was emphasized that price growth continued on a downward trend. Yet, annual inflation remained above the upper limit of deviation from the NBP inflation target. It was pointed out that the elevated annual inflation was driven largely by factors beyond the direct impact of the domestic monetary policy. These developments are accompanied by weakening domestic demand pressure, as indicated by declining core inflation.

While referring to the inflation outlook against the background of the NBP November projection, the majority of the Council members stressed that the projection confirmed a significant decline of risk that the coming quarters would bring intensification of demand pressure. At the same time, the risk of inflation falling below the target over the medium term has increased. In line with the November projection, modest economic growth and deteriorating labour market conditions will support a decline in inflation. According to the majority of the Council members, weakening economic growth along with decreasing wage pressure and employment, substantially reduce the risk of second round effects and

should be conducive to a marked fall in inflation in the coming quarters, even despite still elevated commodity prices. Some Council members argued that although changes in prices of commodities, including energy commodities, remain a significant risk factor for global price stability, the recent information on annexation of the Yamal contract reducing the import prices for natural gas to Poland, allows to expect lower energy price growth in Poland.

The majority of the Council members argued that the growth of prices for consumer goods and services over the monetary policy horizon might run below the inflation target, albeit above the November projection path. Some of these Council members assessed that deceleration of unit labour costs could be milder than assumed in the projection, which might reduce the decline in inflation. According to these Council members, higher growth of unit labour costs relative to the path anticipated in the projection will result from lower labour productivity growth than accounted for in the projection and stronger increase in NAWRU due to hysteresis. Those Council members also noted that in the face of the fiscal imbalance it could not be ruled out that the VAT rate will be left unchanged at 23% in 2014.

According to some Council members, food and energy price growth is particularly likely to run above the November projection path. Few of those Council members were of the opinion that, apart from considerable volatility of global food and energy prices, an additional source of uncertainty for inflation in Poland – larger than assumed in the projection – lies in the impact of the EU Energy and Climate Package on energy prices in Poland. In their opinion, it is equally difficult to assess the transmission of new agreements on gas import prices on domestic energy prices.

As regards current and future interest rate decisions, the majority of the Council members decided that the NBP interest rate should be decreased at the current meeting. The incoming economic data had confirmed a marked deterioration in economic conditions in Poland, while the NBP November projection pointed to a risk of a protracted economic slowdown, which will curb demand pressure and pose risk of inflation falling below the target in the medium term. Interest rate cuts will limit the scale of economic downturn, and, consequently, reduce the risk of inflation falling below the target.

However, few Council members were of the opinion that the NBP interest rates should be kept unchanged due to persistently elevated current inflation and remaining uncertainty about global energy commodity prices. Moreover, in their opinion, a decrease in interest rates may have a limited impact on lending amid still tight lending conditions in the banking sector. They also pointed out that a decrease in interest rates could discourage household savings in the banking system. Yet, those Council members did not rule out decreases in the interest rates at subsequent meetings of the Council might be justified, should the impact of the economic slowdown on inflation be more pronounced and the likelihood of further increases in energy prices fall.

A motion to lower the NBP interest rates by 0.50 percentage point was submitted at the meeting. The motion did not pass. A motion was also submitted to lower the basic NBP interest rates by 0.25 percentage point. The motion was passed. The Council decided to lower the basic interest rates to the following levels: reference rate to 4.50%, lombard rate to 6.00%, deposit rate to 3.00%, rediscount rate to 4.75%.

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

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

While analysing the external conditions, the Council observed that the persistently unfavourable economic climate in the external environment of Poland has an adverse impact on domestic economic activity. At the same time, the Council members pointed to the scale of fiscal tightening in the United States in 2013 as a factor posing uncertainty to the global economic growth in the nearest term. However, some Council members emphasised that in the second half of 2013 GDP growth may accelerate somewhat in Western European economies, including Germany, Poland's main trading partner. Also, a few Council members drew attention to the structural adjustments in the peripheral economies of the euro area, which in the longer term should contribute to higher growth in these countries and bring an improvement in the economic situation of the entire euro area.

While addressing economic conditions in Poland, a further slowdown in the economy was pointed out, confirmed by the 2012 Q3 GDP data. It was emphasised that the slowdown is driven not only by external but also domestic factors. While analysing factors behind the decline in domestic demand in 2012 Q3, the Council members highlighted a decrease in investment and consumption growth deceleration. They observed that household consumption is adversely affected by a decline in real disposable income. As households strive to smooth consumption, it is accompanied by savings rate declining to its historical low. It was pointed out that a decrease in disposable income is in particular related to deteriorating labour market conditions.

While analysing the incoming labour market data, it was pointed out that wage growth decelerated in 2012 Q3, which was accompanied by a further decrease in unit labour costs growth rate. At the same time, some Council members argued that the rising unemployment rate does not indicate a risk of higher wage demands. A few Council members argued that higher unemployment rate may be partially linked to rising equilibrium unemployment rate, which, in their opinion, is suggested by the growth in the number of vacancies and rising employee recruitment costs.

With reference to the outlook for economic growth in Poland, the Council members pointed out that GDP growth will remain weak in the subsequent quarters. Consumption will continue to be hampered, in particular, by deteriorating labour market conditions. Another factor negatively affecting consumption is households' limited capacity to increase consumption through further reduction in the savings rate. In the opinion of the Council, investment growth in the subsequent quarters will continue to be negative, as indicated, in particular, by further decline in the cost estimate value of newly launched investment projects. It was pointed out that declining public investment, including projects co-financed with EU funds, will remain a factor dampening investment. A few Council members observed that the scale of decline in investment may be curbed by the "Polish Investment" government programme, whose effects, however, will be noticeable in the second half of 2013 at the earliest. At the same time it was anticipated that economic growth will continue to be driven by net exports. Yet, in this context, future demand from the euro area and the zloty exchange rate developments constitute a risk factor. Some Council members argued that as the economic conditions abroad are expected to improve, economic growth in Poland may also accelerate in the second half of 2013. Other Council

members observed, in turn, that despite possible economic climate improvement in Poland in the second half of 2013, current data indicate considerable weakening in economic activity and rising risk of recession.

According to some Council members, the observed slowdown in GDP growth partially reflects a decline in potential economic growth due to the fact that factors hitherto enhancing competitiveness of the Polish economy are on the wane. Therefore, these Council members were of the opinion that the negative output gap in the Polish economy may be moderate. Yet, other Council members indicated that potential GDP growth may have declined only slightly in the aftermath of the crisis, and consequently, given the current GDP growth rate, the output gap in the economy is widening.

While addressing inflation developments, the Council members drew attention to the fact that both CPI and core inflation has recently declined. A downward revision in households' inflation expectations was also emphasised. At the same time, the majority of the Council members expressed an opinion that the subsequent quarters will see a considerable decline in inflation. According to the Council members, lower inflation will be supported by supply factors, including cuts in the prices of natural gas as of January 2013, as well as the widening output gap and the lack of wage pressure in the economy. At the same time, some Council members pointed to uncertainty about future inflation developments. The uncertainty is related, in particular, to the developments in the zloty exchange rate which is affected by investors' volatile sentiment. These factors may lead to a reversal in capital flows and increased volatility of the zloty exchange rate. At the same time, a few Council members pointed to the risk related to the strongly expansionary monetary policy of major central banks, which may eventually result in inflation rising significantly across the global economy.

Yet, some Council members presented the opinion that given the persistence of the factors hitherto increasing inflation, inflation is unlikely to decline significantly in the nearest years. In this context, some Council members pointed out that decline in inflation expected in the subsequent quarters will be driven by supply factors and hence will not have any significant impact on wage and inflationary pressures in the economy. These members also pointed to a possible acceleration in economic growth in the second half of 2013, which may somewhat increase inflationary pressure.

It was assessed that the NBP interest rates should be lowered at the current meeting, which should support economic activity and reduce the risk of inflation falling below the target in the medium term. The Council members differed in their opinions as to the scale of the NBP interest rate cuts, both at the current meeting and during the entire cycle.

Most Council members pointed out that given the persistence of inflation and the risks related to price growth within the horizon of the strongest monetary policy impact, the reduction in the NBP interest rates should not be significant. A few of these members additionally indicated that interest rate cuts may weaken the zloty exchange rate, and thus negatively affect inflation, as well as prompt households to deposit savings outside the banking system. At the same time, a few Council members argued that deep interest rate cuts may bring further decline in the savings rate, thus contributing to building imbalances in the economy.

Other Council members, in turn, considered that in the current economic conditions, even a somewhat deeper interest rate reduction would not lead to inflationary and wage pressure in the subsequent quarters. In the opinion of those Council members, considering the degree of economic downturn and

growing risk of inflation falling below the NBP's inflation target in the coming quarters, it was advisable at the current meeting to reduce the NBP interest rates more than previously, and according to a few Council members – far more than previously. Those members observed that the arguments in favour of a relatively prompt monetary policy easing include, in particular, the length of lags in the monetary policy transmission mechanism. In the opinion of those Council members, when making decisions concerning interest rates in Poland it was also necessary to consider the level of interest rates across the world, including in the main developed economies.

At the meeting, a motion was submitted to lower the basic NBP interest rates by 1.50 percentage point. The motion did not pass. A motion was also submitted to lower the basic NBP interest rates by 0.50 percentage point. The motion did not pass. At the meeting, a motion was also submitted to lower the basic NBP interest rates by 0.25 percentage point. The motion was passed. The Council decided to lower the basic interest rates by 0.25 percentage point, to the following levels: reference rate at 4.25%, lombard rate at 5.75%, deposit rate at 2.75%, rediscount rate at 4.50%.

Minutes of the Monetary Policy Council decision-making meeting held on 9 January 2013

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

While analysing the external conditions, it was pointed out that the global economic conditions remained weak. Yet, the uncertainty about the short-term global economic outlook had abated, mainly due to a partial agreement on the scale of fiscal tightening in 2013 in the US, development of institutional reforms in the euro area and further monetary policy easing by main central banks. These factors had also contributed to an improvement in financial market sentiment. At the same time, attention was drawn to protracted recession and continued fiscal tightening in a majority of the euro area member states. It was also indicated that the attempts to reduce general government sector imbalances might curb GDP growth and trigger a further rise in the unemployment rate in some euro area countries in the short term. A few members of the Council argued, however, that in 2013 Germany, Poland's main trading partner, was likely to experience higher GDP growth compared with other euro area countries. Yet, other Council members judged that although some improvement in the global economic conditions might be expected in the coming quarters, economic growth abroad would remain relatively weak.

While addressing economic conditions in Poland, the Council members agreed that the incoming data confirmed further weakening in economic activity in 2012 Q4. It was emphasised that the slowdown was driven by both external and internal factors. It was pointed out that the economic growth in 2012 Q4 was most probably below the November projection.

In the opinion of some Council members, the incoming data, including retail sales data, suggested that the consumption growth could be close to zero in 2012 Q4. While analysing factors behind a slowdown in consumption growth, the Council members pointed to a decline in real disposable income, driven, in particular, by deteriorating labour market conditions. It was emphasised that the slowdown in consumer spending growth was accompanied with a decline in the savings rate to its historical low.

While addressing investment activity, the opinion was expressed that investment growth had probably remained negative in 2012 Q4. Attention was drawn to considerable cuts in public investment expenditure, in particular of local governments, at the end of 2012, related to the necessity of reduction in fiscal imbalances. As regards corporate investment, a few Council members pointed out that in the previous years, strong investment growth had been supported by excessively optimistic sentiment in corporate sector and EU funds inflow.

While discussing the recent developments in the banking sector, a few Council members pointed to still tight lending conditions and slowing deposit growth. Against this background, they also indicated that, following interest rate cuts by the NBP at the previous Council meetings, the interest on deposits fell significantly stronger compared with the interest on loans.

While addressing the Polish economic outlook, the Council members pointed out that GDP growth would stay low in the coming quarters. Consumption would be still adversely affected with slow growth in disposable income of households, driven by the deteriorating labour market conditions, and a higher effective personal income tax rate as of 2013. As regards the labour market conditions, some Council members expected further deterioration, which would be likely reflected in a further rise in the unemployment rate. A few Council members pointed out that the rise in the disability pension contribution in 2012 and a relatively high relation between the minimum and the average wage might dampen the labour demand. Moreover, consumption will be adversely affected with limited room for a further decline in savings rate. While analysing the investment outlook, the Council members assessed that, in particular, a further decline in the estimated value of newly launched investment projects suggested that the investment growth would stay negative in the coming quarters. It was pointed out that a decline in investments of central government and of local governments co-financed with the EU funds would also be conducive to a fall in investment expenditure. At the same time, it was assessed that economic growth would further be supported mainly by net exports. Therefore, demand prospects in the euro area posed a risk to Polish economic outlook. Some Council members were of the opinion that economic growth in Poland might increase along with the likely rebound in economic activity abroad in the second half of 2013.

While addressing inflation developments in the Polish economy, the Council members pointed out that the CPI inflation had declined notably in recent months and had been close to the NBP target in November. It was emphasised that the decline in CPI inflation had been largely driven by slower growth in the commodity prices, including food and energy, which previously had contributed to faster price growth. Core inflation had also declined, indicating no demand pressure. Against this background, attention was paid to a downward revision in inflation expectations of both households and corporates. At the same time, the majority of the Council members believed that in the coming months inflation would decline further and then stabilize below the inflation target for at least one year. In the opinion of the Council members, the decline in inflation would be driven by both decreases in energy prices as of January 2013, negative output gap and lack of wage pressure in the economy. At the same time, some Council members pointed at uncertainty about inflation developments in the longer term. This uncertainty was driven, in particular, by possible considerable changes in commodity prices in the global markets as well as in utility prices. Moreover, a few Council members pointed out that although in 2013 a further decline in core inflation could be expected, it would probably stay elevated considering this business cycle stage.

While discussing the NBP interest rates, as at previous meetings, it was assessed that at the current meeting the NBP interest rates should continue to be lowered, which should support economic activity and reduce the risk of inflation falling below the target in the medium term. Yet, the Council members differed in their opinion as to the scale of cuts in NBP interest rate, both at the present meeting and during the entire cycle.

The majority of the Council members indicated that the incoming data – confirming the previously anticipated decline in inflation and protracted economic slowdown – did not justify a greater scale of cuts in the NBP interest rates at the current meeting. In the opinion of these Council members, also the risks related to growth in prices, in particular for commodities, advocated for maintaining the current scale of interest rate cuts. A few Council members also indicated that a sharp decrease in interest rates might lead to further decline in the propensity to save.

On the other hand, in the opinion of a few Council members, as the inflation was likely to stay below the NBP inflation target in the coming quarters, the NBP interest rates should be lowered more – or even far more – at the current meeting. These members pointed out that in particular the length of lags in the transmission mechanism would justify a relatively prompt monetary policy easing.

While referring to future decisions, the majority of the Council members did not rule out further monetary policy easing, should the incoming data, including the 2012 GDP data, confirm a protracted economic slowdown and should the risk of increase in inflationary pressure remain limited. In turn, other Council members declared that the already effected interest rate cuts were sufficient to limit the risk of inflation running significantly below the target in the medium term, and that the impact of potential further cuts in the NBP rates on economic activity would be small. At the same time, in the opinion of a few of these Council members, further monetary policy easing could, in the longer term, trigger a growth in imbalances in the Polish economy.

At the meeting, a motion was submitted to lower the NBP basic interest rates by 1.25 percentage points. The motion did not pass. A motion was also submitted to lower the NBP basic interest rates by 0.50 percentage points. The motion did not pass. At the meeting, a motion was also submitted to lower the NBP basic interest rates by 0.25 percentage points. The motion passed. The Council decided to decrease the NBP basic interest rates by 0.25 percentage points to the following levels: reference rate to 4.00%, lombard rate to 5.50%, deposit rate to 2.50% and rediscount rate to 4.25%.

Minutes of the Monetary Policy Council decision-making meeting held on 6 February 2013

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

While analysing the external conditions, it was emphasised that the global economic activity remained weak as suggested, in particular, by lower GDP growth in the United States in 2012 Q4 and persisting recession in the euro area. At the same time, attention was paid to a slight improvement in some economic indicators in major developed economies. Some Council members stressed that factors contributing to volatility of sentiment in the financial markets as well as sentiment of households and corporations had not come to an end.

While analysing the outlook for external business conditions, a few Council members pointed to a further downward revision in the outlook for GDP growth in 2013 in countries being Poland's main trading partners, i.e. the euro area countries, including Germany. Other Council members pointed out that although the global economic activity would probably remain relatively low in the coming quarters, it was expected to show a gradual improvement in the second half of 2013. Considering the significant role of net exports in domestic GDP growth in the recent quarters, some Council members assessed that external economic developments in 2013 might have a stronger impact on economic activity in Poland than during the 2009 slowdown.

While analysing the data on economic growth in Poland in 2012 Q4 (implied from the 2012 preliminary GDP estimate), Council members pointed to a further weakening of domestic demand, driven, in particular, by lower consumption demand and further decline in investment. At the same time, some Council members stressed that during the previously observed periods of economic downturn, consumption had always been a factor supporting economic growth and thus the currently observed weakening in consumption might signal stronger weakening in domestic demand in the coming quarters, especially considering the unfavourable outlook for corporate investment and poor prospects for public investment growth. Other Council members assessed that the fundamentals of the Polish economy are still sound which was suggested by the absence of any major macroeconomic imbalances. Moreover, a few Council members argued that according to the currently available short-term forecasts, some GDP growth acceleration could be expected in the coming quarters.

When referring to consumption decline, some Council members pointed out that it was largely driven by worsening situation in the labour market, including low wage growth and intensified concerns about job loss amidst heightened unemployment. Declining consumption was also partly related to the deceleration in lending to households. A few Council members argued that low credit to GDP ratio in Poland as compared to other EU Member States suggested that the role of lending in supporting consumer demand was limited. At the same time, they pointed out that in the Central and Eastern European countries, where inflow of domestic savings to the banking system had been limited, diminished role of foreign capital as a source of lending had translated into deeper deceleration in credit growth. Those Council members indicated that in 2012 the growth in households' bank deposits in Poland had run considerably below its 2011 level which might have affected banks' lending policy. Some Council members assessed that supervisory measures and shrinking demand for lending from the private sector might have been of more importance for the lending volume.

While discussing developments in households' deposits in 2012, some Council members pointed out that although their lower growth had been, to certain extent, driven by larger inflows of capital to investment funds, this was also indicative of households' lower propensity to save especially amidst cuts in interest rates on deposits at the end of 2012. Other Council members were of the opinion that households' propensity to save was currently more determined by business conditions, with low propensity to save being typical of an economic slowdown, while interest rates on deposits had rather a limited impact.

Referring to investment activity, some Council members assessed that there were no signs that could point to any considerable growth in corporate investment which, combined with falling public investment, might translate into continued decline in this component of domestic demand. Yet, a few Council members emphasised that the decline in investment observed in 2012 Q4 was slightly weaker

than in 2012 Q3 and according to available short-term forecasts, also in 2013 investment growth, although likely to remain negative, would be on the rise.

Council members also discussed the impact of fiscal policy on economic activity in 2013. Some Council members pointed out that further decline in public investment would dampen economic growth in the short term. Other Council members indicated, however, that the decline in public investment would be accompanied by growth in public consumption (also due to automatic stabilizers), and consequently, fiscal policy would not be a factor considerably dampening GDP growth.

While analysing inflation developments, the Council members pointed to further decline in CPI inflation which went down to 2.4% in December 2012, i.e. to the level consistent with the NBP inflation target of 2.5%. Also core inflation measures continued on a downward trend and the producer price index remained negative which, in the Council's opinion, was indicative of lack of wage and cost pressure in the economy. Decreasing inflation was accompanied by declining household inflation expectations. Some Council members pointed out that in the coming months inflation might decline to a level close to the lower limit of deviations from the inflation target and, considering that economic activity may continue to be weak in the coming quarters, there was a risk of inflation remaining below the target in the medium term. Other Council members stressed that the currently observed decline in inflation was largely the result of falling growth in energy and food prices which hit one of the lowest levels in years. Those Council members argued that particularly in the case of energy prices affected by global commodity prices, the decline might be a temporary phenomenon.

While discussing the NBP interest rates, the majority of the Council members assessed, as at previous meetings, that at the current meeting the NBP interest rates should continue to be lowered, which should support economic activity and consequently reduce the risk of inflation remaining below the target in the medium term. Yet, those Council members differed in their opinions as to the scale of cuts in the NBP interest rates, both at the current meeting and during the entire current cycle.

As at the January meeting, the majority of the Council members assessed that the incoming data – confirming the previously anticipated decline in inflation and significant economic slowdown – did not justify a greater scale of cuts in the NBP interest rates at the current meeting. In the opinion of a few Council members, concerns that too sharp decrease in interest rate could further undermine propensity to save in the banking sector speaks for maintaining the current scale of interest rate cuts.

In the opinion of some Council members, as there was a risk of inflation running below the NBP inflation target already in the coming quarters, the NBP interest rates should be lowered more – or even far more – at the current meeting. Those members pointed out that in particular the length of lags in the transmission mechanism would justify a relatively prompt monetary policy easing. Those Council members stressed also the relatively high level of real interest rates in Poland in comparison with the major developed economies.

Yet, a few Council members assessed that the current interest rate level was relatively low as compared to the previous periods of economic downturns and further monetary policy easing was not justified. Those members also argued that excessive interest rate cuts would be a factor lowering the incentives to strengthen supply side of the Polish economy, which considering the depth of the current adjustments in some EU countries, including adjustments related to unit labour costs, would have an adverse consequences for GDP growth in the longer run.

While referring to future decisions, the majority of the Council members was of the opinion that the assessment whether it was justified to continue monetary policy easing would depend on the analysis of the incoming data on economic developments and inflationary pressure, including the results of the March macroeconomic projection of the NBP. A few Council members indicated that considering the already implemented monetary policy easing as well as expected gradual improvement in business conditions in the second half of 2013, the current cycle of NBP interest rate cuts might be approaching a pause or an end.

At the meeting, a motion was submitted to lower the NBP basic interest rate by 1.0 percentage point. The motion did not pass. A motion was also submitted to lower the NBP basic interest rate by 0.5 percentage points. The motion did not pass. At the meeting, a motion was also submitted to lower the NBP basic interest rate by 0.25 percentage points. The motion passed. The Council decided to decrease the NBP basic interest rates by 0.25 percentage points to the following levels: reference rate to 3.75%, lombard rate to 5.25%, deposit rate to 2.25% and rediscount rate to 4.00%.

Information from the meeting of the Monetary Policy Council held on 5-6 March 2013

The Council decided to decrease the NBP interest rates by 0.50 percentage points: reference rate to 3.25% on an annual basis, lombard rate to 4.75% on an annual basis, deposit rate to 1.75% on an annual basis, rediscount rate to 3.50% on an annual basis.

Incoming data show that the global economic activity remains low. In 2012 Q4, economic growth in the United States came to a halt, while the euro area remained in recession. GDP declined in all major euro area economies, including Germany. At the same time, economic growth in some major emerging economies probably accelerated. In recent months, economic activity in several developed economies showed some signs of improvement.

In Poland, the GDP data confirmed that in 2012 Q4 there was a marked economic slowdown. Weakening consumer demand was accompanied by slower decline in investment. Economic growth continued to be supported by a positive, albeit somehow lower than in the previous quarter, contribution of net exports.

Incoming data point to still low economic growth in early 2013. Weak economic activity growth is accompanied by falling employment in the corporate sector and rising unemployment, which holds back wage growth. At the same time, both household and corporate lending growth remains subdued.

In January, CPI inflation declined more than expected. According to the preliminary data, CPI inflation was 1.7% y/y, running below the NBP inflation target of 2.5%. Also core inflation remained low, which confirms limited demand pressure in the economy. At the same time, household inflation expectations decreased further.

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

In line with the March projection based on the NECMOD model – assuming unchanged NBP interest rates – there is a 50-percent probability of inflation running in the range of 1.3-1.9% in 2013 (as compared to 1.8-3.1% in the November projection), within 0.8-2.4% in 2014 (as against 0.7-2.4%) and

between 0.7-2.4% in 2015. The annual GDP growth – in line with this projection – will be, with a 50-percent probability, contained within 0.6-2.0% in 2013 (as compared to 0.5-2.5% in the November projection), within 1.4-3.7% in 2014 (as against 1.1-3.5%) and within 1.9-4.4% in 2015.

In the opinion of the Council, incoming data confirm persistently low economic growth in Poland, no wage pressure and low inflationary pressure. Economic activity may gradually improve in the coming quarters. However, GDP growth will probably remain moderate, which will continue to contain inflationary pressure. Such an assessment is supported by the March projection of inflation and GDP.

Considering the risk of inflation running below the NBP inflation target in the medium term, the Council decided to lower the NBP interest rates further. The March decision complements the monetary policy easing cycle commenced in November 2012.

In the opinion of the Council, considerable monetary policy easing in recent months and at the March meeting will allow inflation to run close to target in the medium term and at the same time supports recovery of the Polish economy.

The Council adopted the *Inflation Report – March 2013*.

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 NECMOD⁸⁸, the projection was prepared as the outcome of an iterative process, in the course of which the paths of some variables were adjusted if they diverged from NBP experts' economic intuition based on their knowledge of economic processes. The Management Board of the NBP approved the projection to be submitted to the Monetary Policy Council. The projection constitutes one of the inputs to the Monetary Policy Council's decision making process concerning NBP interest rates.

The March projection based on the NECMOD model covers the period from 2013 Q1 to 2015 Q4. The starting point for the projection is 2012 Q4. The projection does not take into account the MPC decision of decreasing interest rates by 0.5 percentage points on 6 March 2013.

⁸⁸ Current version of the documentation of the model is available at the NBP website.

4.1. Summary

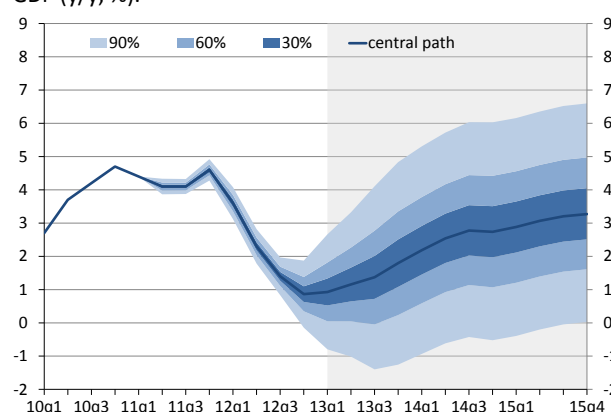
According to the current estimates by the GUS, GDP growth in 2012 in Poland slowed down to 2.0% from 4.3% in 2011, which suggests earlier than expected onset of the economic slowdown scenario outlined in the previous *Projection of inflation and GDP*. This downturn is largely driven by unfavourable developments in the external environment of the Polish economy. Euro area, with debt problems and loss of competitive advantage of some member countries, since 2011 Q4 is in recession again.

Economic slowdown abroad has been accompanied by the gradually fading impact of positive factors supporting domestic economic growth at a relatively high level until 2012 Q1. As 2015 is the end date for settlements under the current EU financial framework, growth in the EU funds absorption and related public investments is on a gradual decline. At the same time, with global trade weakening, so far relatively favourable situation in the German economy, being of the main Polish trading partner, has deteriorated. In view of the anticipated decline in inflation and adoption of a constant NBP reference rate assumption, domestic real interest rates will rise in the years 2013-2015. Moreover, in the short-term projection horizon, it is expected that fiscal policy tightening will have a negative impact on economic growth. Consumption growth will remain at a historically low level over the projection horizon due to gradually rising unemployment, decreasing growth in disposable income and inability to finance consumption at the expense of falling savings rate.

As a result of the above mentioned factors, economic growth in Poland in 2013 will be further dampened to the level of 1.3%. In the longer projection horizon, along with improving situation abroad and the inflow of EU funds

Figure 4.1

GDP (y/y, %).



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

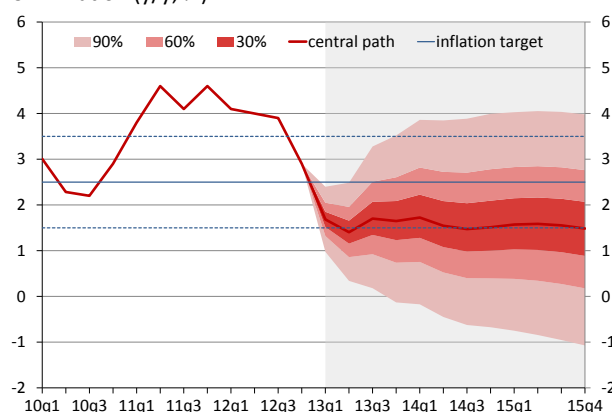
under the newly agreed EU financial strategy for 2014-2020, GDP growth will accelerate to exceed potential GDP growth in 2015. As a result, the output gap will narrow somewhat, still remaining negative at -1.4% of potential GDP in 2015 Q4.

In the projection horizon, inflation will see a sustainable decline remaining at the level close to 1.5% (Figure 4.2). Inflationary pressure will ease as a result of slowdown in domestic economy growth which – by curbing demand pressure – will adversely impact the labour market, and, as a consequence, will drag down growth in unit labour costs. Negative impact will be also exerted by dying out unfavourable price shocks which supported high food and energy prices also in 2012. In the projection horizon, prices of crude oil and agricultural commodities in the global markets are expected to decline, which will be supported by weak global economy outlook and forecasted growth in the supply of those commodities. Fall in inflation in 2013 will also be driven by decreases in natural gas prices for households, the effect of renegotiations of the Jamal contract between PGNiG and Gazprom. In 2014, another factor putting downward pressure on inflation will be lowering VAT rate to the 2010 level.

Uncertainty surrounding inflation and GDP forecast is mainly related to possible developments in the euro area and the ensuing trends in exchange rate of the Polish zloty as well as the scale of future changes in fiscal policy. In our assessment, the likelihood that the outlook for domestic growth deteriorates more than expected in the central projection is on a par with the probability that conditions for the domestic economy will be more favourable, which is reflected in the fan chart for this variable (Figure 4.1). In 2014, the risk of inflation running above the central path is slightly higher than the risk of inflation falling below it. This is the result of possible, aiming at reducing deficit and public sector debt, fiscal policy adjustments in the case

Figure 4.2

CPI inflation (y/y, %).



where they include an increase in effective tax rates (Figure 4.2).

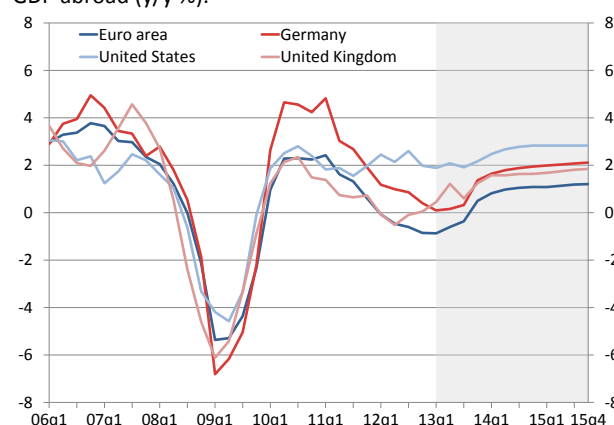
4.2. External environment

Following the global economic downturn, the years 2014-2015 are expected to bring gradual improvement in the world economy. Global GDP growth, and in particular in the emerging economies, will be lower than before the onset of the global financial crisis. This translates into relatively stable prices of commodities and moderate inflationary pressure in the global markets. As a result, it is assumed that interest rates in countries being Poland's main trading partners will remain low throughout the projection horizon.

In the current forecasting round, the assumptions of economic GDP growth abroad⁸⁹ have been revised downwards and continue at a low level throughout the whole projection horizon (an average of 1% y/y). The euro area remains mired in recession, while positive, albeit low economic growth is expected as late as 2014, fuelled by the fading negative impact of fiscal tightening and a gradual recovery in the emerging economies (Figure 4.3). As compared with the previous projection, the sentiment in the European financial markets has improved (see Chapter 1.3) reducing the insolvency risk of banks, enterprises and governments of the euro area countries, which spurred capital inflow to the euro area peripheral countries (see Box 1) and reduced the likelihood of the euro area collapse. Nevertheless, the euro area growth forecast has been revised downwards due to the labour market situation, further fiscal tightening, persistently negative consumer sentiment as well as low level of production capacity utilization (see Chapter 1.1). Additionally, the German economy, being Poland's main trading partner, is especially

Figure 4.3

GDP abroad (y/y %).



⁸⁹ In the NECMOD model, the external sector is represented by four economies (with their respective weights): Germany (43%), the euro area with Germany excluded (43%), Great Britain (8%) and the United States (6%).

strongly affected by global trade weakening. The outlook for the US economy is more favourable – GDP growth in the United States is expected to reach an average of 2.5% y/y (the level close to the previous projection). Such developments in the US economy are indicated by falling unemployment rate, positive industrial production growth and improving situation in the real estate market (see Chapter 1.1).

Gradually increasing supply of energy commodities combined with concurrent moderate rise in demand will help to reduce imbalances in this market. This should contribute to stabilization of energy commodity prices at a level close to the one expected in the previous projection (Figure 4.4). In particular, considering the outlook for oil production growth in non-OPEC countries (including the United States) crude oil prices will follow a gradual downward trend. Oil prices determine, to the largest extent, the level of domestic energy prices in the short-term as crude oil prices translate rapidly into fuel prices (in contrast to the regulated gas and electricity markets, where consumer prices react to changes in hard coal and natural gas prices in the global markets with a certain time lag).

Decline in agricultural commodities prices in the short term, being stronger than assumed in the November projection, is primarily the result of elimination of negative supply conditions in the cereals market observed in the second half of 2012 (among other things, drought in the United States, see Chapter 1.4). In the long term projection horizon, due to moderate demand pressure in the global markets and assumption of average agro-meteorological conditions, persisting, yet limited fall in agricultural commodity prices is expected (Figure 4.4).

Moderate business conditions abroad and relatively stable commodity prices over the projection horizon should support low inflation in the euro area and the United States (Figure 4.5). Considering the forecasts of both sluggish

Figure 4.4

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

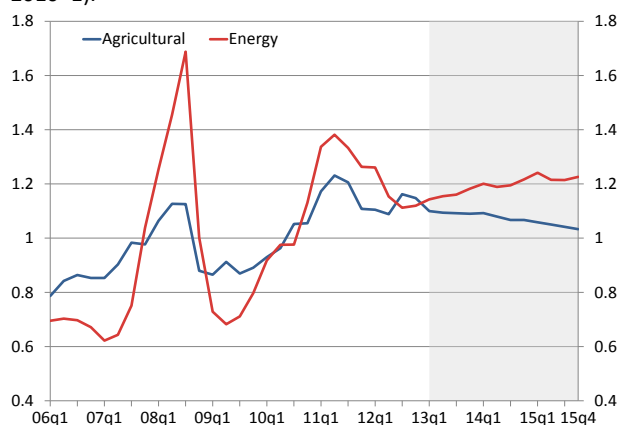
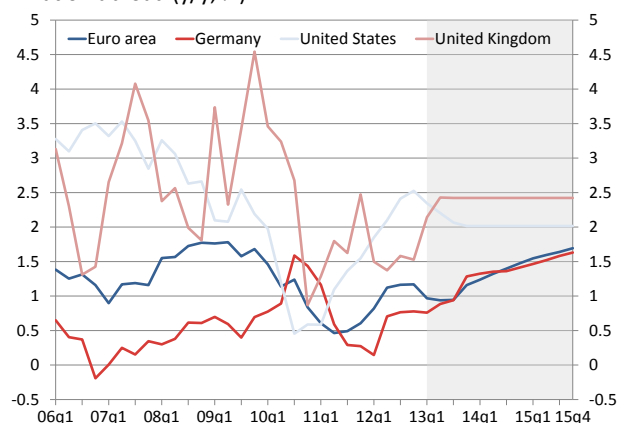


Figure 4.5

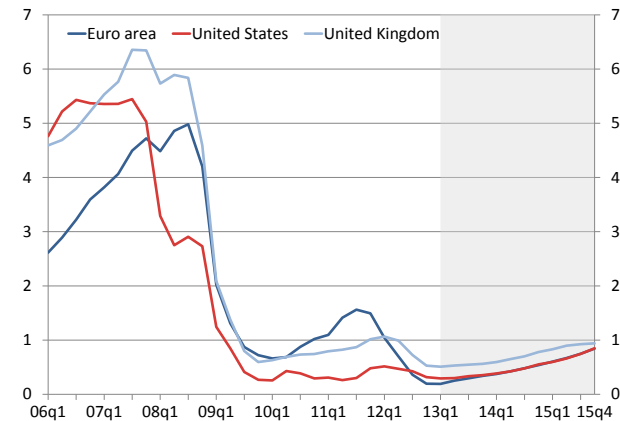
Inflation abroad (y/y, %).



economic growth and low inflation in the euro area, it is assumed that, similarly to the November projection, the ECB will maintain the current interest rate level, with the possibility of interest rate hikes as late as the second half of 2014 (Figure 4.6). The interest rate path in the United States is also at the level close to the previous projection. The unemployment rate is not expected to fall below 6.5% before the end of 2014 which means that, as declared by the Fed, monetary policy will continue to be accommodative and, as a result, interest rates will remain unchanged in this period (see Chapter 1.3). Economic growth prospects in the euro area lower than in the United States suggest likely weakening of the euro against the US dollar to the average level of 1.26 in the years 2013-2014, and then slight appreciation along with stabilization in the euro area.

Figure 4.6

Interest rate abroad (%).



4.3. Polish economy in the years 2013-2015

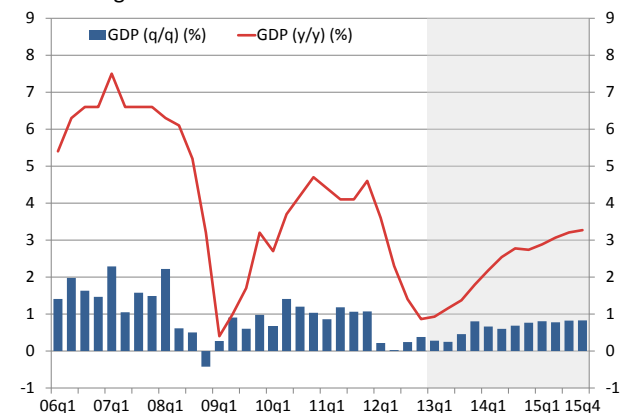
Aggregate demand

Current projection indicates that downturn in the Polish economy was deepest at the turn of 2012 and 2013. GDP growth plummeted below 1% - the level comparable with that observed in the first half of 2009 (Figure 4.7). Since the second half of 2013, year-on-year GDP growth will follow gradual upward trend, yet will remain below the potential growth level until 2014 Q2.

The factors behind weak GDP growth in 2013 include unfavourable economic situation abroad, in particular, in the euro area and falling household consumption (driven by worsening labour market situation) which cannot be sustained at the expense of reduction in savings. Fiscal tightening and limited public investment financed with EU structural funds also deepen the slowdown. Amidst negative gross fixed capital formation in the corporate sector and close-to-

Figure 4.7

Economic growth.



zero contribution of inventories to GDP, net exports will be in 2013 the factor easing the scale of GDP downturn.

In the years 2014-2015, amidst moderate improvement in business conditions abroad, growth in domestic demand will accelerate, yet, will remain lower than during the 2010-2011 rebound. It will be supported by gradually rising consumption and investment of corporates as well as alleviation of fiscal policy tightening along with slow rebuild of inventories. In 2015, GDP growth will edge up to 3.1%, which will be additionally fuelled by growing inflow of funds under the new EU financial framework for the years 2014-2020.

Over the short-term projection horizon, private consumption growth will remain close to zero (Figure 4.9) as a result of weak growth in disposable income of households. Also domestic real interest rates will increase in line with the adopted assumption of a constant NBP reference rate. Households' disposable income will be adversely affected by deteriorating situation in the labour market, reflected in lower wage growth and falling employment, and also, to a certain extent, in declining income from dividends and bank deposits. Yet, growth in disposable income in real terms will remain positive due to falling inflation. As a result of consolidation measures in the public finance sector (i.a. wage freeze in the public sector in the years 2012-2013 and fiscal rules currently in effect), it is expected that in 2013 public consumption growth will, despite its rise, remain significantly below its long-term average.

The years 2014-2015 will bring gradual rise in private consumption following increase in real wages and decelerating unemployment growth which will have a positive effect on disposable income. When the previously implemented wage freeze in the government sector is lifted, as assumed in the projection, public consumption

Figure 4.8

GDP growth (y/y, %) – breakdown.

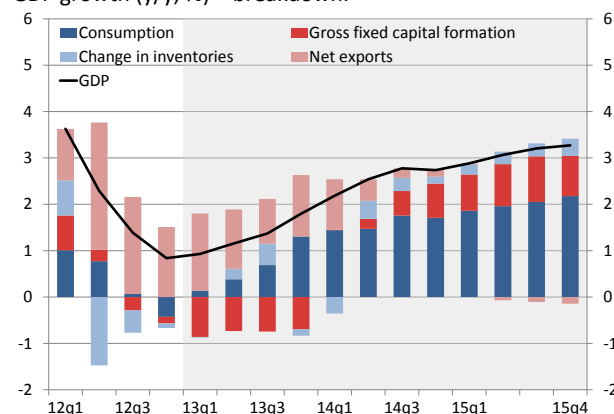
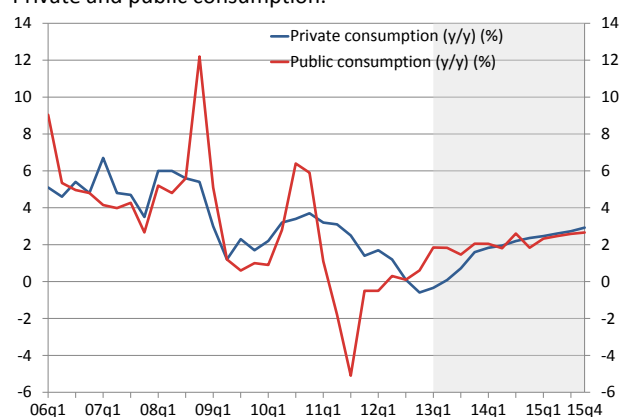


Figure 4.9

Private and public consumption.



will grow moderately over the long projection horizon.

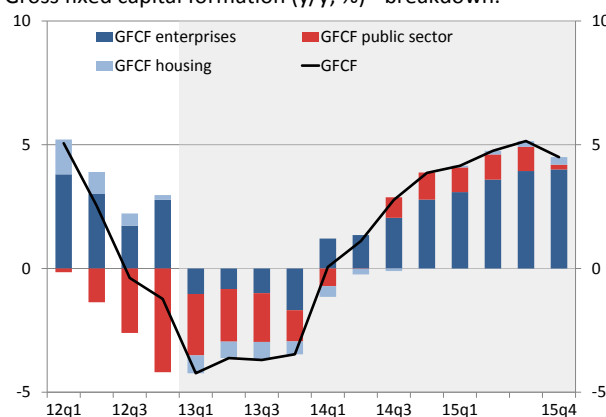
Growth in gross fixed capital formation will remain negative in the entire 2013. This will be driven by slowdown in all components of the aggregate: corporate and public as well as housing investment (Figure 4.10). However, as a result of improving business conditions, corporate investment will begin to recover in 2014 Q1, and also, over the longer horizon, in residential investment. 2015 will, in turn, bring rebound in public investment financed with EU structural funds as their absorption will rise.

In 2013, the persistently unfavourable situation in the euro area and slowdown in the domestic economy will bring about decline in corporate investment. Realization of this scenario is supported by deteriorating situation of corporates and the observed cuts in new and replacement investment.⁹⁰ In the years 2014-2015, along with economic recovery abroad and persistently high absorption of EU funds used to finance private sector capital expenditure, corporate investment will start to rebound. Corporate investment growth will be further fuelled by growing replacement investment (necessary due to amortization of capital) and the currently observed, relatively high level of production capacity utilization, close to its long-term average⁹¹.

Over the short-term horizon of the projection, the ratio of public investment to GDP will plunge. This is caused, among others, by falling absorption of EU structural funds used to finance investments of the public finance sector under the *National Cohesion Strategy 2007-2013* which ends in 2015. Furthermore, local government units will be reducing its investment in the coming years, due to the fiscal rules adopted at

Figure 4.10

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



⁹⁰ See. *Financial situation of the corporate sector –2012 Q3*, NBP; See. *Economic climate in the enterprise sector in 2012 Q4 and forecasts for 2013 Q1*, NBP.

⁹¹ See. *Economic climate in the enterprise sector in 2012 Q4 and forecasts for 2013 Q1*, NBP.

the local government level (Figure 4.11). Over the long-term projection horizon, positive growth in public investment may be expected as a result of the newly agreed EU financial framework for the years 2014-2020 and subsequent increase in the inflow of EU funds to Poland.

In the years 2013-2014, a decline may also be seen in housing investment, driven by the expectations regarding more restrictive lending policy of banks. Furthermore, deteriorating – amidst unfavourable domestic and foreign economic conditions – household sentiment limits households' propensity to incur long-term financial obligations. These factors are reflected, inter alia, in the lowest, over the past seven years, growth in mortgage debt⁹². Housing developers' investment will also be restrained, following its previous acceleration prior to the entry into effect of the *Act on the protection of home buyers' rights* in April 2012.⁹³ However, the impact of falling demand on the real estate investment will be alleviated by ratio of property prices to construction costs which reflects developers' high rate of return.⁹⁴

As a result of low economic growth abroad and weakening domestic demand, in 2013 (similarly to 2012), growth in trade volume will be close to zero amidst negative import growth and export growth sinking to its lowest level since 2009 (Figure 4.12). Falling imports are the result of their higher sensitivity to changes in the global and domestic economic conditions. Consequently, contribution of net exports to GDP growth will be significantly positive in 2013. In the years 2014-2015, along with the recovery in the economic situation abroad and rebound in domestic demand, import growth is expected to outpace export growth. Thus, contribution of net exports to GDP growth will gradually decline,

Figure 4.11

EU transfers (in bn. EUR) – breakdown.

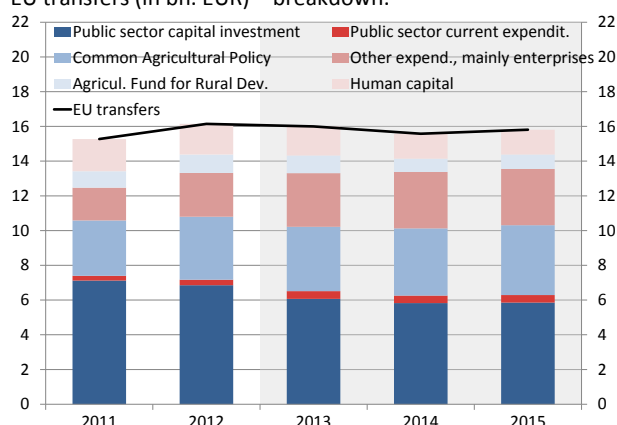
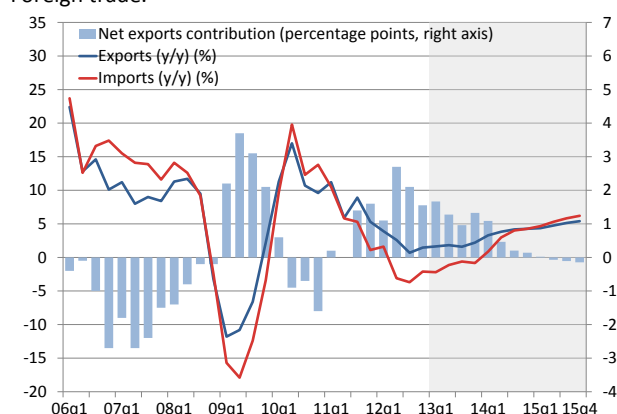


Figure 4.12

Foreign trade.



⁹² See Senior Loan Office Opinion Survey on Bank Lending Practices and Credit Conditions 2012 Q4, NBP; See Information on home prices and situation in the residential and commercial real estate market in Poland, 2012 Q3, NBP.

⁹³ See Information on home prices and situation in the residential and commercial real estate market in Poland, 2012 Q3, NBP.

⁹⁴ Ibidem.

remaining positive until the end of 2014 due to, inter alia, a relatively good situation of Germany as compared to other euro area economies.

Macroeconomic equilibrium

Potential GDP growth, which fell in the aftermath of the global financial crisis, will remain close to 3% y/y over the projection horizon and below its long-term average. Due to the slowdown in economic activity (reflected in GDP decline below its potential level), the output gap, negative since 2012 Q3, will continue to widen until 2013 Q3 to level off at -1.8% of GDP by the end of 2014. From the beginning of 2015, the output gap starts to close gradually, reaching the level of -1.4% of potential GDP growth in 2015 Q4 (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 productive capital reflecting the fall in public investment, and, to a lesser extent, corporate investment (Figure 4.14).

Decline in the long-term labour supply, resulting from the expected negative structural changes in the labour market has also slightly negative impact on potential growth over the projection horizon. The equilibrium unemployment rate (NAWRU) will be on the rise over the projection horizon as a result of the hysteresis effect. This phenomenon is reflected, among other things, in the currently observed growth in the share of long-term unemployed persons in the total number of the unemployed. This process will intensify along with the anticipated deterioration in the labour market. The equilibrium unemployment rate is also increased by higher effective labour taxation (higher pension contribution rate, freeze of personal income tax thresholds) and increase in the ratio of minimum wage to average wage. Growth in the equilibrium

Figure 4.13

Output gap.

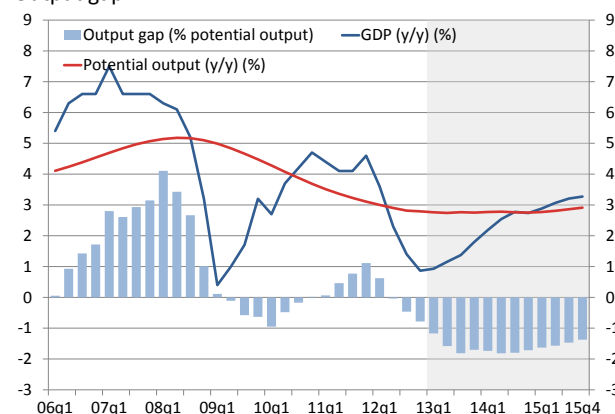
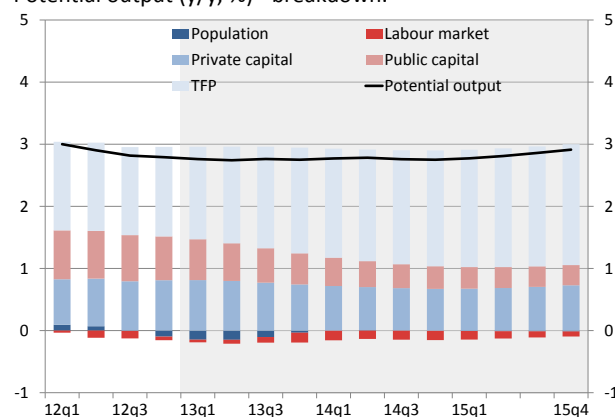


Figure 4.14

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



unemployment rate will, however, be fairly moderate due to high job elasticity in the domestic market, resulting from corporates' adjustments of variable wage components in response to weakening business conditions, and favourable role of flexible labour contracts⁹⁵.

The equilibrium labour force participation rate will be fairly stable over the projection horizon which results from negative and positive structural changes being offset against each other. Labour force participation rate will be negatively affected by deteriorating age structure in the coming years, driven by growing number of post-working age population. On the other hand, labour force participation rate will increase as a result of legal changes limiting pension eligibility before the attainment of retirement age (the so-called bridging pensions introduced in 2009) and the raise of the retirement age (as of the beginning of 2013). The total estimated impact of those changes is the rise in the number of the economically active by approx. 170 thousand persons over the projection horizon.

Weaker economic activity affects the labour market, whereas, given labour market rigidities, economic slowdown is first seen in declining wage growth, and then in falling number of working persons (Figure 4.15, Figure 4.16, Figure 4.17). The number of the employed follows a downward trend until the second half of 2015, which, amidst relatively stable labour force participation rate, translates into growing unemployment rate and widening unemployment gap (up to 1.8 p.p. at the turn of 2014 and 2015). Unemployment gap continuing at a positive and relatively high level translates into low wage pressure. Throughout the projection horizon, real wage growth will be significantly below labour productivity growth. As a result, until the end of 2015, wage fund contribution to GDP will continue to fall, whereas growth in unit labour costs will not exceed 1.5% y/y.

Figure 4.15

Employment and activity in the labour market.

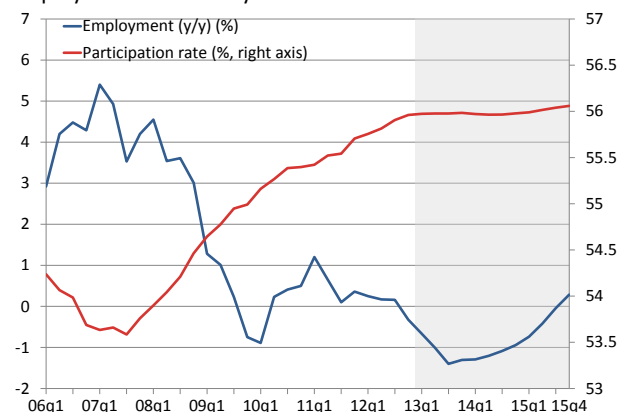


Figure 4.16

Unemployment.

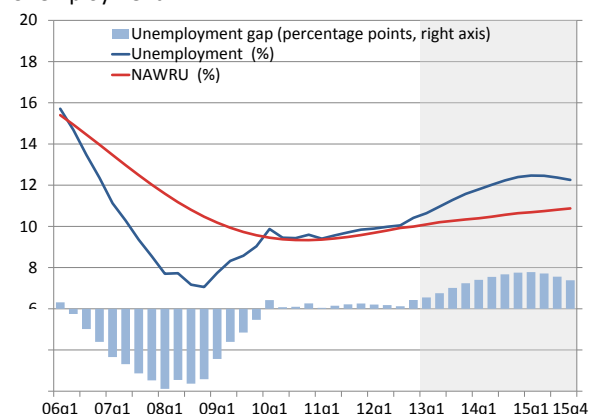
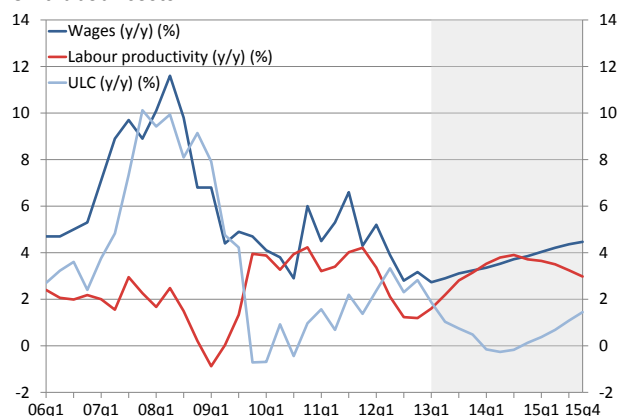


Figure 4.17

Unit labour costs.

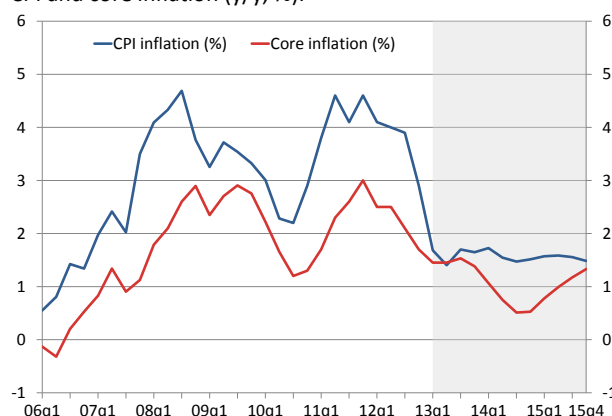


⁹⁵ See *Labour market survey – report 2012*, NBP.

Throughout the projection horizon, the continuing current account deficit will be largely offset by the inflow of EU funds. External imbalances, as measured by the ratio of current and capital account deficit to GDP, will further improve over the projection horizon (from 1.2% of GDP in 2012 to 0.9% and 0.8% of GDP in 2014 and 2015, respectively). This will be driven by improving trade balance (positive, except for 2015, contribution of net exports throughout the projection horizon), amidst relatively stable balance of EU transfers and slightly deteriorating income balance.

Figure 4.18

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



Foreign exchange rate and inflation

Following zloty appreciation in 2013 Q1, the factors strengthening and weakening the Polish currency will be, to a large extent, offset further in the long-term projection horizon. As a result, the nominal effective exchange rate of the zloty will remain relatively stable in the medium and long term. On the one hand, the zloty exchange rate continues to run below the level determined by fundamental factors, which will support gradual appreciation of the currency towards the equilibrium level. Weak economic growth in the domestic and foreign economies may limit the inflow of direct and portfolio investment into the Polish market. Additionally, the narrowing interest rate disparity, resulting from the assumption of a constant NBP reference rate adopted in the projection, will weaken the zloty exchange rate.

As a result of modest economic growth and stable exchange rate, core inflation will be driven down to 1.5% in 2013 and 0.7% in 2014 to rise again to 1.1% in 2015 (Figure 4.18). Low core inflation over the projection horizon results largely from weak growth in unit labour costs, which is, in turn, the effect of declining employment and moderate wage growth. Moderate inflation pressure is also supported by stable nominal effective exchange rate of the

zloty, and, as a result, growth in import prices (Figure 4.19). In the medium term projection horizon, the decline in core inflation is additionally enhanced by the expected return of the basic VAT rate to 22% in 2014.

Due to the expected improvement in the supply conditions in the Polish and the global markets, domestic food prices inflation will be on the decline in the coming quarters. In the long-term projection horizon, growth rate of domestic food prices will remain at a low, close to 2% y/y level (Figure 4.20). Factors limiting food price growth, apart from decline in agricultural commodity prices observed in the global markets, will include moderate growth in the domestic economy, and, in the long-term horizon, also depreciation of the US dollar against the euro and the zloty, driving down prices of agricultural commodities as expressed in PLN.

Energy price inflation in the short-term projection horizon will decline relatively fast (from 7.9% in 2012 to 1.0% in 2013) which will be primarily the result of decrease in the price of natural gas for households as of 1 January 2013, falling fuel price growth and only slight increases in electricity. Decline in energy price growth in the medium and long-term projection horizon will be supported by gradually falling crude oil prices in the global markets and relatively low growth in the prices of other energy commodities. In 2013 growth of energy costs resulting from the purchase of CO₂ emission allowances will be fed through to electricity prices to a moderate extent, lesser than previous estimates. This is caused by economic slowdown in the European Union and, consequently, downward revision in the current as well as forecasted prices of CO₂ emission allowances in the recent period⁹⁶.

As a result of these developments, CPI growth in 2013 will run considerably below the last year's

Figure 4.19

Terms-of-trade.

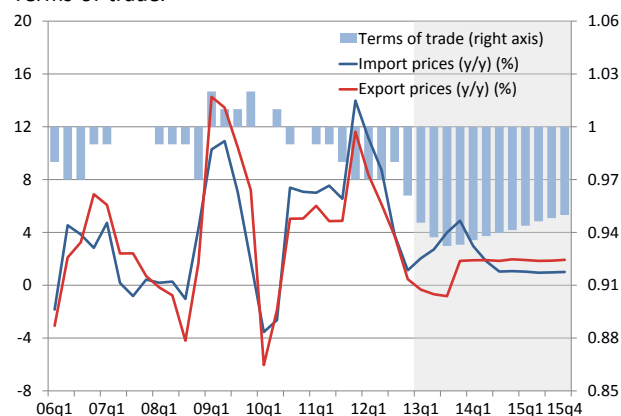
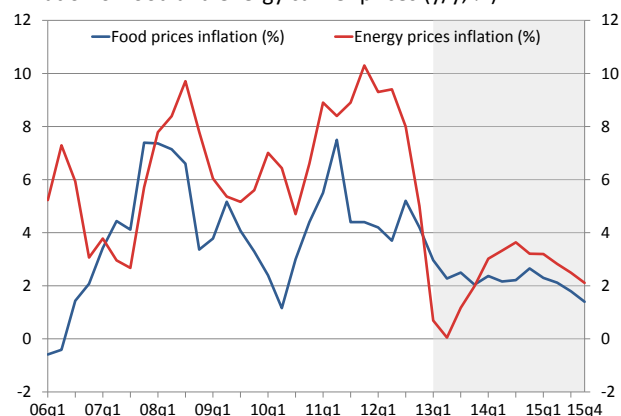


Figure 4.20

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

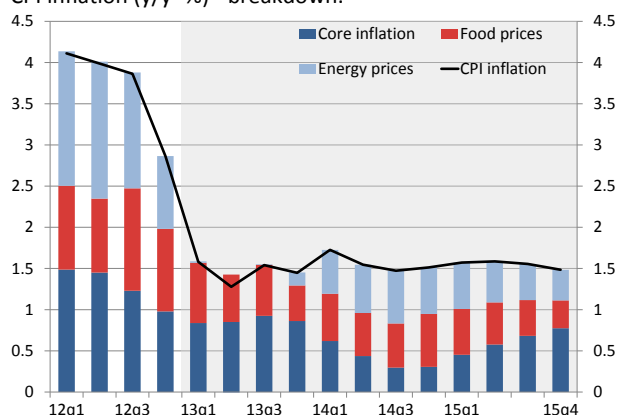


⁹⁶ See. *Short-term Macroeconomic Impact of the Energy and Climate Package in the Polish Economy*, NBP, 2012. Since the release of the above report, current and forecasted prices of emission allowances have fallen significantly.

level (1.6% y/y). The relatively low inflation level in 2013 is the consequence of regulatory factors (decrease in gas prices, slight increase in energy prices) and low demand pressure. In 2014, despite economic downturn coming to an end, the developments in the labour market curbing inflationary pressure through weaker growth in unit labour costs as well as decrease in basic VAT rate will maintain inflation at an almost unchanged level (Figure 4.21). In 2015, due to declining food and energy price growth, gradually improving situation in the labour market and rising unit labour costs, conducive to higher core inflation, CPI inflation will run at a level close to the previous years (1.5%). Under the assumption of a constant NBP interest rate throughout the projection horizon, the probability of the average annual inflation ranging from 1.5%-3.5% in the years 2013-2015 amounts to an average of 48%.

Figure 4.21

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



4.4. Current versus previous projection

Since the November projection to the cut-off date of the current forecasting round, the Central Statistical Office (GUS) published a series of disappointing data concerning developments in the domestic economy, including, in particular, weaker than expected estimates of GDP growth in 2012 Q3 and in the whole of 2012. Economic downturn abroad, translating faster than anticipated in the November projection into slowdown in the domestic economy, as well as a downward revision of forecasts of economic growth abroad, both downgraded forecasts of domestic economic growth for 2013. Since the previous inflation projection, the NBP reference rate was lowered by 100 basis points (projections are prepared under the assumption of constant NBP interest rates) which curbed the decline in GDP growth in 2013 and increased GDP growth in 2014 (see Table 4.1). As a result of the above

Table 4.1

March projection versus November projection.

	2012	2013	2014
GDP (y/y, %).			
III 2013	2,1	1,3	2,6
XI 2012	2,3	1,5	2,3
CPI inflation (y/y, %).			
III 2013	3,7	1,6	1,6
XI 2012	3,8	2,5	1,5

developments, as well as given the regulatory changes leading to a downward revision in forecasts of energy prices, in the March projection the annual inflation in 2013 is lower by 0.9 percentage points as compared with the previous forecasting round, and in 2014 – slightly higher (see Table 4.1).

GDP

The downward revision in the forecasted GDP growth in 2013 between the projections results largely from consumption estimates for 2012 Q3 and Q4 being lower than anticipated⁹⁷ (see Figure 4.23). This is driven by stronger than anticipated in the November projection impact of deteriorating labour market situation on household expenditure, amidst historically low savings rate and tightening of consumer lending criteria in the recent quarters. Lower forecast of private consumption is only partly offset by slightly higher than in the previous projection general government consumption growth (resulting partly from the statistical base effect connected with lower than expected expenditure, among other things, on drug reimbursement and wages in the public sector in 2012). Additionally, the current projection assumes slightly higher growth in gross capital formation in 2013. Better than expected data on this category in 2012 published by the Central Statistical Office (GUS) point to the possibility of lower than previously expected decline in corporate investment in response to unfavourable domestic and global economic conditions.

In 2014, given non-revised forecasts of economic growth abroad, domestic GDP growth runs above the path assumed in the previous projection, as the effects of the series of interest rate cuts

Figure 4.22

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

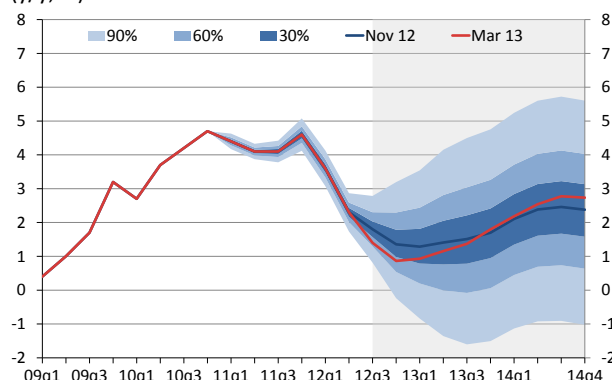
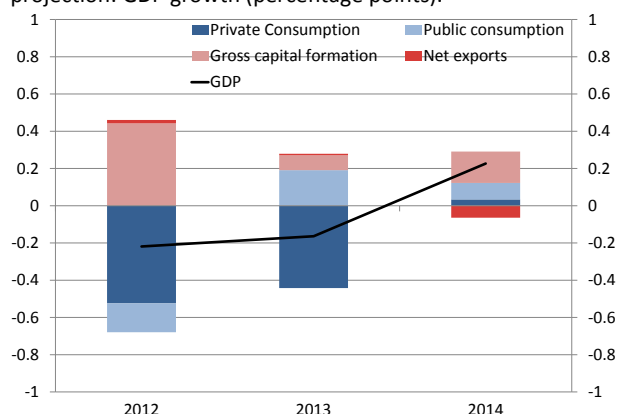


Figure 4.23

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



⁹⁷ Estimates of GDP and its components in 2012 Q4 are based on preliminary data of the Central Statistical Office (GUS) for the whole of 2012 under the assumption of unchanged data for 2012 Q1-Q3.

implemented in the recent months will be observed in this horizon. In particular, lower cost of raising capital will be conducive to faster consumption and investment growth. Moderate depreciation of the zloty, driven by declining interest rate disparity, will have a positive impact on price competitiveness of domestic production. Additionally, some expenditures financed with EU transfers from the current financial framework has been postponed to subsequent quarters, which curbs GDP growth in 2013 and increases it in 2014.

Inflation

Given similar paths of core inflation and food price inflation between the projections, the decline in CPI inflation in the current forecasting round has been driven by revised forecasts of energy price growth (see Figure 4.25).

As the effects of lower wage growth in the economy and higher import prices growth are offset against each other, there are no major changes in the expectations about future core inflation. Faster growth in the price of imported goods is the result of zloty being weaker as compared with the previous projection. This is driven, on the one hand, by lower interest rates, and, on the other hand, by higher exchange rate risk premium, being the result of, among other things, deterioration of the outlook for economic growth abroad in the short-term projection horizon and higher domestic debt of the public finance sector. Core inflation will also be driven by rising taxes and local charges, inter alia, resulting from intensification of adjustments necessary to meet the requirements of the act putting in place a new system of municipal waste management⁹⁸ and deteriorating financial condition of local government units.

Figure 4.24

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

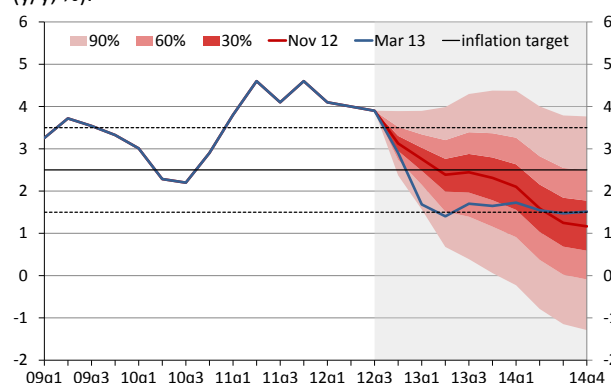
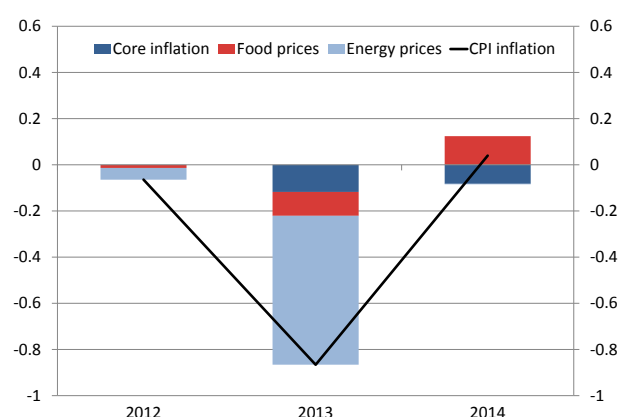


Figure 4.25

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



⁹⁸ Act of 1 July 2011 amending the Act on maintaining order and cleanliness in municipalities and certain other acts (Journal of Laws No. 152, item 897).

Downward revision of energy prices, almost fully accounting for lowering inflation path as compared with the previous forecasting round, is driven by higher than expected decrease in natural gas tariffs for households as of the beginning of 2013, being the result of renegotiations of the Jamal contract between PGNiG and Gazprom. Moreover, the Energy Regulatory Office approved new electricity tariffs for households whose growth is lower than assumed in the previous projection. This was driven, among other things, by the downward revision in the current and forecasted prices of CO₂ emission allowances as result of deteriorated outlook for economic growth in the euro area in 2013. Another factor behind lower CPI inflation is a decline in the forecasted fuel prices being the result of slightly lower forecasts of crude oil prices in the global markets caused by lower growth in the global economy.

4.5. Forecast uncertainty sources

It is assessed that the balance of risk factors is distributed symmetrically around the central GDP projection path over the projection horizon. The risk of medium-term inflation running above the central path is slightly higher, due to the eventuality of fiscal policy adjustments proving necessary in order to comply with fiscal rules - in particular, a possible extension of the raised VAT rate into 2014 (Table 4.2). The key sources of projection uncertainty are presented below.

External environment and exchange rate

The external environment, and, in particular, the duration of recession in the euro area as well as the scale of subsequent recovery remain the most important source of uncertainty for the projection of inflation and GDP. Incoming euro area data point to a somewhat bleaker than

Table 4.2

Probability of inflation running:

	below 1.5%	below 2.50%	below 3.50%	below the central projection	In the range (1.5-3.5)
13q1	0.33	0.97	1.00	0.50	0.67
13q2	0.55	0.95	1.00	0.50	0.45
13q3	0.41	0.79	0.97	0.49	0.56
13q4	0.43	0.77	0.95	0.49	0.51
14q1	0.40	0.71	0.91	0.47	0.51
14q2	0.45	0.73	0.91	0.46	0.46
14q3	0.47	0.74	0.91	0.46	0.44
14q4	0.46	0.73	0.90	0.47	0.44
15q1	0.47	0.73	0.90	0.49	0.43
15q2	0.47	0.73	0.90	0.50	0.43
15q3	0.49	0.74	0.90	0.50	0.41
15q4	0.51	0.75	0.91	0.51	0.40

expected outlook for economic growth and more distant prospects of recovery. On the other hand, sentiment in the global financial markets has improved, with measures taken by central banks, in particular, the OMT programme announced by the ECB. The impact of a possible exacerbation of the euro area recession on domestic economic growth may be mitigated by the weakening of the zloty, the development observed throughout the financial crisis during late 2008 and early 2009. At the same time, weaker national currency would constrain a fall in the inflation rate caused by the negative demand shock.

Fiscal and regulatory policy

Fiscal and regulatory policy may be a material uncertainty factor for the projection of future inflation and GDP, in particular, towards the end of the projection horizon. The 2011-2012 measures to increase the general government revenues and curb expenditures were aimed, on the one hand, at reducing the 2012 deficit down to the level allowed by EU regulations, thus allowing for the lifting the excessive deficit procedure against Poland, and on the other, maintaining the public debt below the 2nd prudential threshold specified in the *Public Finance Act*. Given the anticipated economic downturn, in order to keep the public deficit at a level compliant with national and European fiscal rules, it may be necessary to take additional adjustment measures in the projection horizon, for instance to abandon the reinstatement of the standard 22% VAT rate in 2014 (which the Projection takes into account). There is also material uncertainty related to the extent of the EU funds absorption in the nearest years and the EU funds utilisation rate under the 2014-2020 financial framework.

Domestic demand

A major source of uncertainty for the projection is the response of households and the corporate sector to the developments abroad and to fiscal austerity measures. The impact of the fiscal tightening reflected in a lower general government sector deficit will probably enhance the assessment of Poland's creditworthiness. Yet, at the same time, this assessment is largely determined by short-term prospects for economic growth, which will be undermined by the fiscal consolidation. Moreover, favourable domestic and international developments may translate into better perceptions of Poland by foreign investors, resulting in more capital inflows, including FDI. On the other hand, a prolonged recession in the euro area combined with low current savings rate and limited credit availability may cause consumption and investment growth to persist at low levels in the long term perspective.

Food and energy prices in Poland

Another source of uncertainty for the projection is hardly predictable impact of regulatory policies - as well as the situation in the global commodity market - on the level of domestic energy and food prices. In this respect, there is a considerable uncertainty about the impact of future EU environmental policies, which is difficult to estimate. This concerns, in particular, the currently implemented Climate and Energy Package, aimed at reducing CO₂ emissions. In particular, prices of future CO₂ emission allowances remain unknown. These will depend on both the demand and a possible ceiling on the number of those entitlements. Uncertainty is further boosted by the absence of precise provisions concerning appropriation of proceeds from the sale of CO₂ emission allowances and the extent of investment in low-emission technologies and renewable energy sources.

There is also substantial uncertainty about regulatory measures in the food and energy markets (the Ministry of the Economy energy bill package) as well as future tariff policy conducted by the Energy Regulatory Office. The situation in the global agricultural and energy commodity markets continues to be affected by uncertainty about future economic growth in the world's major economies. In addition, agricultural commodity prices will be traditionally influenced by weather and water conditions, whereas energy commodity prices, in particular those of crude oil, by the scale of disruptions in the supply in non-OPEC countries and the size of output from unconventional deposits in the United States.

Table 4.3

Central path of inflation and GDP projection

	2011	2012	2013	2014	2015
Consumer Price Index CPI (% y/y)	4.3	3.7	1.6	1.6	1.5
Food prices (% y/y)	5.4	4.3	2.4	2.3	1.9
Energy prices (% y/y)	9.1	7.9	1.0	3.3	2.7
Core inflation net of food and energy prices (% y/y)	2.4	2.2	1.5	0.7	1.1
GDP (% y/y)	4.3	2.0	1.3	2.6	3.1
Domestic demand (% y/y)	3.4	0.1	0.0	2.2	3.3
Individual consumption (% y/y)	2.6	0.5	0.5	2.1	2.7
Public consumption (% y/y)	-1.5	0.1	1.8	2.1	2.5
Gross fixed capital formation (% y/y)	9.0	0.6	-3.8	1.9	4.6
Contribution of net exports (percentage point y/y)	0.9	1.8	1.3	0.5	-0.1
Exports(% y/y)	7.7	1.9	1.8	3.9	4.9
Imports (% y/y)	5.5	-2.0	-1.2	3.0	5.5
Gross wages (% y/y)	5.2	3.7	3.0	3.6	4.3
Total employment (% y/y)	0.6	0.1	-1.1	-1.1	-0.2
Unemployment rate (%)	9.6	10.1	11.1	12.1	12.4
NAWRU (%)	9.5	9.9	10.2	10.5	10.8
Labour force participation rate (%)	55.5	55.9	56.0	56.0	56.0
Labour productivity (% y/y)	3.7	2.0	2.4	3.7	3.3
Unit labour costs (% y/y)	1.5	2.7	1.0	-0.1	0.9
Potential output (% y/y)	3.3	2.9	2.8	2.8	2.8
Output gap (% of potential GDP)	0.6	-0.2	-1.6	-1.8	-1.5
Index of agricultural commodity prices (USD; 2010=1.00)	1.18	1.13	1.09	1.08	1.05
Index of energy commodity prices (USD; 2010=1.00)	1.33	1.16	1.16	1.20	1.22
Price level abroad (% y/y)	1.0	1.3	1.4	1.7	1.8
GDP abroad (%y/y)	1.9	0.0	0.1	1.3	1.5
Current and capita account balance (% GDP)	-2.9	-1.4	-1.2	-0.9	-0.8
WIBOR 3M (%)	4.54	4.91	3.96	3.95	3.95

Source: LFS data is the data source for total employment, labour force participation rate and unemployment rate. The index of agricultural commodity prices is constructed on the basis of the IMF's forecasts for future paths of the prices of wheat, pork, beef, poultry, fish, sugar, rape oil, oranges, bananas and drinks allowing for weights reflecting the consumption structure of Polish households. The index of the prices of energy commodities includes the prices of crude oil, coal and natural gas allowing for the consumption structure of these commodities in Poland.

Chapter 5

THE VOTING OF THE MONETARY POLICY COUNCIL MEMBERS IN OCTOBER 2012 - JANUARY 2013

- **Date:** 3 October 2012

Subject matter of motion or resolution:

Motion to lower the NBP interest rates by 0.5 percentage points.

MPC decision:

Motion did not pass.

Voting of the MPC members:

For: A. Bratkowski
E. Chojna-Duch

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

Z. Gilowska was absent.

• Date: 3 October 2012**Subject matter of motion or resolution:**

Motion to lower the NBP interest rates by 0.25 percentage points.

MPC decision:

Motion did not pass.

Voting of the MPC members:

For: M. Belka

A. Bratkowski

E. Chojna-Duch

A. Zielińska-Głębocka

Against: A. Glapiński

J. Hausner

A. Kaźmierczak

A. Rzońca

J. Winiecki

Z. Gilowska was absent.

• Date: 7 November 2012**Subject matter of motion or resolution:**

Motion to lower the NBP interest rates by 0.5 percentage points.

MPC decision:

Motion did not pass.

Voting of the MPC members:

For: M. Belka

A. Bratkowski

E. Chojna-Duch

A. Zielińska-Głębocka

Against: Z. Gilowska

A. Glapiński

J. Hausner

A. Kaźmierczak

A. Rzońca

J. Winiecki

• Date: 7 November 2012**Subject matter of motion or resolution:**

Motion to lower the NBP interest rates by 0.25 percentage points.

MPC decision:

Motion passed.

Voting of the MPC members:**For:** M. Belka

A. Bratkowski

E. Chojna-Duch

J. Hausner

A. Rzońca

J. Winiecki

A. Zielińska-Głębocka

Against: Z. Gilowska

A. Glapiński

A. Kaźmierczak

• Date: 7 November 2012**Subject matter of motion or resolution:**

Resolution no 8/2012 on reference rate, refinancing credit rate, fixed-term deposit rate and rediscount rate at the NBP.

MPC decision:

The MPC lowered NBP interest rates by 0.25 percentage points.

Voting of the MPC members:**For:** M. Belka

A. Bratkowski

E. Chojna-Duch

J. Hausner

A. Rzońca

J. Winiecki

A. Zielińska-Głębocka

Against: Z. Gilowska

A. Glapiński

A. Kaźmierczak

• Date: 20 November 2012**Subject matter of motion or resolution:**

Resolution no 9/2012 amending the resolution on the principles for the application of foreign exchange swaps by the National Bank of Poland.

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: 4 December 2012**Subject matter of motion or resolution:**

Resolution no 10/2012 on interest rates on short-term loans granted to the Bank Guarantee Fund, and interest rates on the provisioning and supplementary contributions to the stabilization fund granted to the National Association of Cooperative Savings Credit and Unions by the NBP.

Voting of the MPC members:**For:** M. Belka

A. Bratkowski

E. Chojna-Duch

A. Glapiński

J. Hausner

A. Kaźmierczak

A. Rzońca

A. Zielińska-Głębocka

Z. Gilowska and J. Winiecki were absent.

Against:**• Date: 5 December 2012****Subject matter of motion or resolution:**

Resolution no 11/2012 on approving the Financial Plan of the National Bank of Poland for 2013.

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: 5 December 2012****Subject matter of motion or resolution:**

Motion to lower the NBP interest rates by 1.5 percentage points.

MPC decision:

Motion did not pass.

Voting of the MPC members:

For: A. Bratkowski
E. Chojna-Duch

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

- **Date:** 5 December 2012

Subject matter of motion or resolution:

Motion to lower the NBP interest rates by 0.5 percentage points.

MPC decision:

Motion did not pass.

Voting of the MPC members:

For: A. Bratkowski
E. Chojna-Duch
Z. Gilowska
A. Glapiński

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

- **Date:** 5 December 2012

Subject matter of motion or resolution:

Motion to lower the NBP interest rates by 0.25 percentage points.

MPC decision:

Motion passed.

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:** 5 December 2012

Subject matter of motion or resolution:

Resolution no 12/2012 on reference rate, refinancing credit rate, fixed-term deposit rate and rediscount rate at the NBP.

MPC decision:

The MPC lowered the NBP interest rates by 0.25 percentage points.

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:** 9 January 2013

Subject matter of motion or resolution:

Motion to lower the NBP interest rates by 1.25 percentage points.

MPC decision:

Motion did not pass.

Voting of the MPC members:**For:** A. Bratkowski**Against:** M. Belka

E. Chojna-Duch

A. Glapiński

J. Hausner

A. Kaźmierczak

A. Rzońca

J. Winiecki

A. Zielińska-Głębocka

Z. Gilowska was absent.

• Date: 9 January 2013**Subject matter of motion or resolution:**

Motion to lower the NBP interest rates by 0.5 percentage points.

MPC decision:

Motion did not pass.

Voting of the MPC members:**For:** A. Bratkowski

E. Chojna-Duch

Against: M. Belka

A. Glapiński

J. Hausner

A. Kaźmierczak

A. Rzońca

J. Winiecki

A. Zielińska-Głębocka

Z. Gilowska was absent.

• Date: 9 January 2013**Subject matter of motion or resolution:**

Motion to lower the NBP interest rates by 0.25 percentage points.

MPC decision:

Motion passed.

Voting of the MPC members:**For:** M. Belka

A. Bratkowski

E. Chojna-Duch

A. Glapiński

J. Hausner

A. Kaźmierczak

A. Rzońca

J. Winiecki

A. Zielińska-Głębocka

Z. Gilowska was absent.

Against:**• Date: 9 January 2013****Subject matter of motion or resolution:**

Resolution no 1/2013 on reference rate, refinancing credit rate, fixed-term deposit rate and rediscount rate at the NBP.

MPC decision:

The MPC lowered NBP interest rates by 0.25 percentage points.

Voting of the MPC members:**For:** M. Belka

A. Bratkowski

E. Chojna-Duch

A. Glapiński

J. Hausner

A. Kaźmierczak

A. Rzońca

J. Winiecki

A. Zielińska-Głębocka

Z. Gilowska was absent.

Against: