

Inflation Report

March 2011

National Bank of Poland
Monetary Policy Council

Warsaw, March 2011

The *Inflation Report* presents the Monetary Policy Council's assessment of the current and future macroeconomic developments influencing inflation. The projection of inflation and GDP presented in Chapter 4 was prepared at the Economic Institute of the National Bank of Poland. The projection was prepared with the use of the NECMOD macroeconomic model. Content-related supervision over the works on the projection was entrusted to a member of the NBP Management Board, Mr. Zbigniew Hockuba. 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; the cut-off date for the data was 21 February 2011. In turn, the periodisation of the analysis (breakdown into sub-periods) is conditioned by the development of particular variables.

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

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Summary

Recent quarters have seen further recovery in the global economy. The extent of this recovery, however, continues to vary strongly: the rebound is less pronounced in advanced economies than in developing, notably Asian, economies. Moreover, the growth rates in developed countries differed widely in 2010. Faster growth was observed in those developed countries that direct a large share of their exports to emerging markets in Asia (Germany, Switzerland, Sweden, Japan) or in Latin America (the United States). Economic activity continued to be weak in the peripheral countries of the euro area.

The past few quarters have seen a sharp rise in world commodity prices, including oil and agricultural commodities, which has contributed to a global rise in inflation. This applies in particular to many developing economies, where upward inflationary pressures are enhanced by strong GDP growth. In the case of major advanced countries, modest growth in economic activity contributes to lower inflation.

In recent months, the situation in the international financial markets has been influenced by the moderately favourable macroeconomic data from the United States and Germany, accompanied, however, by concerns about the stability of public finances in the peripheral countries of the euro area and the condition of the European banking sector. Yields on US and German Treasury bonds have risen. Unlike in 2010 Q2, however, the financial market tensions in the euro area at the end of 2010 did not entail an increase in global risk aversion.

Since the publication of the previous Report, the major central banks have continued to pursue an expansionary monetary policy, including the unconventional measures under quantitative easing of their monetary policy. In contrast to the major developed economies, the central banks in some small advanced economies and emerging economies have continued tightening monetary policy.

In 2010, the annual growth of prices of consumer goods and services in Poland amounted to 2.6%, i.e. it was close to the NBP inflation target of 2.5%. However, in recent months inflation rose markedly above 2.5% - to 3.1% in December 2010 and 3.8% (according to preliminary GUS data) in January 2011. The increase in inflation in October-December 2010 was mainly driven by a sudden rise of the prices of energy, as well as, of gas and fuel. The high growth in food prices was also an important factor that caused inflation to remain at elevated levels. The increase in inflation in December 2010 was additionally driven by the base effect related to prices of Internet services. The acceleration of inflation in January 2011 was mostly driven by a rise in the VAT rates effective since 1 January 2010 which translated into higher domestic prices, and a further growth in the prices of agricultural commodities and crude oil in the world markets as well as increases in administered prices of energy carriers.

Rising world prices of energy and agricultural commodities and metals translated into higher zloty-denominated import prices of goods in 2010 Q3 (after their decline in the first half of 2010). They also contributed to further strong rise in PPI in 2010 Q4.

Inflation forecasts of financial sector analysts over a one-year horizon have run at 2.9-3.1% since August 2010. In turn inflation expectations of enterprises increased to 3.4% in 2010 Q4, which however resulted from higher current inflation known at the moment of conducting the survey and not from deterioration of the structure of responses to the survey questions. In November 2010-February 2011, the increase in current inflation translated also into higher inflation

expectations of individuals. The rise in inflation expectations could also be the result of higher VAT rates effective from the beginning of 2011.

In 2010 Q3, GDP in real terms rose by 4.2% y/y as compared to 3.5% y/y in 2010 Q2. Based on preliminary GUS data on 2010 GDP, real GDP may be estimated to have risen by 4.3% y/y in 2010 Q4. The growth of individual consumption rose significantly in the second half of 2010, reaching levels close to its multi-year average. In comparison with the first half of the year there was also a marked increase in the growth of public consumption. Growth in gross fixed capital formation was marginally positive in the second half of 2010, which resulted from an improvement in the growth of fixed capital spending by both the government and the enterprise sector. The contribution of net exports to GDP growth in Q3 was close to zero, and negative in 2010 Q4. The negative contribution of net export to growth in 2010 Q4 resulted in part from increased import caused by reallocation of expenditures related to changes in the tax scheme since 2011.

Available data indicate that production capacity utilization continues to grow and now stands slightly above the multi-year average, which, given the relatively favourable assessments of general business conditions, may support the improvement of investment growth in 2011. Uncertainty about the outlook for global and domestic economic growth remains a factor limiting enterprises' propensity to invest.

Despite a significant acceleration of economic growth, 2010 brought further deepening of the deficit of the public finance sector, which in ESA95 terms increased from 7.2% GDP in 2009 to approx. 7.9% GDP. In addition, 2010 saw a rise of public debt, which approached the level of approx. 53.5% of GDP. In 2011, after accounting for the announced fiscal tightening due to structural adjustments and the changes introduced in the pension system, the deficit of the public finance sector will probably run below 6% of GDP (in ESA95 terms).

2010 Q3 and Q4 brought a decline in growth of Polish exports, which resulted to a large extent from a fall in the value of exports of means of transport. At the same time, the weakening of the dynamics of German exports in the second half of 2010 contributed to a slowdown in exports of Polish intermediate goods. Slower growth of exports which are characterized by relatively high import intensity had a considerable impact on slowing the growth of imports.

The labour market is seeing a further rise in employment, which is indicated both by the number of working persons according to the BAEL Labour Force Survey in 2010 Q3 and by data on employment in the enterprise sector in 2010 Q4 and in January 2011. At the same time a strong increase in the number of the economically active translates to rise in the unemployment rate. 2010 Q4 saw a significant rise in wage growth, which proved markedly higher than in the enterprise sector, where wage growth continued at a modest level. Labour productivity growth in the economy in 2010 Q3 was close to the nominal wage growth, which resulted in a slight decline in unit labour costs in the economy. In turn, in 2010 Q4 - according to NBP estimates - unit labour costs grew by approx. 3.0% y/y. In industry unit labour costs has continued to decline since August 2009 (which is typical of economic recovery), albeit since mid-2010 at a diminishing pace.

In January 2011 the Monetary Policy Council raised the NBP's interest rates by 0.25 percentage points, which was reflected in the rise of interbank market rates. Since the publication of the previous *Report*, also yields on Polish government bonds have increased, with was supported by expectations of increases of short-term interest rates and the publication of favourable data on GDP in Poland. The increase in the risk premium due to heightened financial market uncertainty in the euro area in November 2010 was also conducive to the increase in bond yields. The involvement of non-residents in the domestic debt market has increased since October 2010,

although at a slower pace than in the previous two years. At the same time, the involvement of non-residents on the Warsaw Stock Exchange has increased.

2010 Q3 saw no significant changes in the housing market in Polish major cities. Asking prices in the primary market increased slightly, while asking prices in the secondary market and transaction prices in both these markets decreased slightly.

The zloty exchange rate was relatively stable throughout November, however at the end of the month the Polish currency weakened significantly. The depreciation of the zloty was mainly connected with the rise in tensions in the European financial market driven by sovereign debt crisis in some euro area countries. In December 2010 the zloty started to appreciate against the US dollar and the euro but continued to weaken against the Swiss franc. In January 2011, the zloty appreciated against all the three analysed currencies.

Following an increase in the previous period, the volume of corporate loans held with domestic banks declined in November and December 2010 and grew in January 2011. In annual terms the growth of corporate loans remained marginally negative, although it had been rising steadily. In the analysed period the revival in the market for housing loans has continued, which was accompanied with a decline of households' consumer loans indebtedness. As a result the annual growth of housing loans remained relatively high, and of consumer loans - decreased. In the period from September 2010 to January 2011, the annual growth of the M3 aggregate amounted to approximately 9%.

In 2010 Q3, the current account deficit increased in 2010 Q3, which was driven primarily by a deepening deficit in the trade account and a reduced surplus on the current transfers account. According to provisional estimates, in 2010 Q4 the current account deficit also deepened. 2010 Q3 saw a rise in net inflow of capital to Poland, which was in large part due to continued inflows of net portfolio investment. Also in 2010 Q4 the financial account of the balance of payments recorded a surplus - although markedly lower than in 2010 Q3.

The *Inflation Report* is structured as follows: in Chapter 1 economic developments in the external environment of the Polish economy are presented in the context of their impact on inflationary processes in Poland. Those processes as well as the domestic factors affecting them are discussed in Chapter 2. *Minutes of the Monetary Policy Council decision-making meetings* held in October, November, December 2010 and January 2011 together with the *Information from the meeting of the Monetary Policy Council* in March 2011 are presented in Chapter 3. Minutes from the MPC meeting held in March will be published on 17 March 2011 and so will be included in the next *Report*.

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 – under the assumption of constant NBP interest rates – there is a 50-percent probability of inflation running in the range of 2.8-3.7% in 2011 (as compared to 2.5-3.5% in the October projection), 2.2-3.4% in 2012 (as compared to 2.4-3.7%) and 2.1-3.7% in 2013. In turn, the March projection sees the annual GDP growth, with a 50-percent probability, in the range of 3.3-5.1% in 2011 (as compared to 3.3-5.5% in the October projection), 2.3-4.8% in 2012 (as compared to 2.8-5.5%) and 1.7-4.4% in 2013.

Chapter 1.

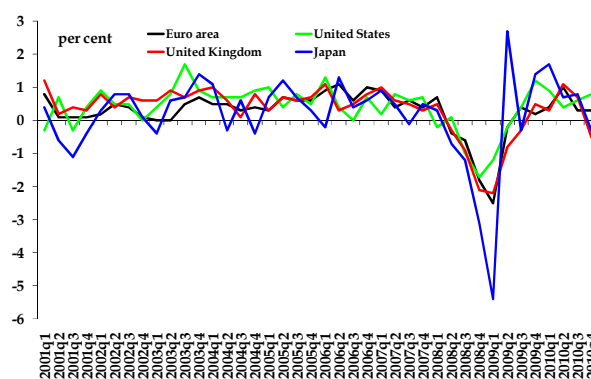
External environment of Polish economy

1.1. Global economic activity

Recent quarters have seen further recovery in the global economy. The extent of the recovery, however, continues to vary strongly: the rebound is less pronounced in advanced economies than in developing, notably Asian, economies. Moreover, the growth rates in developed countries differed widely in 2010. Faster growth was observed in those developed countries that direct a large share of their exports to emerging markets in Asia (Germany, Switzerland, Sweden, Japan) or in Latin America (the United States). Economic activity continued to be weak in the peripheral countries of the euro area.

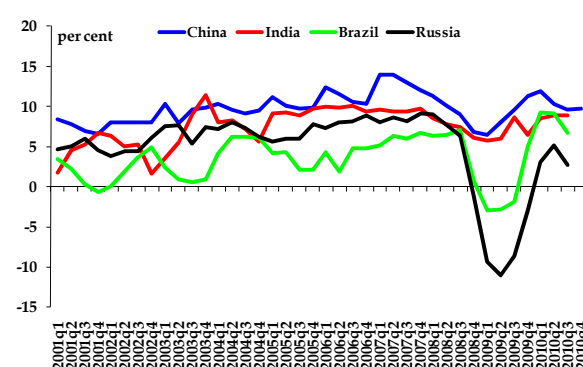
Recent data indicate that global growth accelerated in 2010 Q4 in comparison with 2010 Q3, in particular global trade increased (Figure 1.3) and global indicators of activity in manufacturing and services ¹ improved. Stronger growth is driven by a gradual recovery in private consumption in developed countries combined with the still strong domestic demand in emerging economies. A negative impact on growth is exerted by large fiscal imbalances in many countries. These imbalances increase the uncertainty about the economic outlook and have spawned fears of a possible re-exacerbation of the fiscal crisis (which continues to pose a threat to the financial stability of the euro area). The effects of monetary expansion, including the

Figure 1.1
Economic growth in selected advanced economies (q/q).



Source: Eurostat and IMF data (seasonally adjusted).

Figure 1.2
Economic growth in China, India, Brazil and Russia (y/y).



Source: Reuters data.

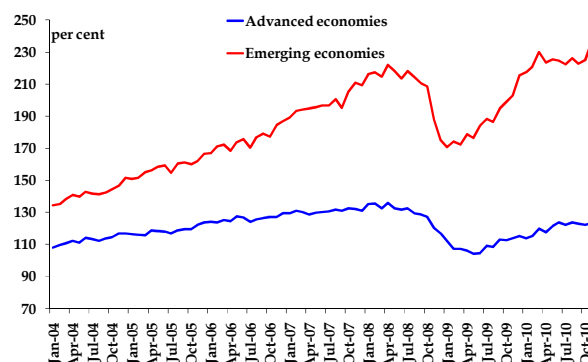
¹ The global index of activity in manufacturing and services (JP Morgan Global Manufacturing & Services PMI) rose from 52.6 percentage points in September to 57.0 percentage points in December 2010.

unconventional measures² implemented by the major central banks, remain to be another crucial uncertainty factor for the global economic situation.

In the second half of 2010 GDP growth in the United States accelerated to 0.6% q/q in Q3 and 0.8% q/q in Q4 after seasonal adjustment (compared to 0.4% q/q in 2010 Q2; Figure 1.1). Faster growth in Q3 resulted from a smaller negative contribution to GDP growth of net exports and a larger positive contribution of the change in inventories. Growth was adversely affected by slower nonresidential and residential fixed investment. Stronger Q4 growth was supported by an acceleration in private consumption expenditures and residential investment, and by slower imports coupled with an acceleration in exports. GDP growth was slowed by a marked fall in inventories' contribution and by weaker nonresidential investment. Despite a gradual economic recovery unemployment remains high. There are no clear signs of a reversal of the negative trends in the housing market.

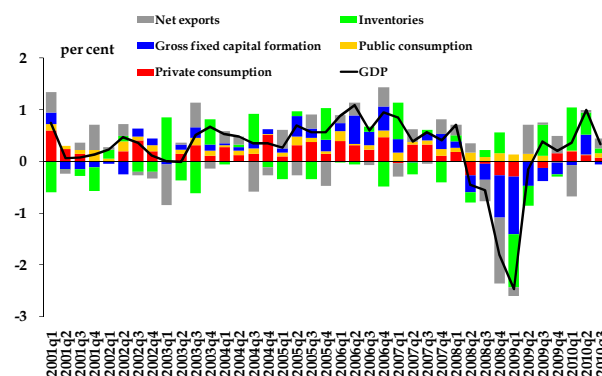
Following an acceleration in the first half of 2010, GDP growth in the euro area slowed down significantly in 2010 Q3 (to 0.3% q/q after seasonal adjustment, as opposed to 1.0% q/q in 2010 Q2). Slower growth resulted from a fall in gross fixed capital formation and a smaller contribution of the increase in inventories (Figure 1.4). Private consumption, the recovery of which continues to be hampered by the adverse situation in the labour market (Figure 1.6), has maintained its modest positive contribution to GDP growth. Net exports, fuelled by the depreciation of the euro in the first half of 2010 and a recovery in the global economy also supported GDP growth. According to preliminary estimates GDP growth in the euro area stabilized in Q4 at 0.3% q/q, after seasonal adjustment. This levelling off of economic activity in the euro area in Q4 is also indicated by data on economic activity in industry (Figure 1.5). In the second half of 2010, there were still pronounced differences in the strength of

Figure 1.3
Volume of imports (2000=100).



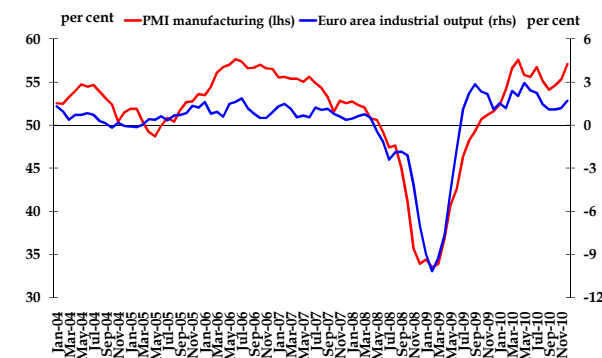
Source: CPB Netherlands Bureau for Economic Policy Analysis data (seasonally adjusted).

Figure 1.4
Euro area GDP growth (q/q).



Source: Eurostat data (seasonally adjusted).

Figure 1.5
Euro area industrial production growth* and PMI for manufacturing.



Source: Eurostat, Markit data.

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

² The unconventional monetary policy measures consist in the active use of the central bank balance sheet with a view to directly influencing prices in the financial markets. The unconventional measures undertaken in recent years by the major central banks included mainly conditional and unconditional purchases of private sector assets as well as government bonds.

economic recovery between the core economies of the euro area (Germany, France) and the economies most deeply affected by the sovereign debt crisis which experienced very low economic activity (Greece, Ireland, Portugal and Spain).

In the United Kingdom, GDP growth slowed down markedly in the second half of 2010. Although growth in 2010 Q3 was relatively fast (0.7% q/q, down from 1.1% q/q after seasonal adjustment in 2010 Q2), in Q4 GDP fell by 0.5% q/q. However, the decline could have been largely due to adverse weather conditions in 2010 Q4 and their dampening impact on output in construction and services.

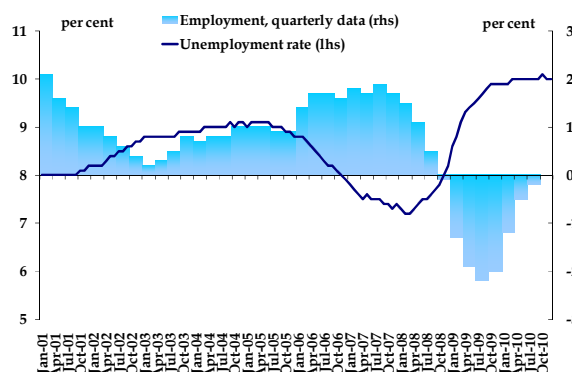
Economic growth remains buoyant in China, Brazil and India, but relatively sluggish in Russia. In 2010 Q3 GDP growth in China fell to 9.6% y/y from 10.3% y/y in Q2, but it edged up to 9.8% y/y in Q4 (Figure 1.2). The modest decline in the annual GDP growth in the second half of 2010 resulted from lower government investment. At the same time private consumption increased due to rising household income.

In 2010 Q3, GDP in q/q terms increased in all the new EU Member States outside the euro area (Figure 1.7, Figure 1.8) except Romania, which recorded a GDP decline of 0.7% q/q. In the analysed period, the growth performance of these economies was highly diverse in terms of both the rate and the structure of growth. Faster growth was recorded in Latvia and the Czech Republic, whereas slower - in Lithuania, Estonia, Hungary and Bulgaria. According to preliminary estimates in 2010 Q4 all new EU member states outside the euro area posted GDP growth in q/q terms. Growth was fastest in Bulgaria and the Baltic states, slightly slower in the Czech Republic, and close to zero in Hungary and Romania.

1.2. Inflationary processes abroad

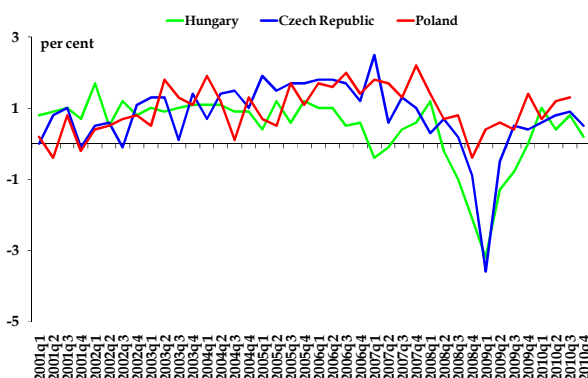
The past few quarters have seen a sharp rise in world commodity prices, including oil and agricultural commodities, which has contributed to a global rise in inflation. This applies in particular to many developing

Figure 1.6
Euro area employment (y/y) and unemployment rate.



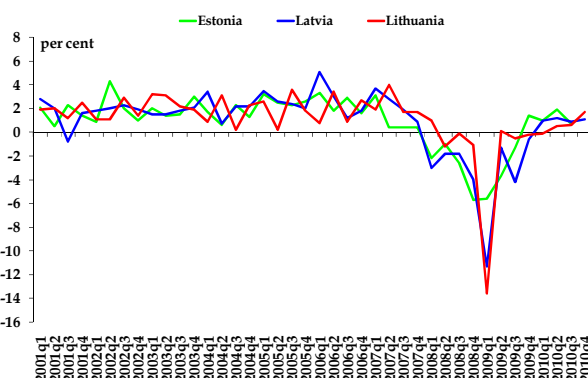
Source: Eurostat data

Figure 1.7
Economic growth in the Czech Republic, Hungary and in Poland (q/q).



Source: Eurostat data (seasonally adjusted).

Figure 1.8
Economic growth in the Baltic countries (q/q).



Source: Eurostat data (seasonally adjusted).

economies, where upward inflationary pressures are enhanced by strong GDP growth. In the case of major advanced countries, modest growth in economic activity contributes to lower inflation.

Since the publication of the previous *Report*, CPI inflation in the United States, after a period of stabilising at a level of slightly above 1%, reached 1.5-1.6% in December 2010 - January 2011 (Figure 1.9). At the same time, HICP inflation in the euro area has increased steadily and exceeded 2% at the end of 2010. In Germany HICP inflation reached 2.0% in January 2011. However, since core inflation figures remain low, there seem to be no clear signs of inflationary pressures in major developed economies. In the United States and the euro area low core inflation is supported by the persistently high unemployment. Conversely, in China and other developing countries CPI inflation has been growing due to booming commodity prices and high capacity utilisation.

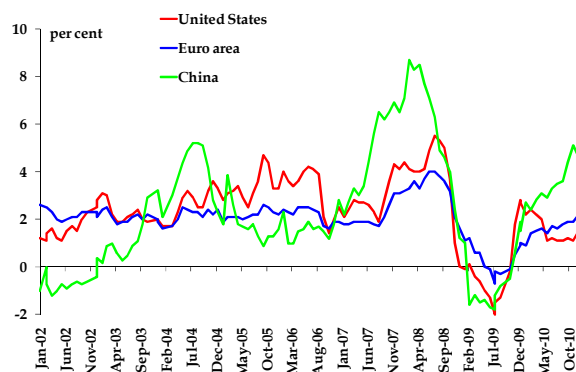
All the countries of Central and Eastern Europe experienced a rise in inflation in the last months of 2010 (Figure 1.10, Figure 1.11). This was driven primarily by faster growth in food and electricity prices, with core inflation remaining low.

1.3. International financial markets and monetary policy abroad

In recent months, the situation in the international financial markets has been influenced by the moderately favourable macroeconomic data from the United States and Germany, accompanied, however, by concerns about the stability of public finances in the peripheral countries of the euro area and the condition of the European banking sector.

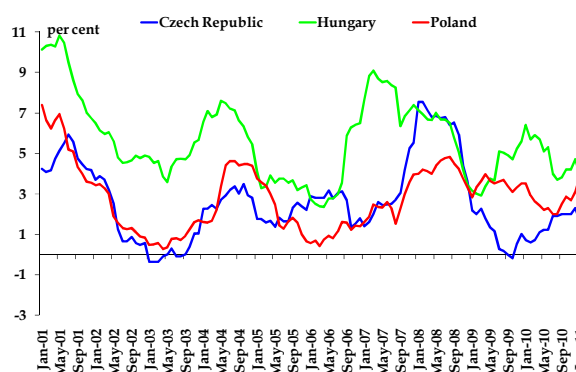
In November 2010 the tensions which had been building up in the euro area since May reached a new high. This time renewed financial market tensions were triggered by a rise in Ireland's borrowing needs and mounting problems of this country with obtaining the necessary funds in the financial markets. As a result, yields on

Figure 1.9
CPI inflation in the major economies (y/y).



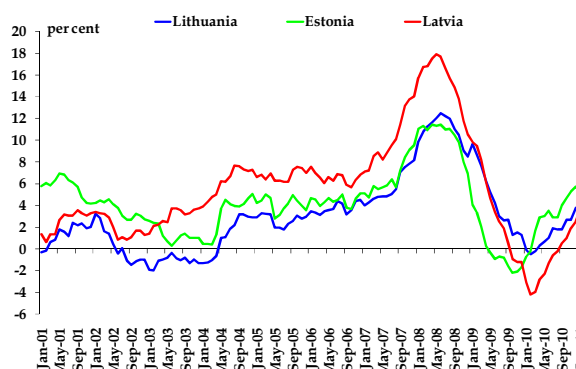
Source: IMF data.

Figure 1.10
CPI inflation in the Czech Republic, Hungary and Poland (y/y).



Source: National CSO's data.

Figure 1.11
CPI inflation in the Baltic countries (y/y).



Source: National CSO's data.

Treasury bonds of the countries most heavily affected by the sovereign debt crisis, as well as the prices of CDS on these bonds, rose sharply and have since remained at an elevated level. (Figure 1.13).

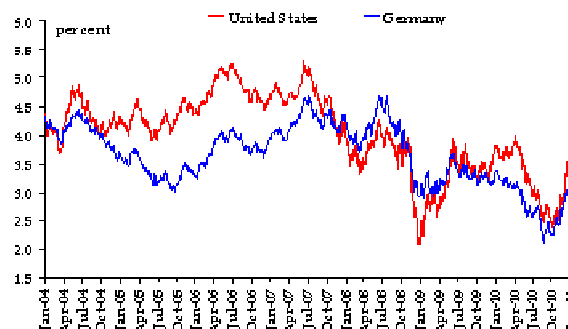
Unlike in 2010 Q2, however, the financial market tensions in the euro area at the end of 2010 did not entail an increase in global risk aversion. In 2010 Q4 and in January and February 2011 share prices in the major stock exchanges rose (Figure 1.15) while share price increases in emerging markets came to a halt.

Since the publication of the previous *Report*, yields on US and German Treasury bonds have risen (Figure 1.12), mainly due to the release of relatively favourable macroeconomic data in those economies. Relatively good macroeconomic data and increasing commodity prices, by translating into rising inflation fears, led to expectations of earlier than previously anticipated monetary policy tightening, which raised the expected value of short-term interest rates reflected in bond yields. The increase in yields on US bonds could also have resulted from an increase in the risk premium connected with the concerns of a possible deterioration in the US budget following the implementation of a new stimulus package.

The intensification of the sovereign debt crisis in some euro area countries in November 2010 led to a depreciation of the euro against the US dollar in that month (Figure 1.14). Since December 2010 the euro has appreciated, however. The appreciation of the euro could have resulted from a certain mitigation of concerns about the solvency of the peripheral euro area countries (which was reflected in lower CDS rates), which was connected with intensified works on the final shape of the European Financial Stability Facility. Euro's appreciation could also have been supported by growing expectations of earlier than previously anticipated interest rate hikes by the ECB.

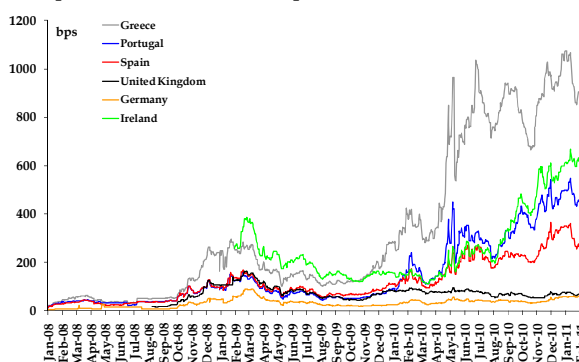
Since the publication of the previous *Report*, the major central banks have continued to pursue an expansionary monetary policy (Figure 1.16). The Fed has maintained its interest rate at 0.00-0.25%, the European Central Bank (ECB) at 1.00%, the Bank of England at 0.50%, and the

Figure 1.12
Yields of 10-year US and German bonds.



Source: Bloomberg data.

Figure 1.13
CDS spreads in selected developed countries.



Source: Bloomberg data, NBP calculations.

Figure 1.14
The EUR/USD exchange rate (increase denotes appreciation of the euro).



Source: Bloomberg data.

Swiss National Bank (SNB) has not changed the 0.00-0.75% band for the 3-month LIBOR rate, continuing its efforts to keep the rate close to 0.25%, i.e. in the lower region of the band.

In November 2010 the Fed announced its decision about further quantitative easing of its monetary policy and commenced the purchase of Treasury bonds worth approx. USD 75 billion per month. The total value of the bond purchases is to amount to USD 600 billion, and the programme is scheduled to last until mid-2011. Following the financial market tensions related to the sovereign debt crisis in some euro area countries, the ECB increased in November and December 2010, as well as in the beginning of January 2011 the scale of government bond purchases. After some stabilisation in the financial markets in January 2011, the ECB suspended the purchase of bonds but recommenced it in February. In that month, in response to fears about the fiscal situation in Portugal and rising yields on that country's debt securities, the ECB purchased Portuguese sovereign bonds.

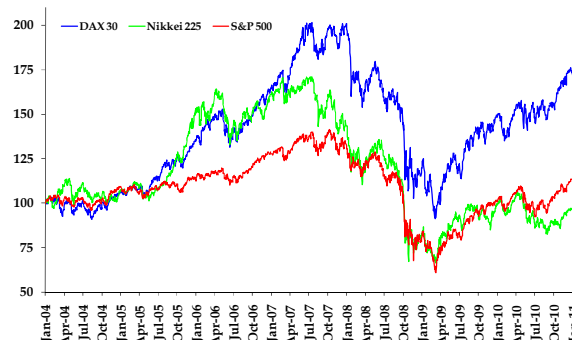
In contrast to the major developed economies, the central banks in some small advanced economies (among others in Sweden, Canada and Australia) and emerging economies (including China, India, South Korea, Chile, Peru and Hungary) have continued tightening monetary policy. Since the publication of the previous *Report* the currencies of emerging economies have not appreciated, which could partly be connected with foreign exchange interventions undertaken by some central banks in order to counteract an excessive appreciation of the currencies.

1.4. Global commodity markets

Since the publication of the previous *Report* oil prices have risen considerably and recently run slightly above the level of 100 USD/b (Figure 1.17). The upward trend in the commodity markets is, to a large extent, caused by long-run factors, i.e. growing demand - mainly from developing countries - accompanied by limited supply growth within coming years. The rise in oil prices was supported by a decline in crude oil inventories driven by the fact that the output

Figure 1.15

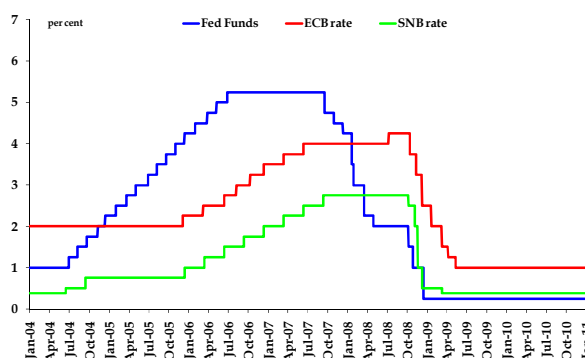
Stockmarket indices in Germany (DAX 30), Japan (Nikkei 225) and the United States (S&P 500), January 2004 = 100.



Source: Reuters Ecowin data, NBP calculations.

Figure 1.16

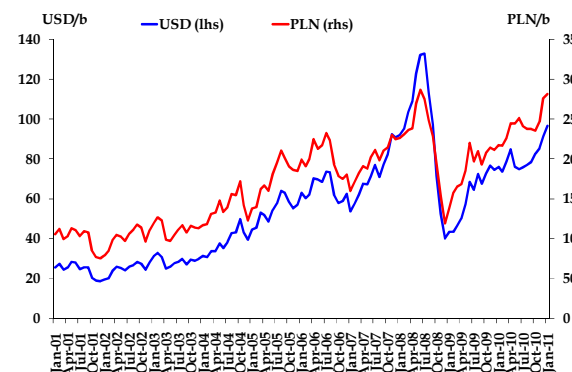
Fed Funds rate, ECB refinancing rate, and SNB rate.



Source: Central banks' data.

Figure 1.17

Brent crude oil prices in USD and PLN.



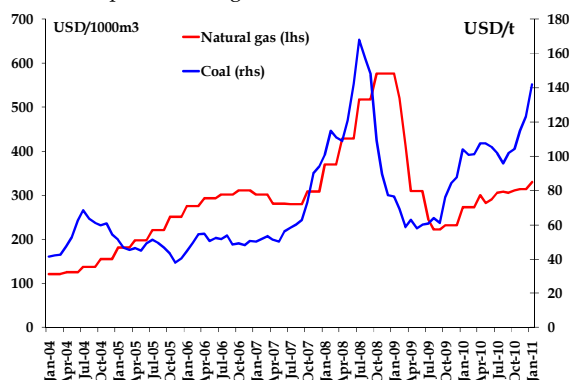
Source: The US Department of Energy data, NBP calculations.

in OPEC countries remained low despite a rise in oil consumption and upward revision of forecasts of global oil demand. Prices were growing also due to the Fed's decision to continue expansionary monetary policy, a renewed rise in financial investors' interest in commodity markets and political turmoil in Maghreb countries of 2011.

Coal prices in January 2011 rose to approx. 142 USD/t (as compared to 104 USD/t in October 2010). Prices of natural gas, on the other hand, increased at the beginning of 2011 to approx. 330 USD/1000 m³ (as compared to 311 USD/1000 m³ in October 2010; Figure 1.18).

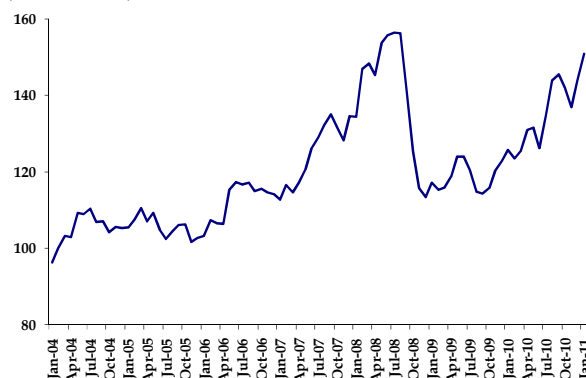
Since the publication of the previous *Report* prices of agricultural commodities have continued to rise. The food price index rose in October 2010 - January 2011 by 6.1% (this rise was one of the highest in 1999-2010; Figure 1.19). High prices of agricultural commodities were fuelled by unfavourable weather conditions. The high level of liquidity in the global financial markets, supporting speculative activity in futures markets, was another driving force behind the rise in prices of agricultural commodities. A long-run factor that could have contributed to higher food prices was an increase in bio-fuel production.

Figure 1.18
Gas and coal prices in the global markets.



Source: IMF data.

Figure 1.19
Index of agricultural commodity prices in the global markets (2004Q1=100).



Source: IMF data, NBP calculations.

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

Chapter 2.

Domestic economy

2.1. Inflationary processes

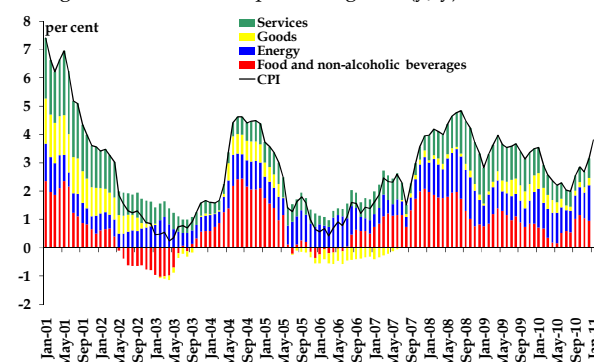
2.1.1. Consumer prices

In 2010, the annual growth of prices of consumer goods and services in Poland amounted to 2.6%, i.e. it was close to the NBP inflation target of 2.5%. However, in recent months inflation rose markedly above 2.5% - to 3.1% in December 2010 and 3.8% (according to preliminary GUS data) in January 2011³ (Figure 2.1).

The increase in inflation in October-December 2010 was mainly driven by a sudden rise of the prices of energy, including primarily fuel prices (as a consequence of the increase in crude oil prices in the global markets), as well as the increase in the prices of gas (the effect of higher tariffs effective since October 2010; Figure 2.2). The increase in inflation in December 2010 was additionally driven by the base effect, which resulted from a strong decrease in the prices of Internet services in December 2009.

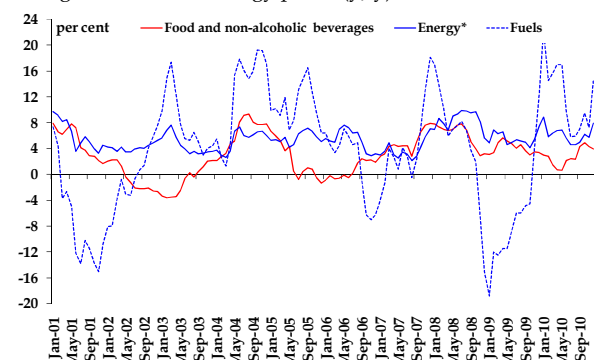
The high growth in food prices was also an important factor that caused inflation to remain at elevated levels in the analysed period. The growth in food prices was supported by unfavourable supply developments in the domestic market of fruit, vegetables and cereal, related to adverse agricultural and meteorological conditions prevailing in spring

Figure 2.1
Changes in CPI and main price categories (y/y).



Source: GUS data, NBP calculations.

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).

³ Data on inflation in January 2011 may be revised due to a change in the CPI basket weights, made at the beginning of each year. Because of the preliminary character of the data, GUS did not publish information on price developments in all components of the consumer basket, which makes a deeper analysis of price changes in particular groups impossible.

and summer 2010. It was also connected with an upward trend of the prices of agricultural products in the world commodity markets observed since the start of 2010 (see subsection 1.4 Global commodity markets).

The acceleration of inflation in January 2011 was mostly driven by a rise in the VAT rates effective since 1 January 2010 which translated into higher domestic prices, and a further growth in the prices of agricultural commodities and crude oil in the world markets as well as increases in administered prices of energy carriers.

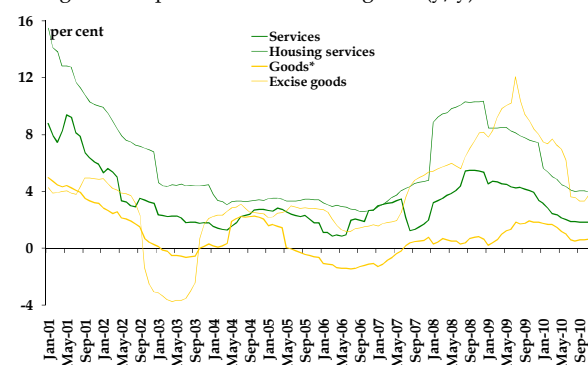
2.1.2. Core inflation

In October-December 2010, all core inflation measures increased (Figure 2.4). The index of core inflation net of food and energy prices, which remained unchanged at 1.2% y/y since July 2010, rose to 1.6% y/y in December 2010. This was mainly driven by the above mentioned base effect related to a significant decrease in the prices of Internet services at the end of 2009. The increase in core inflation was also supported by a rise in the prices of tobacco products and goods related to recreation and culture (newspapers, magazines and books). According to NBP preliminary estimates⁴, in January 2011 core inflation rose to 1.9% y/y, which was mainly the result of the increases in the VAT rates effective from 1 January.

2.1.3. The Maastricht price stability criterion

In October-December 2010, the 12-month average HICP inflation in Poland, considered while assessing the compliance with the Maastricht price stability criterion, decreased slightly from 2.8% to 2.7%. In the same period, according to NBP estimates, the reference value for the inflation criterion increased from 2.2%⁵ to 2.4% (Figure 2.5). As a result, the gap

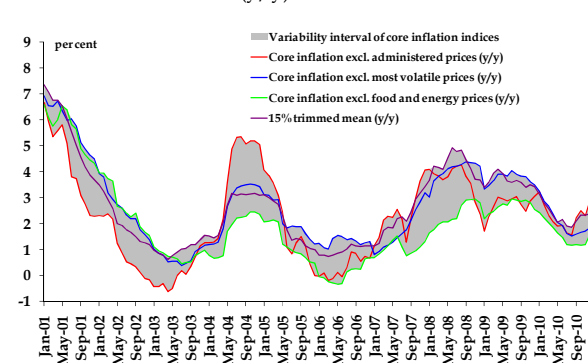
Figure 2.3
Changes in the prices of services and goods (y/y).



Source: GUS data, NBP calculations.

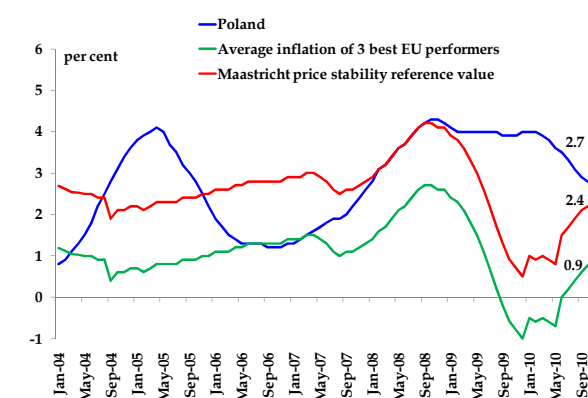
* The category of goods does not include food, non-alcoholic beverages or energy.

Figure 2.4
Core inflation measures (y/y).



Source: GUS data, NBP calculations.

Figure 2.5
HICP inflation in Poland (12-month moving average) and the Maastricht criterion.



Source: Eurostat data, NBP calculations.

⁴ Final data on core inflation net of food and energy prices in January together with the remaining core inflation indices will be released by NBP in March 2011, after the GUS publication of revised data on inflation and new CPI basket weights.

⁵ Those estimates are based on the assumption that in October and November 2010 the reference group for the price stability criterion would include: Slovakia, the Netherlands and Lithuania, while in December 2010 - Slovakia, the Netherlands and Germany. A formal examination whether a particular economy complies with the price stability criterion is made by the European Commission and the European Central Bank in *Convergence Reports*, the latest issue of which was published in May 2010.

between the 12-month average HICP inflation in Poland and the reference value in October-December 2010 narrowed from 0.6 percentage points to 0.3 percentage points.

2.1.4. Producer prices

Producer prices in industry (PPI) grew by 4.9% y/y in 2010 Q4 (after an increase of 4.0% y/y in the preceding quarter)⁶, which was mainly driven by the acceleration of price growth in manufacturing (Figure 2.6). The rise of PPI in the analysed period was mainly supported by further growth in commodity prices in the global markets.

The growth in producer prices in the domestic market rose to 6.4% y/y in 2010 Q4 (as compared to 5.2% y/y in the preceding quarter; Figure 2.6), and in the exported goods market - to 1.5% y/y (as compared to 1.2% y/y, respectively).

2.1.5. Import prices

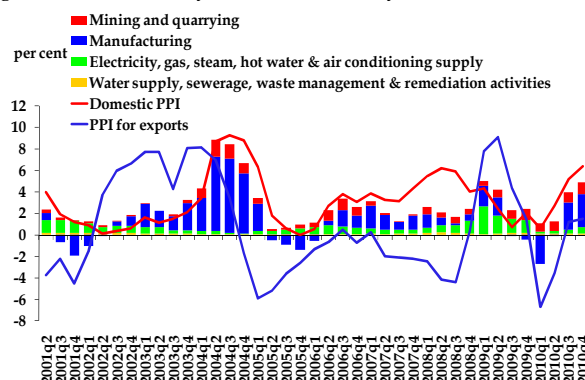
In 2010 Q3, zloty-denominated import prices of goods increased by 7.6% y/y as compared to a decline of 3.5% y/y in the preceding quarter (Figure 2.7), which was accompanied by a further weakening of zloty's appreciation in year-on-year terms. The increase in these prices was mainly driven by growth in the prices of energy commodities and metals, and also of food products. At the same time the scale of the decrease in the prices of imported durable goods diminished.

2.1.6. Inflation expectations

Inflation forecasts of financial sector analysts over a one-year horizon have run at 2.9-3.1% since August 2010 (in February 2011, inflation expected by analysts amounted to 3.0%; Figure 2.8).

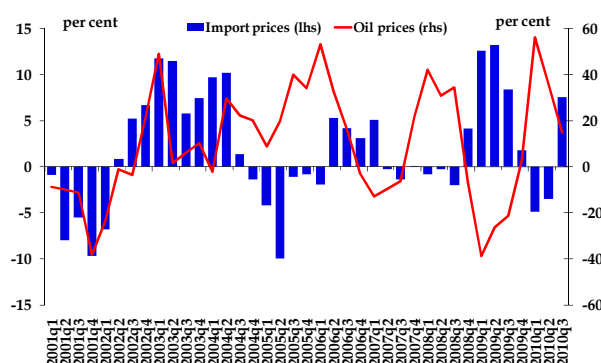
Inflation expectations of enterprises in the 12-month horizon (an objectified measure), having remained at a level close to the NBP inflation target since 2009 Q2, increased to 3.4% in 2010

Figure 2.6
Domestic PPI, PPI for exports and the composition of annual growth of total PPI by sections of industry.



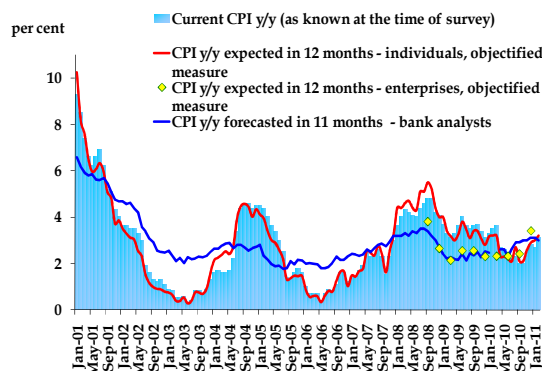
Source: GUS data.

Figure 2.7
Changes in import prices and in oil prices in PLN terms.



Source: GUS data.

Figure 2.8
Inflation expectations of individuals and enterprises and inflation forecasts of bank analysts.



Source: Ipsos, Reuters and GUS data, NBP calculations.

⁶ In January 2011 PPI has remained the same as in December 2010, i. e. amounted to 6.2% y/y.

Q4 (against 2.4% in the preceding quarter). The rise in enterprises' inflation expectations resulted from higher current inflation known at the moment of conducting the survey.

Due to the adaptive nature of the expectations of individuals, the objectified measure of these expectations usually runs close to inflation observed at the moment of conducting the survey. In November 2010-February 2011, the increase in current inflation, coupled with negligible changes in the structure of responses to the survey questions, translated into higher inflation expectations of individuals. The rise in inflation expectations could also be the result of higher VAT rates effective from the beginning of 2011.

2.2. Demand and output⁷

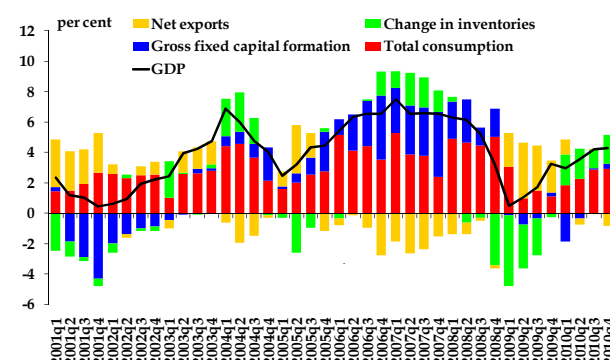
In 2010 Q3, GDP in real terms rose by 4.2% y/y as compared to 3.5% y/y in 2010 Q2 (Figure 2.9). Based on preliminary GUS data on 2010 GDP, real GDP may be estimated to have risen by 4.3% y/y in 2010 Q4. Throughout the second half of the year, relatively robust GDP growth in q/q terms was maintained (1.3% q/q and 1.2% q/q in 2010 Q3 and Q4 respectively).

The growth of individual consumption rose significantly in the second half of 2010, reaching levels close to its multi-year average. In comparison with the first half of the year there was also a marked increase in the growth of public consumption.

Growth in gross fixed capital formation was marginally positive in the second half of 2010. The slight rise in investment in 2010 Q3 resulted from an improvement in the growth of fixed capital spending by both the government and the enterprise sector. Investment by large and medium-sized enterprises increased for the first time since 2008 Q4. At the same time, in 2010 Q3 and Q4 enterprises continued to rebuild inventories, which translated into a further positive contribution of this category to GDP growth.

Figure 2.9

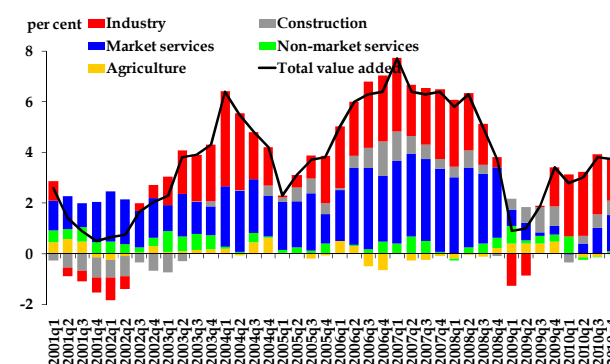
Contribution of aggregate demand components to GDP growth.



Source: GUS data.

Figure 2.10

Sector contribution to annual growth of gross value added.



Source: GUS data, NBP calculations.

⁷Data on GDP and its components in 2010 Q4 are NBP estimates based on preliminary data on 2010 GDP published by the GUS.

Total domestic demand rose by 4.2% y/y in 2010 Q3 (as compared to 4.0% y/y in 2010 Q2). In 2010 Q4, the increase was even higher; preliminary estimates place it at 5.1% y/y.

The growth of both exports and imports decreased in the second half of 2010 as compared with the first half of the year. The contribution of net exports to GDP growth in Q3 was close to zero, and negative in 2010 Q4. The negative contribution in 2010 Q4 resulted partly from increased import due to the shift in expenditures connected with changes in the tax scheme since 2011.

In 2010 Q3 and Q4, industry continued to provide the largest contribution to gross value added growth, even though this contribution fell somewhat. The positive contribution to gross value added growth from market services and construction increased (Figure 2.10), with market services representing a particularly strong rise.

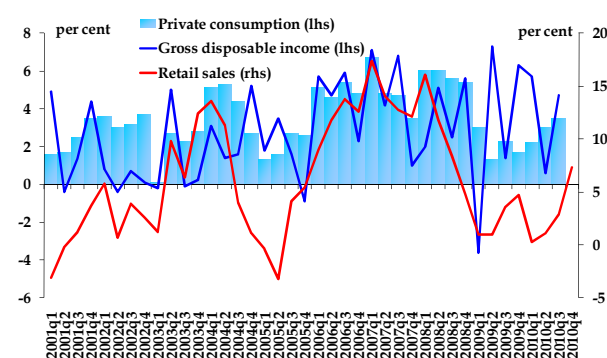
2.2.1. Consumption demand

Growth in consumption demand continued to accelerate in the second half of 2010. According to GUS data, the growth rate of individual consumption increased to 3.5% y/y in 2010 Q3 (as compared with 3.0% y/y in 2010 Q2). The growth rate implied for 2010 Q4 from the annual GUS estimates amounted to 3.9% y/y (Figure 2.11).

The rising growth in consumption demand in 2010 Q3 was supported by an accelerated growth in households' disposable income. A fast rise of this category⁸ in 2010 Q3 resulted primarily from an increase in income from hired employment⁹. Growth in households' disposable income was adversely affected by a more sluggish rise in social benefits and income of sole traders.

With disposable incomes growing faster than individual consumption, households' saving

Figure 2.11
Growth of private consumption, gross disposable income and retail sales (y/y, constant prices).



Source: GUS data.

⁸ Slow growth in households' disposable income in 2010 Q2 was largely the result of the base effect.

⁹ According to NBP estimates, growth in income from hired employment in 2010 Q3 was significantly higher than wage fund growth calculated on the basis of data on employment and wages in the economy. Income from hired work includes - apart from wages - i.e. some forms of benefits, non-cash income, transfers from Employee Benefit Fund and severance pay.

rate increased in 2010 Q3 up to 10.3% as compared with 8.1% in 2010 Q2¹⁰.

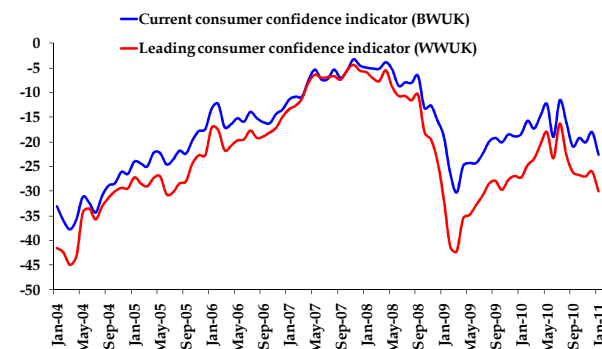
In the second half of 2010, real growth in retail sales rose considerably, amounting to 2.9% y/y and 7.3% y/y in Q3 and Q4 respectively (as compared with 1.1% y/y in 2010 Q2). Such an increase is a sign of further recovery in consumer demand in the last quarter of 2010. The strongest growth was recorded in the sales of durable goods (i.e. in motor vehicles, furnitures, electronics and household appliances). Replacement purchases in the flooded areas of Poland, intensified purchases of goods ahead of the VAT increase scheduled for the start of 2011 and the abolishment of VAT discounts on the purchase of cars with goods vehicle approval certificates starting 2011 could have contributed to strong growth in the sales of durable goods (see subsection 2.2.2 Investment demand).

The deterioration in households' sentiment, manifested in the surveys of economic climate (particularly marked in January 2011) may signal a deceleration in consumption demand at the beginning of 2011 (Figure 2.12). In January 2011 all GUS indicators of consumer confidence declined, except for the indicator of change in households' financial condition in the past 12 months. The fall in the current and leading consumer confidence indicators was brought about primarily by a deterioration in the indicator of change in the country's general economic situation in the coming year. Possible decrease in the growth of individual consumption may be conducive to decrease in import.

2.2.2. Investment demand

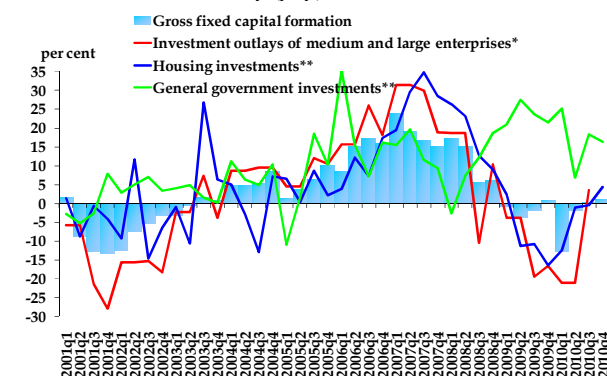
In the second half of 2010 investment growth in the economy ceased to be negative. According to GUS data, investment increased by 0.4% y/y in 2010 Q3 (as compared to a drop by 1.7% y/y in the previous quarter; Figure 2.13). Based on the GDP estimates for 2010 published by the GUS the growth of investment outlays on fixed

Figure 2.12
Consumer confidence indicators.



Source: GUS, NBP data.

Figure 2.13
Investment in the economy (y/y).

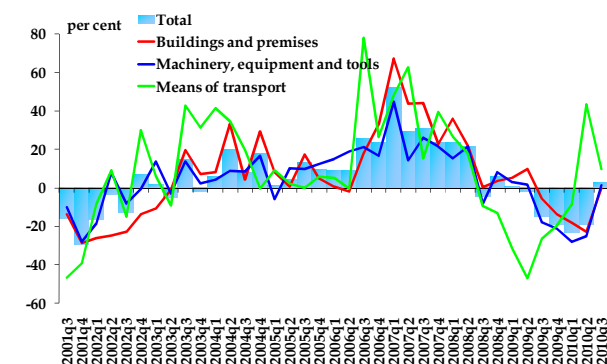


Source: GUS data, Ministry of Finance data, NBP estimates.

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

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

Figure 2.14
Gross fixed capital formation in the enterprise sector (in nominal terms, y/y).



Source: GUS data, NBP calculations.

¹⁰ Saving rate after seasonal adjustment. The average (seasonally adjusted) saving rate in the period from 1999 Q1 to 2010 Q3 amounted to 9.5%.

capital formation in 2010 Q4 may be estimated to have amounted to 1.0% y/y.

Estimates for 2010 Q3 indicate a significantly higher growth in public investment and investment of large and medium-sized enterprises. At the same time, housing investment fell slightly as compared with the corresponding period of the previous year (Figure 2.13).

In 2010 Q4 growth in public investment continued at a level close to the one recorded in 2010 Q3, while growth in housing investment proved positive for the first time since 2009 Q1.

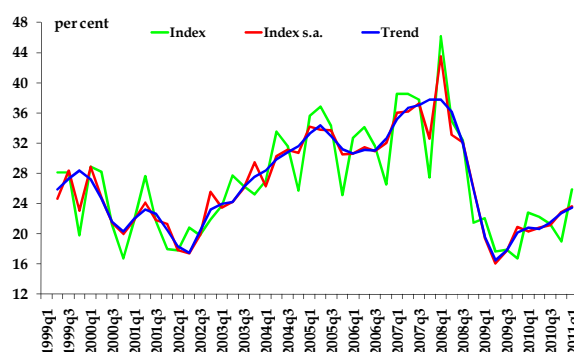
The increase in investment outlays in enterprises (in nominal terms) in 2010 Q3 resulted from the fact that declines in category buildings and premises as well as machinery and equipment ceased, amidst continuing high (10% y/y) albeit significantly lower than in Q2 (43.3% y/y), growth of outlays on means of transport (Figure 2.14). The fast growth of expenditure on means of transport was related to a low base of 2009 when enterprises drastically cut down on this type of investment and with the abolition of VAT discounts on the purchase of cars with goods vehicle approval certificate, announced for the end of 2010.

The results of the NBP business conditions survey¹¹ indicate that in 2011 a recovery in investment may be expected, which is suggested by an increase in the number of companies planning new investments and by the growth in the volume of anticipated investment outlays. Considering the plans for 2011 Q1, investment activity of enterprises may slightly increase as compared to 2010 Q4 (Figure 2.15), although the index of new investment remained at a level lower than the multi-year average. Similarly to the previous quarters, almost all investors declare their intention to continue investment as planned.

The results of the NBP business condition survey show differences across enterprises as regards plans to embark on new investment in 2011 Q1. The new investment indicator continues to be significantly higher in large enterprises than in medium-sized and small

Figure 2.15

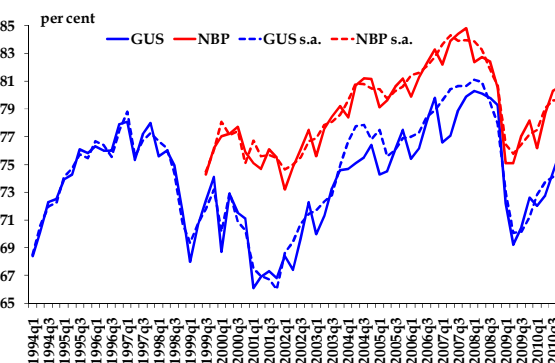
Index of new investments (percentage of enterprises planning to start new investments within the coming quarter).



Source: NBP business tendency survey.

Figure 2.16

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



Source: GUS data, NBP business tendency survey.

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

Table 2.1

Selected financial efficiency indices in the enterprise sector.

per cent	2004	2005	2006	2007	2008	2009	2010		
							q1	q2	q3
Return on sales ratio	5.9	5.3	5.5	5.6	5.0	5.0	4.8	5.5	5.6
Net profitability ratio	4.8	3.9	4.7	5.0	3.3	4.1	4.0	4.7	5.0
Cost level index	94.3	95.1	94.3	93.9	95.8	95.0	95.0	94.7	94.5
end of period									
Liquidity ratio of the first degree	30.3	31.8	34.9	33.7	33.6	38.5	38.7	37.5	37.7

Source: GUS data.

¹¹ Economic Climate in the Enterprise Sector in 2010 Q4 and Forecasts for 2011 Q1, NBP.

enterprises, although it is on a steady rise in both groups. A significant increase in the number of planned investments is declared by export companies, while the forecasts of other companies have deteriorated considerably what is reflected in a strong upward trend in forecasts of new investments in the manufacturing sector, dominated by export enterprises.

Available data indicate that production capacity utilization continues to grow and now stands slightly above the multi-year average (Figure 2.16), which, given the relatively favourable assessments of general business conditions¹², may support the improvement of investment growth in 2011. Strong growth in the estimated value of newly started investments in 2010 Q2 and Q3 also indicates the possibility of acceleration of the growth in outlays for fixed capital formation. Uncertainty about the outlook for global and domestic economic growth remains a factor limiting enterprises' propensity to invest.

In 2010 Q3 the majority of financial efficiency indicators in the enterprise sector continued to improve, including the return on sales and net profitability, while liquidity ratios remained at high levels (in 2010 Q3 the value of liquidity ratio of the first degree amounted to 37.7%¹³; Table 2.1). The good liquidity standing of companies may have a positive impact on their investment activity, in particular since a significant part of enterprises declare that they finance investments with their own funds. The high level of liquid funds should also facilitate access of enterprises to external financing.

2.2.3. Government demand

Despite a significant acceleration of economic growth, 2010 brought further deepening of the deficit of the public finance sector, which in ESA95 terms increased from 7.2% GDP in 2009 to approx. 7.9% GDP¹⁴. 2010 saw continued low growth of revenues from taxes and social insurance contributions, which in part was the

¹² Good business condition is indicated by the general business condition indicator IRG - SGH, PMI indicator and leading indicator published by the BIEC (Bureau for Investments and Economic Cycles) - data for December 2010.

¹³ Liquidity ratio of the first degree informs how much of short-term liabilities an enterprise is able to cover immediately i.e. with its most liquid assets to which it has easiest access (short-term investments).

¹⁴ According to the autumn EDP notification (*Excessive Deficit Procedure*).

effect of a negative balance of direct taxes' annual settlements for the previous year¹⁵. On the other hand, available data on central budget expenditures and expenditures of local government entities in the course of 2010 indicate that the growth of public sector expenditures exceeded the growth of public sector revenues. This resulted in an increase of the central budget deficit, major special purpose funds, and probably also of the local government deficit. In addition, 2010 saw a rise of public debt, which approached the level of approx. 53.5% of GDP¹⁶, exceeding the first prudential threshold provided for in the Act on public finance, i.e. 50% of GDP¹⁷.

According to preliminary data of the Ministry of Finance¹⁸, the central budget deficit in 2010 amounted to almost PLN 45 billion, thus was by PLN 7 billion lower than assumed in the Budget Act. The lower deficit was largely the result of lower than assumed spending of the central budget, amidst higher non-tax revenues¹⁹. Total central budget revenues and expenditures in 2010 were lower than in 2009 due to the exclusion of EU funds from the central budget since 2010.

After the first three quarters of 2010 local government units recorded a surplus in the amount of PLN 0.9 billion, i.e. by PLN 3.3 billion lower than in 2009. According to the NBP's monetary statistics, in 2010 the increase in the bank debt of local government entities amounted to PLN 8.8 billion and was by PLN 1.8 billion higher than in the previous year. Based on this information it may be concluded that in 2010 the deficit of local government entities could have been higher than in 2009.

In 2010 deficits were recorded by major special purpose funds whereas the financial condition of the Social Security Fund was of key importance. Despite the utilization of funds from the Demographic Reserve Fund (PLN 7.5 billion), the debt of the Social Security Funds

¹⁵ In particular it refers to a negative balance of annual settlements of income taxes of legal entities. According to the Ministry of Finance, the level of due CIT revenues for 2009 amounted to PLN 25.4 billion, compared to PLN 31.2 billion in 2008.

¹⁶ According to statements made by the representatives of the Ministry of Finance of January 2011.

¹⁷ Exceeding this threshold means that the relation of the central budget deficit to the central budget revenues in the draft of the Budget Act for 2012 may not be higher than in the Budget Act for 2011.

¹⁸ According to statements made by the representatives of the Ministry of Finance of January 2011.

¹⁹ Including the non-planned NBP's profit transferred to the budget in the amount of PLN 4.0 billion.

resulting from loans from the central budget increased.

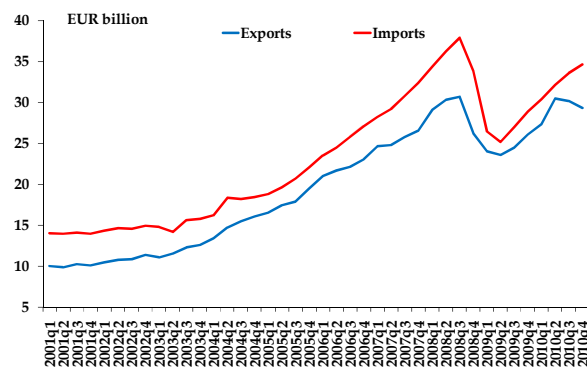
2011 is expected to bring a tightening of the fiscal policy. According to the NBP estimates presented in the Opinion of the Monetary Policy Council to the Draft of the Budget Act for 2011, it may be assumed that the scale of fiscal tightening resulting from structural adjustments may reach approx. 1 percentage point of GDP. Additionally, the decline in the public finance sector deficit is supposed to result from the announced lowering of contribution to the open pension funds from 7.3% to 2.3% of the assessment base, which will improve the current situation of public finances²⁰. After accounting for the changes introduced in the pension system, the deficit of the public finance sector in 2011 will probably run below 6% of GDP (in ESA95 terms).

2.2.4. Exports and imports²¹

2010 Q3 and Q4 brought a decline in foreign orders which translated into a lower growth rate of Polish exports. The value of exports fell in 2010 Q3 by 1.1% q/q (Figure 2.17) and increased by 23.0% y/y (in seasonally adjusted terms). In 2010 Q4 the value of exports fell by 2.6% q/q and increased by 12.5% y/y. The slowdown of exports resulted to a large extent from a fall in the value of exports of means of transport, the sale of which was earlier supported by Germany's government incentive program aimed at stimulating new car purchases. At the same time, the weakening of the dynamics of German exports in the second half of 2010 contributed to a slowdown in exports of Polish intermediate goods (from 33.2% y/y in 2010 Q2 to 28.7% y/y in Q3 and to 20.1% y/y in Q4).

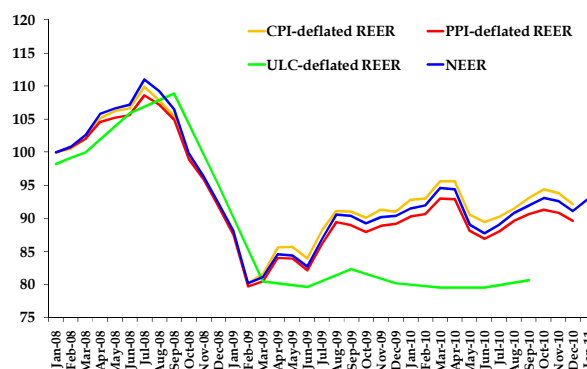
Slower growth of exports which are characterized by relatively high import intensity had a considerable impact on slowing the growth of imports. In 2010 Q3 the value of imports increased by 4.6% q/q and by 24.5% y/y (in seasonally adjusted terms). In 2010 Q4

Figure 2.17
Value of Polish exports and imports.



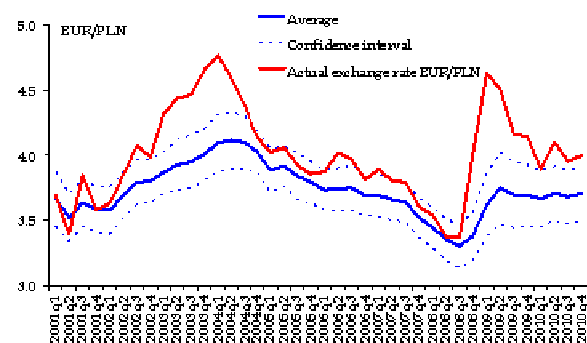
Source: NBP calculations based on GUS data (seasonally adjusted).

Figure 2.18
Zloty real and nominal effective exchange rate (increase denotes appreciation; January 2008=100).



Source: NBP and European Commission data.

Figure 2.19
Average threshold exchange rate (EUR/PLN) of exports profitability declared by enterprises.



Source: NBP data and estimates.

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

²⁰ According to the document prepared by the Chancellery of the Prime Minister, accompanying the draft act introducing the above mentioned change to the pension system, its impact on the performance of the public finance sector in 2011 may be assessed at approx. 0.7 percentage point of GDP.

²¹ Information about the value of Polish exports and imports refers to GUS data (in EUR) adjusted for seasonal factors.

the value of imports increased by 3.1% q/q and 19.8% y/y. The slower growth of exports in 2010 Q3 translated into a decline in the growth rate of imports of intermediate goods (from 32.4% y/y in 2010 Q2 to 26.9% y/y in Q3 and to 19.3% y/y in Q4). The growth of imports of capital goods, despite an acceleration in the second half of 2010, was still lower than the growth of imports of intermediate goods (in 2010 Q2 imports of capital goods grew at 11.9% y/y, against 22.6% y/y and 14.5% y/y in Q3 and Q4, respectively).

2010 Q4 brought a slight depreciation of the real and nominal exchange rate of the zloty (compare subsection 2.4.3 Exchange rate; Figure 2.18), which contributed to maintaining the price competitiveness of exports. Moreover, according to the NBP's business condition surveys in 2010 Q4 the zloty exchange rate continued to be weaker than the threshold exchange rate of export profitability, declared by enterprises (Figure 2.19).

2.2.5. Output

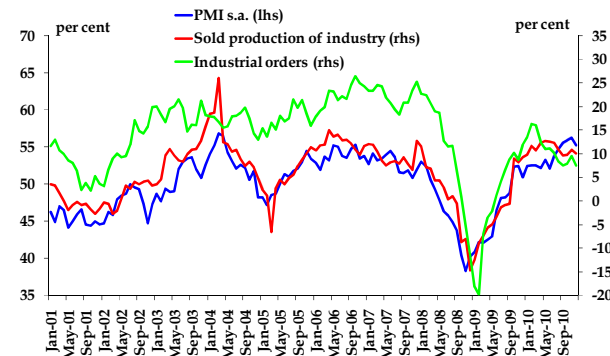
Data on industrial output and orders indicate continued high activity in this sector at the end of 2010 and in January 2011 (Figure 2.20). Also a high level of the PMI index points to the continuation of upward trends in industry.

The growth rate of construction and assembly output, following a steep decline at the beginning of 2010 (related primarily to weather conditions) rose in subsequent months. Nevertheless (Figure 2.21), since September 2010 the growth of the order portfolio has been oscillating around zero which suggests a possibility of a lower growth of construction and assembly output in 2011.

The developments in GUS general business tendency indicators in 2010 Q4 and in January and February 2011 point to diverse changes in particular sections (Figure 2.22). The financial and insurance activity index is particularly high as compared to its multi-year average whereas the construction index is relatively low.

Figure 2.20

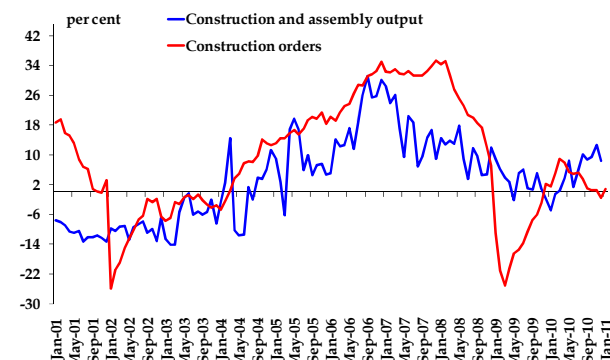
PMI and annual growth of sold production of industry and of industrial orders.



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

Figure 2.21

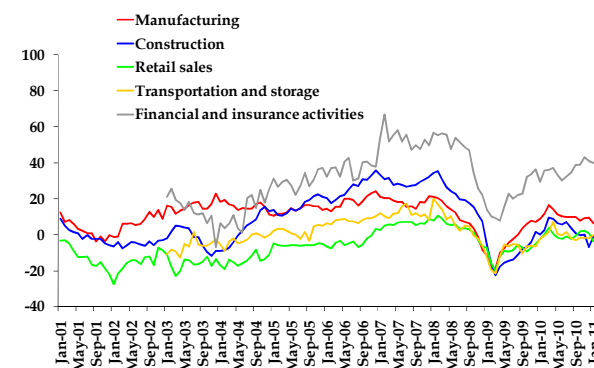
Annual growth of construction and assembly output and construction orders.



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

Figure 2.22

Indicators of future economic activity in selected sections.



Source: GUS business tendency survey.

2.3. Labour market

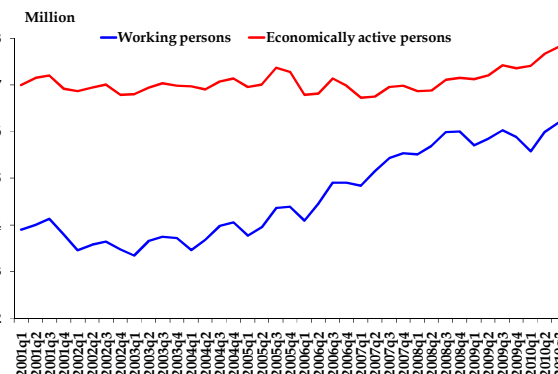
The labour market is seeing a further rise in employment. In 2010 Q3 the number of working persons according to the BAEI Labour Force Survey increased by 1.1% y/y (as compared to 0.9% y/y in 2010 Q2; Figure 2.23). The increase in the number of working persons was connected with an increase in the number of the employed for a definite period of time coupled with a slight decrease in the number of the employed for an indefinite period of time. In October 2010 - January 2011 employment in the enterprise sector continue to increase²² (Figure 2.24), whereas the strong increase in employment at the beginning of 2011 was caused by the inclusion of those enterprises that experienced an increase in employment throughout 2010 large enough to make them eligible for participation in the survey (enterprises with at least 9 employees).

In 2010 Q3 the number of the economically active continued to rise according to the BAEI survey (by 2.3% y/y as compared to 2.8% y/y in the previous quarter; Figure 2.23). The growth in the number of economically active persons was still mainly driven by the increase in the economic activity ratio of young persons (i.e. aged 15-24) and persons at pre-retirement age (i.e. aged 45-59/64), which could be connected with the abolition of the compulsory military service and the withdrawal (starting from 2009) of the possibility of early retirement.

In 2010 Q3 the seasonally adjusted unemployment rate according to the BAEI survey rose to 9.9% (as compared to 9.4% in 2010 Q2). On the other hand, the registered unemployment rate in seasonally adjusted terms, following a slight decline in April-August 2010, remained since September on a moderate upward trend and - according to preliminary data²³ - amounted to 12.4% in January 2011 (as compared to 12.0% in September 2010; Figure 2.25). The observed rise in the unemployment rate was driven by an

Figure 2.23

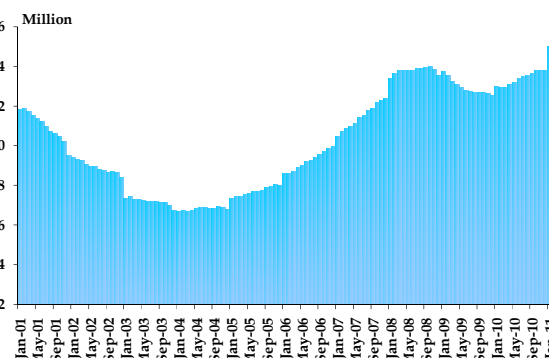
Working persons working in the economy and economically active in the economy according to BAEI.



Source: GUS data.

Figure 2.24

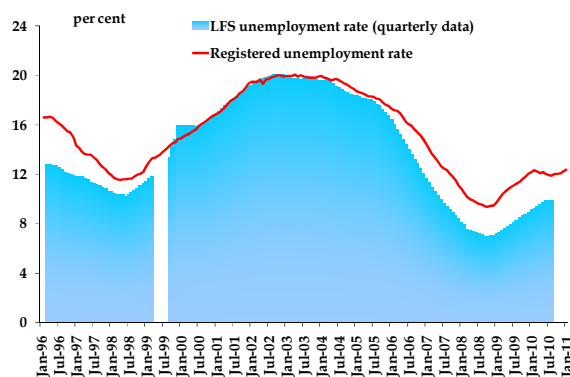
Employment in corporate sector.



Source: GUS data.

Figure 2.25

Unemployment rate registered by labour offices and unemployment rate according to LFS.



Source: GUS data (seasonally adjusted).

Date till 2002 adjusted for the results of the 2002 National Census. No BAEI survey was conducted in 1999 Q2 or Q3.

There are two reasons for the differences between the unemployment rate according to the BAEI and the registered unemployment rate: (1) different definition of unemployed person. (2) Different definition of population to which the number of the unemployed is referred.

²² Average monthly employment growth in the enterprise sector in 2010 was slightly higher than in 2005 and 2008 but significantly lower than in 2006-2007.

²³ January 2011 unemployment data are based on Ministry of Labour and Social Policy estimates.

increase in the number of the economically active.

The seasonally-adjusted number of job vacancies reported to labour offices remained stable until the end of 2010, however in January 2011 it recorded a substantial decline causing a decline in the number of vacancies per one unemployed (Figure 2.26). Strong decline in the number of job vacancies in January 2011 was caused by decline in subsidized employment programmes. A particularly strong decline was recorded in number of places of occupational activation, which are entirely financed with funds for Labour Fund and European Social Fund.

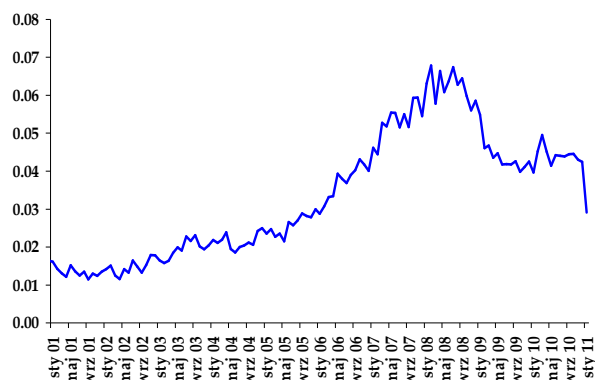
The results of the NBP business conditions surveys ²⁴ indicate that the number of enterprises planning employment cuts still slightly exceeded the number of enterprises planning an employment increase, although as compared to the previous quarter the employment forecast indicator rose somewhat (by 0.2 percentage point in seasonally adjusted terms) and continues above its long-term average.

2010 Q4 saw a significant rise in wage growth. Wages in the economy rose in 2010 Q4 by 6.0% y/y in nominal terms (as compared to 2.9% y/y in 2010 Q3), and by 3.0% y/y in real terms (as compared to 0.8% y/y in 2010 Q3; Figure 2.27). In the enterprise sector, the growth of nominal wages increased in 2010 Q4 to 4.3% y/y (from 2.0% y/y in 2010 Q3), and to 1.6% y/y in real terms (as compared to -0.1% y/y in the previous quarter). The significantly higher wage growth in the economy as compared to the enterprise sector was probably caused by high wage growth in the administration in 2010 Q4 (administration wage growth amounted to just 0.1-0.2% y/y in 2010 Q2-Q3 and is expected to be freezed in 2011).

Labour productivity growth in the economy amounted to 3.1% y/y in 2010 Q3 (as compared to 2.5% y/y in 2010 Q2) and was close to the nominal wage growth. This resulted in a slight decline in unit labour costs in the economy (by 0.2% y/y in 2010 Q3 as compared to their rise

Figure 2.26

Labour market tensions index (number of vacancies per one unemployed).

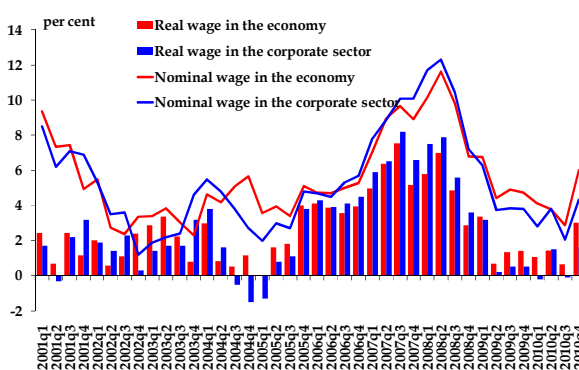


Source: GUS data. NBP calculations.

The Vacancy-Unemployment Ratio is directly proportional to the probability of an unemployed person finding a job (the more vacancies per unemployed the more likely he/she is to find a job) and inversely proportional to the probability of filling a vacant post by an employer (the more job offers in relation to the number of unemployed persons the less likely it is that the vacancy is fill in quickly). The measure reflects the relative power of employees and employers in wage negotiations.

Figure 2.27

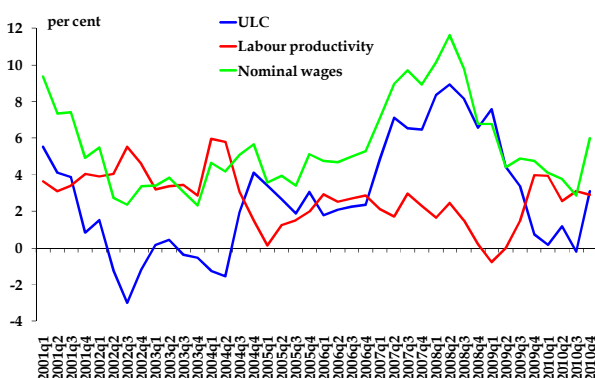
Annual growth of wages in the economy and corporate sector.



Source: GUS data. NBP calculations.

Figure 2.28

Annual growth of labour productivity, wages and unit labour costs (ULC) in the economy.



Source: GUS data. NBP calculations.

²⁴Economic Climate in the Enterprise Sector in 2010 Q4 and Forecasts for 2011 Q1, NBP.

by 1.2% y/y in the previous quarter; Figure 2.28). According to NBP estimates that take into account implied GDP growth in 2010 Q4 unit labour costs grew in 2010 Q4 by approx. 3.0% y/y. In industry unit labour costs has continued to decline since August 2009 (-2.2% y/y in December 2010 as compared to -5.0% y/y in September 2010), albeit since mid-2010 at a diminishing pace. The decline of unit labour costs in industry reflects a strong growth of labour productivity in this sector typical of economic recovery.

2.4. Financial markets

2.4.1. Financial asset prices and interest rates

Since the publication of the previous *Report*, the Monetary Policy Council raised the NBP's interest rates by 0.25 percentage points, in particular it increased the reference rate to 3.75% (Figure 2.29).

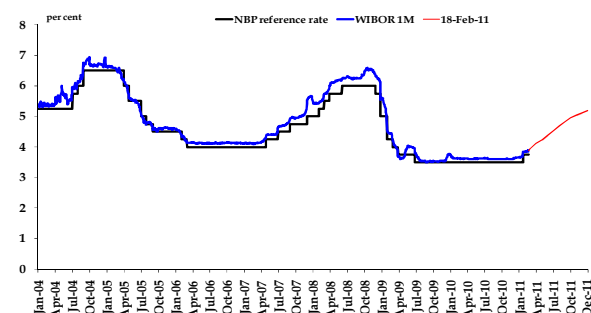
The increase in the NBP's interest rates in January 2011 was reflected in the rise of interbank market rates. At the same time, in January 2011, there was a decline in the spread between the interest rate on deposits in the interbank market and the OIS rate (Figure 2.30). Despite the fall in the spread the interbank market did not function fully effectively and domestic banks used mainly interbank operations with the shortest maturity.

According to the results of the Reuters survey²⁵ of 11 February 2011 most bank analysts anticipated the NBP reference rate to be raised by 50-75 basis points by the end of 2011. However, FRA contracts indicate that at the end of 2011 1M WIBOR rate will range at 5.00-5.25%.

Since the publication of the previous *Report*, yields on Polish government bonds have increased, with a stronger increase in the long maturity than in the short maturity bonds (Figure 2.31). The increase in yields was supported by expectations of increases of short-term interest rates and the publication of

Figure 2.29

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



Source: Reuters data. NBP calculations.

Figure 2.30

The spread between the 3-month interbank deposit rate and the OIS rate in Poland.



Source: Reuters data. NBP calculations.

Figure 2.31

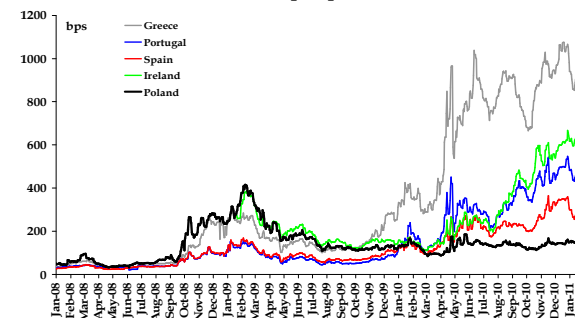
Yields of Polish benchmark bonds.



Source: Reuters data.

Figure 2.32

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



Source: Reuters data.

²⁵ According to the survey results eight out of 15 polled analysts expected the reference rate to be raised to 4.25%, while the remaining seven analysts - to 4.50%.

favourable data on GDP in Poland. The increase in the risk premium due to heightened financial market uncertainty in the euro area in November 2010 was also conducive to the increase in bond yields.

CDS rates for all Polish bonds were markedly lower than for bonds of peripheral euro area countries (Figure 2.32). The involvement of non-residents in the domestic debt market has increased since October 2010, although at a slower pace than in the previous two years (Figure 2.33).

In December 2010 yields on Polish long-term bonds in average annual terms, used for assessing the compliance with the Maastricht criterion, amounted to 5.8%, that is it was above the estimated reference value for this criterion (5.2%).

Since the publication of the previous *Report* the WIG index has remained, despite some volatility, at a level similar to that recorded in October 2010 while the involvement of non-residents on the Warsaw Stock Exchange has increased (Figure 2.34, Figure 2.35).

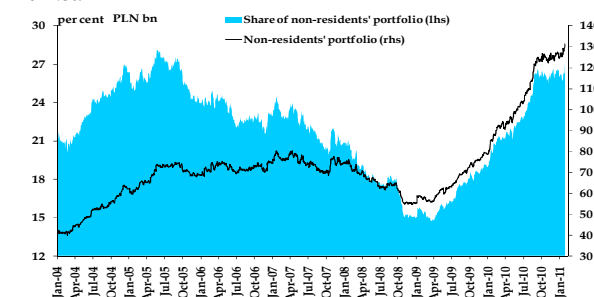
2.4.2. Home prices

2010 Q3 saw no significant changes in the housing market in Polish major cities²⁶. Asking prices in the primary market increased slightly, while asking prices in the secondary market and transaction prices in both these markets decreased slightly (Figure 2.36).

In 2010, the number of completed flats was by approx. 15% lower than in 2009. However, profit margins in the residential construction sector remain high, which encourages developers to embark on new investment projects. In 2010, the number of newly started construction projects was significantly higher than in 2009, which should translate into a higher number of completed flats in the coming quarters (Figure 2.37).

Figure 2.33

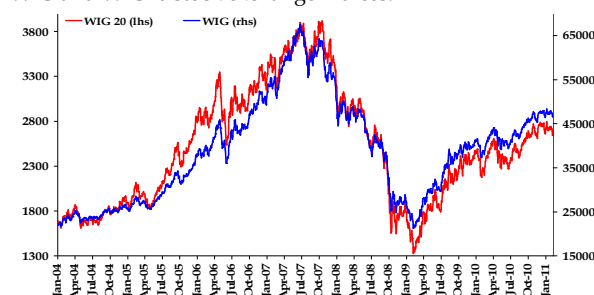
Non-residents' involvement in the Polish Treasury bond market.



Source: National Depository for Securities (KDPW) data.

Figure 2.34

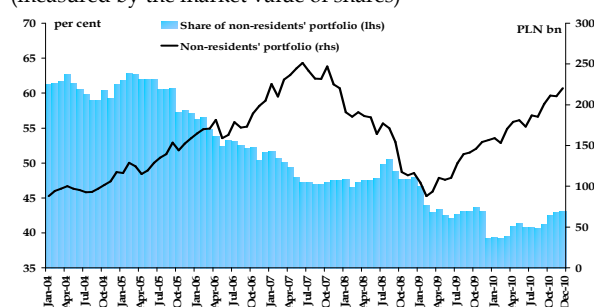
WIG and WIG20 stock exchange indices.



Source: Reuters data.

Figure 2.35

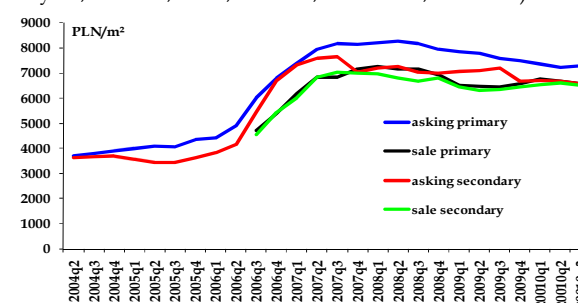
Non-residents' involvement in the Polish equity market (measured by the market value of shares)



Source: NBP data.

Figure 2.36

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



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

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

²⁶ More information on the situation in the Polish housing market can be found in the NBP publication *Report on the prices of flats and the situation on the residential market in Poland in 2010 Q3* available at the NBP website (www.nbp.pl, in Polish only).

2.4.3. Exchange rate

Since the publication of the previous *Report*, the nominal exchange rate of the zloty appreciated by 1.1% against the euro, whereas against the US dollar and the Swiss franc it depreciated by, respectively, 0.1% and 4.0% (Figure 2.38).

The zloty exchange rate was relatively stable throughout November, however at the end of the month the Polish currency weakened significantly. The depreciation of the zloty was mainly connected with the rise in tensions in the European financial market driven by increased concerns about the fiscal situation in Ireland and in other peripheral euro area countries. In December 2010 the zloty started to appreciate against the US dollar and the euro but continued to weaken against the Swiss franc. In January 2011, the zloty appreciated against all the three analysed currencies. Since the publication of the previous *Report* the zloty exchange rate developments were similar to developments in the exchange rates of other emerging market currencies.

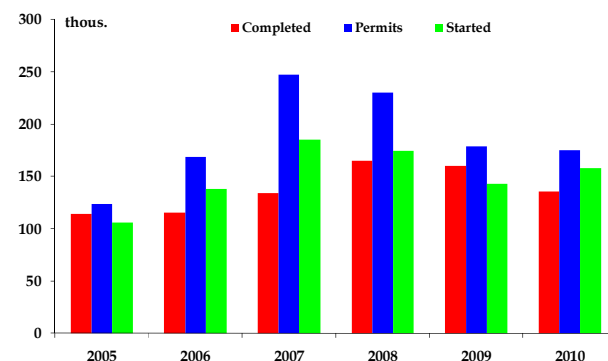
2.5. Credit and money²⁷

2.5.1. Loans

Following an increase in the period from May to October 2010, the volume of corporate loans held with domestic banks declined in November and December 2010 and grew in January 2011 (Figure 2.39)²⁸. This was primarily caused by substantial changes in current loans (i.e. overdrafts and operating loans), extended to enterprises to finance current liabilities related to their core business activity. Annual growth of corporate loans remained marginally negative, although it had been rising steadily from April 2010 to January 2011. The growth in corporate loans of small and medium sized enterprises was substantially higher than in the case of large companies which are less dependent on external financing.

Figure 2.37

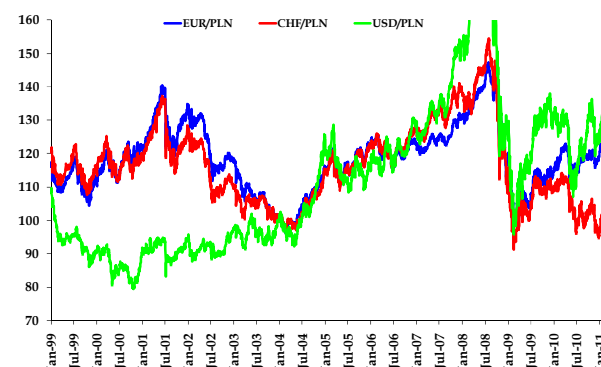
The number of completed flats, construction permits issued and construction projects started.



Source: GUS data.

Figure 2.38

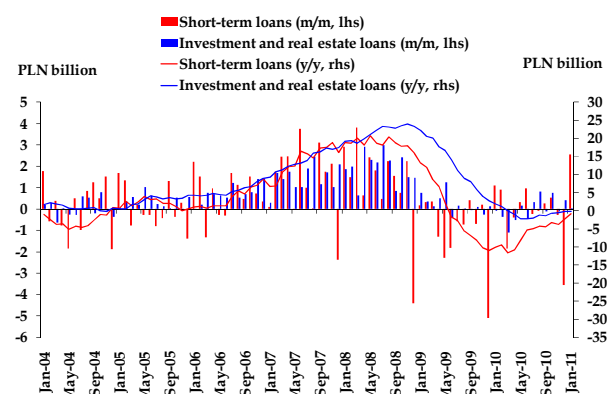
Nominal exchange rates of the Polish zloty, the Czech koruna and the Hungarian forint against the euro (January 2004=100; increase denotes appreciation).



Source: Ecwin data, NBP calculations.

Figure 2.39

Loans to enterprises.



Source: NBP data.

²⁷ The monetary data presented in this chapter refer to values adjusted for the impact of fluctuations in zloty exchange rate against main foreign currencies.

²⁸ It is typical for enterprises' debt to fall sharply in December and rise in January.

According to survey studies of enterprises²⁹, in 2010 Q4 the percentage of enterprises applying for a loan reached the lowest level ever recorded in the survey (seasonally adjusted data; Figure 2.40), while a particularly strong decline was recorded by the largest enterprises. At the same time, the share of loan applications approved by banks remained relatively high. On the other hand, surveys carried out among senior loan officers indicate a rising demand - mainly among small and medium enterprises - for corporate loans³⁰.

Apart from domestic sources of credit, enterprises financed their activities through external debt. The volume of foreign corporate loans stood at EUR 91.2 billion in 2010 Q3 rising at an annual rate of 11.4%. In turn, the total value of enterprises' external debt (including debt securities) rose to EUR 92.8 billion, i.e. by 8.0% y/y.

The revival in the market for housing loans has continued, with their volume increasing between September 2010 and January 2011 by an average of PLN 2.6 billion per month (Figure 2.41). The majority of new housing loans were denominated in the zloty (in December 2010, 77.2%), which led to a steady rise in the share of zloty loans in overall housing loans (Figure 2.42).

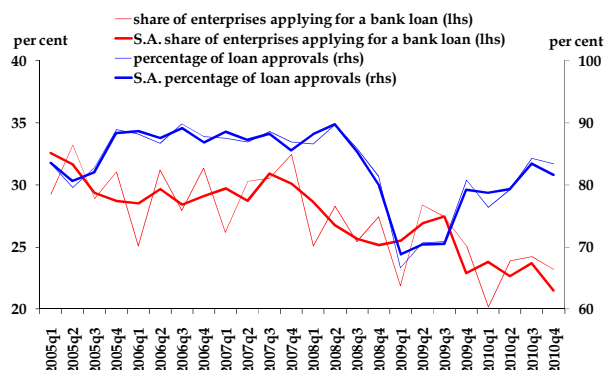
In the period from September 2010 to January 2011, households' consumer loans indebtedness decreased further (by an average of PLN 0.4 billion per month; Figure 2.41).

Survey studies of banks indicate that in 2010 Q4 banks began to grant housing loans on more favourable terms. Most banks reduced their margins and non-interest costs of loans, partly in response to competitive pressure in the market. At the same time, a vast majority of banks tightened the criteria for such loans, relating it to the obligation to implement Recommendation T.

In 2010 Q4, banks once again tightened the criteria for granting consumer loans to households. With regard to terms of the loans, banks reduced the cost of their servicing, while

Figure 2.40

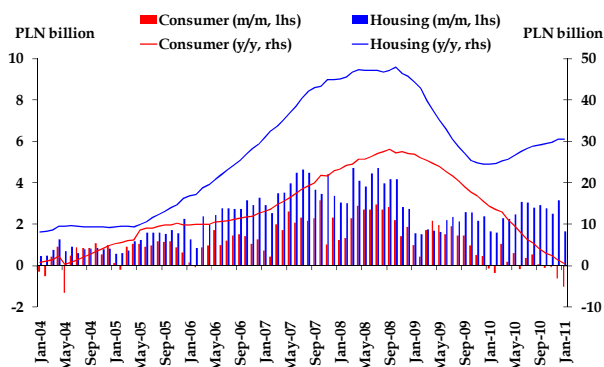
Share of enterprises applying for loans and percentage of approved loan applications.



Source: NBP data.

Figure 2.41

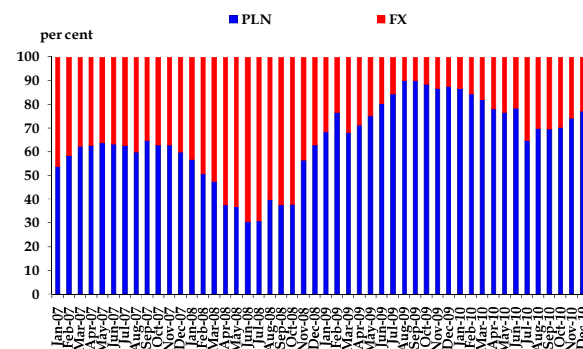
Loans to households.



Source: NBP data.

Figure 2.42

Currency structure of newly granted housing loans to households.



Source: NBP data.

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

²⁹ Economic climate in the enterprise sector in 2010 Q4 and forecasts for 2011 Q1, NBP.

³⁰ Senior Loan Officer Opinion Surveys on Bank Lending Practices and Credit Conditions, 2010 Q4., NBP.

increased the margins charged to higher risk customers and decreased the maximum amount of loan³¹ (Figure 2.42). According to banks, the main cause of credit tightening in this area was the need to implement Recommendation T. The more restrictive criteria were also introduced in response to the rising share of unperforming loans.

In the period from September to December 2010, average interest on new corporate PLN loans fluctuated at around 5.9% (Figure 2.45). The interest charged on new PLN housing loans to households declined further (by 0.2 percentage point in the analysed period), and reached 6.1% in December, the lowest level since August 2007 (Figure 2.48). There was a comparable decrease (of 0.3% percentage points) in the interest on new consumer loans, which fell to 14.9% in December. Given the modest rise in WIBOR 3M rates, the fall in the interest rate means a further loosening of the criteria for granting loans to households as a result of lower margins charged by banks.

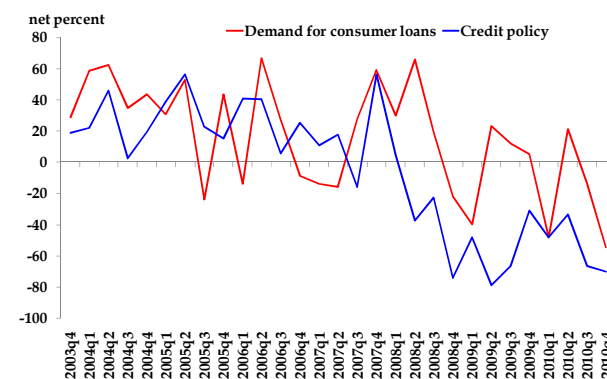
2.5.2. Deposits and monetary aggregates

In the period from September 2010 to January 2011, the annual growth of the M3 aggregate amounted to approximately 9% (Figure 2.48)³². The growth of broad money was much slower than that of its liquid components constituting the M1 aggregate, which expanded in December 2010 and January 2011 at an annual rate of respectively 15.9% and 14.7%. The annual growth rate of the M0 aggregate amounted to 7.7% in January 2011.

In the period from September to December 2010, the volume of corporate deposits at banks grew by PLN 17.7 billion, while in January 2011 it decreased by PLN 13 billion (Figure 2.47)³³. The annual growth of deposits has exhibited a declining trend since May 2010. Liquidity conditions in the enterprise sector in 2010 Q4 continued to be good. 69.5% of the enterprises surveyed by the NBP under business condition

Figure 2.43

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

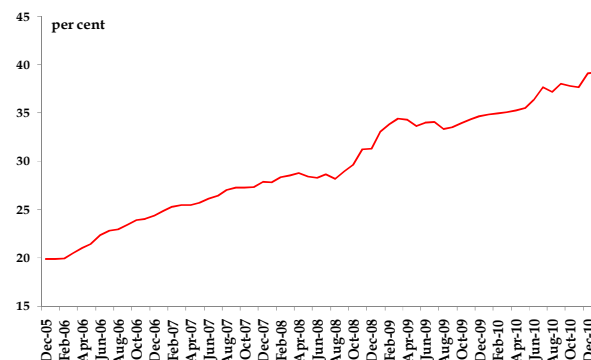


Source: NBP data.

Weighted responses of banks. Positive value of both indicators should be interpreted respectively as a rise in the demand for credit or easing of lending policy with respect to the previous quarter.

Figure 2.44

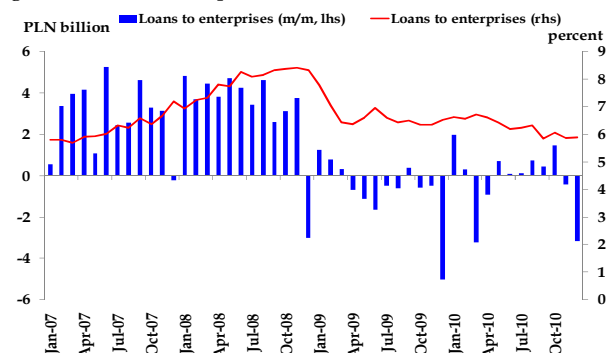
Share of housing loans in the total of loans.



Source: NBP data.

Figure 2.45

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



Source: NBP data.

³¹ Senior Loan Officer Opinion Surveys on Bank Lending Practices and Credit conditions, 2010 Q4., NBP.

³² The fall in the annual growth to 6.7% in October was in large part caused by the base effect. In October 2009 there was a surge in money supply related to a sharp increase in short-term loans to investors wishing to purchase the shares of the Polish Energy Group under its privatisation scheme.

³³ It is typical for enterprises' deposits to rise sharply in December and fall in January.

surveys declared no liquidity problems³⁴, which is close to the average from the period 2004-2010.

Household deposits in the period from September 2010 to January 2011 increased on average by PLN 4.5 billion per month³⁵ while their annual growth stabilised at around 10% (Figure 2.47). One of the reasons for slower growth in household deposits in 2010 versus 2009 was the reduction in the interest rate on new PLN deposits (in December 2010 it was 0.5 percentage points below the level of the previous year).

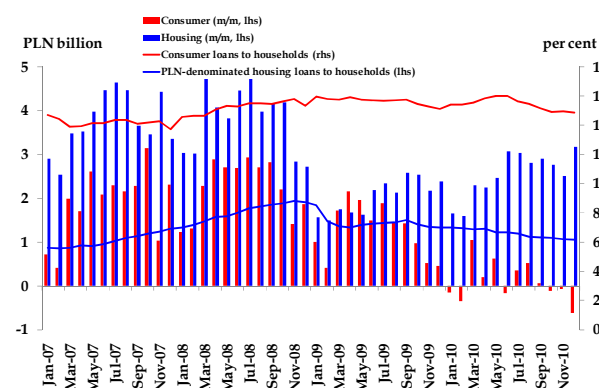
At the same time, other categories of financial assets held by the public rose fast, which was conducive to mitigating the growth of the M3 aggregate. In the period from September to December 2010, the value of households' assets held by investment funds increased by PLN 8.3 billion, out of which net contributions of new funds accounted for PLN 1.9 billion. The overall value of financial assets held by households increased in this period by PLN 35.6 billion, while in the entire year 2010 - by PLN 69.7 billion (a 10.2% rise in y/y terms)³⁶.

2.6. Balance of payments

In 2010 Q3, the current account deficit amounted to EUR 3.6 billion (compared to EUR 1.9 billion in 2010 Q2 and EUR 1.5 billion in 2009 Q3). This deterioration was driven primarily by a deepening deficit in the trade account and a reduced surplus on the current transfers account (Figure 2.49). According to provisional estimates, in 2010 Q4 the current account deficit amounted to EUR 5.0 billion (as compared with a deficit of EUR 3.0 billion in the corresponding period of 2009), which was mainly the result of further deepening of trade deficit.

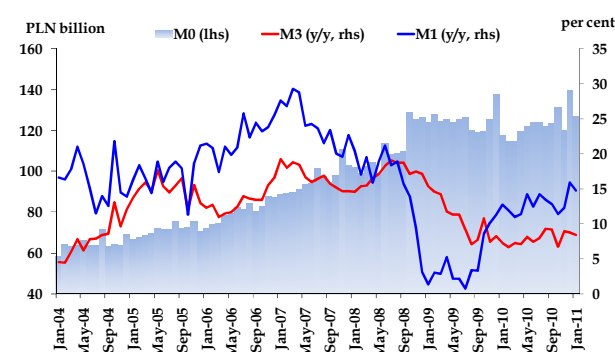
2010 Q3 saw a rise in net inflow of capital to Poland. The surplus on the financial account reached EUR 12.7 billion (compared to EUR 6.5

Figure 2.46
Monthly increases and average interest charged on newly granted PLN loans to households.



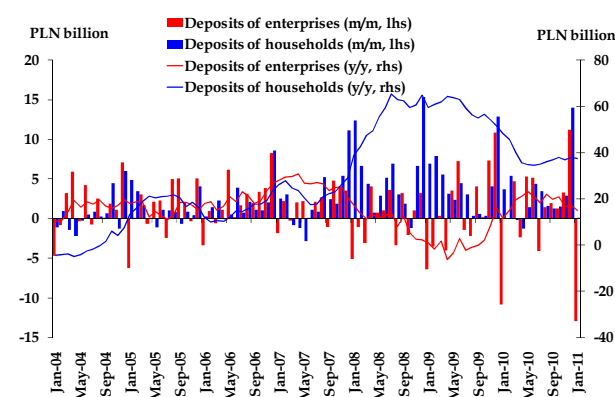
Source: NBP data.

Figure 2.47
Currency in circulation and annual growth rate of M1 and M3.



Source: NBP data.

Figure 2.48
Bank deposits of households and enterprises.



Source: NBP Data.

³⁴ *Economic climate in the enterprise sector in 2010 Q4 and forecasts for 2011 Q1*, NBP.

³⁵ The highest monthly rise in households' deposits was recorded in December 2010 (by PLN 14 billion) which is a typical phenomenon for the end of a year.

³⁶ The quoted amount of financial assets includes both deposits with a term of less than 2 years, and deposits of over 2 years, which are not included in the M3 aggregate.

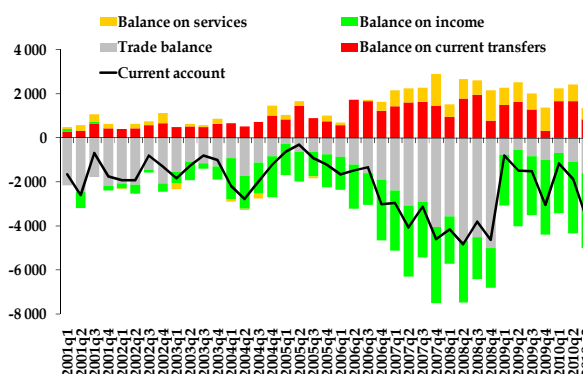
billion in 2010 Q2 and EUR 11.1 billion in 2009 Q3), which was in large part due to continued inflows of net portfolio investment, amounting to EUR 7.2 billion. According to preliminary estimates, in 2010 Q4 the financial account of the balance of payments recorded an inflow of approx. EUR 1.5 (as compared with EUR 7.0 in the corresponding period of 2009).

In 2010 Q3 foreign investors mainly invested in Treasury bonds. Poland's external debt in EUR rose in 2010 Q3 by EUR 20.6 billion, to EUR 229.8 billion (Figure 2.51).

The current account deficit (in terms of four consecutive quarters) rose to 2.8% of GDP in 2010 Q3 (as compared with 2.2% in 2010 Q2), while the current and capital accounts recorded in 2010 Q3 a deficit of 1.3% of GDP (compared to a deficit of 0.9% of GDP in 2010 Q2; Figure 2.50). Over a half of the 2010 Q3 current account deficit was financed by an inflow of direct investment (in the previous quarter, it was wholly financed by foreign direct investment).

Figure 2.49

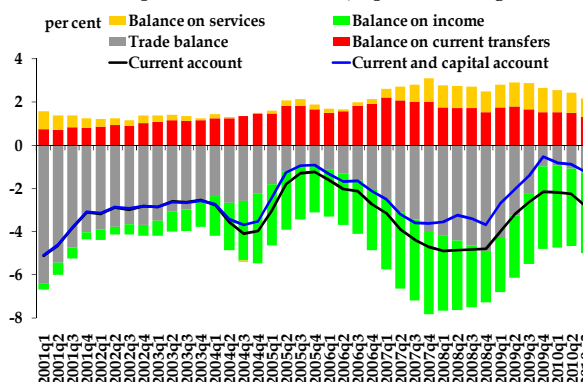
Current account balance.



Source: NBP data.

Figure 2.50

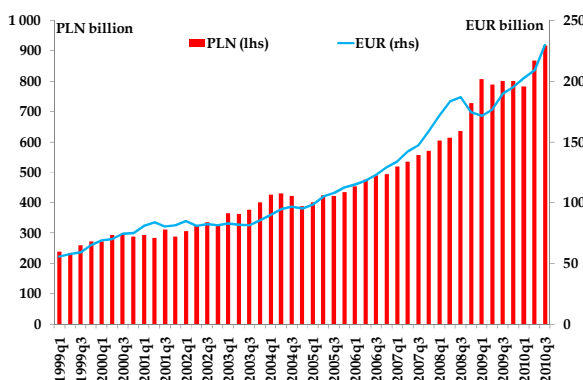
Current and capital account to GDP (4-quarter rolling window).



Source: NBP data.

Figure 2.51

External debt in EUR and PLN.



Source: NBP data.

Chapter 3.

Monetary policy in October 2010 - March 2011

At the meetings in October, November and December 2010 the Monetary Policy Council decided to keep the NBP interest rates unchanged: the reference rate at 3.50% on an annual basis; the lombard rate at 5.00% on an annual basis; the deposit rate at 2.00% on an annual basis; the rediscount rate at 3.75% on an annual basis and the discount rate³⁷ at 4.00% on an annual basis. At the meeting in January 2011 the Monetary Policy Council decided to raise the NBP interest rates by 25 basis points: the reference rate to 3.75%, the lombard rate to 5.25%, the deposit rate to 2.25% and the rediscount rate to 4.00%. At the meeting in March 2011 the Monetary Policy Council decided to keep the interest rates unchanged.

What follows in the next part of the chapter are the previously published *Minutes of the Monetary Policy Council decision-making meetings* held in October, November, December 2010, and January 2011 as well as the *Information from the meeting of the Monetary Policy Council* in March 2011.

Minutes of the Monetary Policy Council decision-making meeting held on 27 October 2010

At the meeting the Monetary Policy Council discussed the outlook for economic growth and inflation, situation in the public finance sector and in the labour market, monetary and credit aggregates and the exchange rate of the zloty.

While analysing the current situation in the real economy and the outlook for economic growth in Poland, fast growth in industrial output, retail sales and exports was pointed out. Some Council members argued that the data on the consumption of households in 2010 Q2 and retail sales indicated that the economic growth, which had so far been mainly reinforced by growing external demand, was increasingly supported by domestic factors. In their opinion the current consumption growth cannot be fully attributed to one-off factors such as rebuilding of assets in the areas affected by floods and transferring some purchases from 2011 in view of the expected change of VAT rates and changes in the regulations on VAT deduction on car purchases. In the opinion of those Council members, the improving labour market situation, including the relatively fast employment growth in the enterprise sector, would act towards further consumption growth. In turn, the strengthening private consumption amid further high export

³⁷ In line with the decision of the Monetary Policy Council of 29 September 2010 (MPC resolution No. 7/2010) presented in the Monetary Policy Guidelines for 2011 regarding the withdrawal of the bill discount credit from the set of monetary policy instruments as from 1 January 2011 the discount rate applied only until the end of 2010.

growth could translate into investment recovery in enterprises, even though due to the uncertainty surrounding the future economic situation, including the situation in the public finance sector, corporate investment growth in the quarters to come could remain low. Those members emphasised that the possibility of investment revival is suggested by an increase in production capacity utilisation above the long-run average and favourable financial and liquidity situation of enterprises, allowing them to self-finance investment. Moreover, in the opinion of those Council members, investment growth in the economy in the coming quarters – apart from the quickly growing public investment – might be also supported by housing market recovery, the symptoms of which appeared in 2010 Q3.

Other Council members argued, however, that the incoming data did not unequivocally confirm that the recovery in economic activity was sustainable. They pointed out that some forecasts indicated the possibility of economic growth weakening in 2011 or stabilising at a relatively low level in the next two years. They also emphasised that retail sales growth was most likely being raised by the rapid increase in the sale of automobiles and durable goods, which was driven by one-off factors. After the expiry of the impact of these factors – in the opinion of those Council members – the growth of household consumption may slacken, which is confirmed by the low growth of real wages. Those members also pointed out that investment growth was still very low, and in the recent period the sentiment of enterprises had worsened, including their expectations on output, demand and employment.

While discussing the outlook for inflation in Poland, the Council addressed the results of the inflation projection based on the NECMOD model and other forecasts. It was pointed out that, in line with the October projection, in its entire horizon the probability of inflation running above the NBP inflation target of 2.5% is higher than the probability of inflation running below this target. Other internal NBP forecasts also point to such distribution of those probabilities.

The members of the Council pointed out that in the short term inflation would be driven by rising food prices, caused by supply-side shocks in the country and abroad, changes in indirect tax rates and the rise in administered prices, primarily energy prices. Some Council members assessed that inflation would also be raised by delayed effects of the strong depreciation of the zloty during the economic crisis, which could not yet fully translate into consumer prices in Poland. In the opinion of other Council members, inflation would be limited by factors such as zloty exchange rate appreciation observed in recent months, low inflation in the external environment of the Polish economy and still weak demand and wage pressure, including the positive development of the relationship between the growth of labour productivity and aggregate wages. Some Council members assessed, however, that taking into account a possible decline in the potential growth of the Polish economy as a result of the financial crisis and other factors, the current rate of economic growth was already relatively high and would not be a factor limiting the inflation rise in Poland.

In the opinion of some Council members, after the expiry of factors temporarily raising inflation, in the absence of monetary policy tightening, inflation was likely to remain at an elevated level due to the expected increase in domestic wage and demand pressures, including a likely acceleration in unit labour cost growth and the inflation rise abroad. This is indicated by the forecast steady growth of core inflation net of food and energy prices in the projection based on the NECMOD model. Other Council members, however, assessed that inflationary pressures may be eased by an appreciation of the zloty and fiscal policy tightening in 2012 announced by the government. They also pointed out that inflation would decrease after the supply-side inflationary factors expire.

Board members also discussed the situation of the public finance sector. Some members pointed out that the scale of the planned fiscal tightening in 2011 was not sufficient for curbing the public

debt accumulation. Some Council members also indicated that due to the risk of lower than projected revenues from the VAT and lower income from privatisation in 2011, the scale of fiscal tightening and also the reduction of the borrowing needs of the central budget may prove smaller than assumed. Those members also pointed out that the revenues which would be reducing the borrowing needs of the central budget in 2011 were of one-off nature and would not curb the growth of public debt in the following years. Therefore, in order to halt the rapid public debt accumulation it would be necessary to increase the scale of fiscal tightening in the years to come. These members also emphasised that the likely lack of consent to deduct the cost of pension reform from the general government deficit would necessitate a strong fiscal tightening in the coming years in order to meet the requirements of the Stability and Growth Pact. According to those members, the strong fiscal tightening would be a factor curbing economic growth and inflationary pressure in Poland. Some Council members, however, pointed to the uncertainty concerning the fiscal policy after 2011. Moreover, some Council members pointed out that, because of the possibility of the so-called non-Keynesian effects of fiscal tightening, such tightening does not have to significantly reduce the short-term economic growth if it is mainly based on the reduction of general government expenditure. If, however, it was based on indirect tax increases, then it would act towards a short-term increase in inflation in Poland, rising the risk of inflation becoming entrenched at a heightened level.

While discussing the situation in the external environment, the continued recovery of moderate growth in the global economy was emphasised, including the persistence of low GDP growth in major developed economies and a gradual decline in the growth of the Chinese economy as a result of macroeconomic policy tightening in this country. The effects of high fiscal imbalance and its planned reduction, as well as the effects of monetary expansion, including non-standard measures undertaken and envisaged by major central banks continue to be an important uncertainty factor for the global economic growth. Some Council members assessed that the decline in China's economic growth could translate – through its adverse impact on the outlook for German exports – into a slowdown in the Polish exports. However, other Council members, assuming that the competitive exchange rate devaluations would not intensify and no collapse in the world trade should be anticipated, believed that the rapid growth in major emerging economies could be expected, which would support the relatively high demand for German and, indirectly, also for Polish exports.

Some Council members pointed out that GDP growth rate in the euro area was now close to the growth rate of the economies of the United States and the United Kingdom, which had historically grown faster than the euro area. Those members argued that this may be associated with different economic policy responses to the financial crisis in those economies. In particular, they pointed out that the relatively rapid improvement of business sentiment in Germany during the recovery from the recession might have been supported by the fact that fiscal deficit had not been allowed to rise to a high level in Germany, which limited the risk of increased future tax burden in this country.

Some Council members pointed out that – in view of the probably extended period of low interest rates being maintained by major central banks and the reintroduction of quantitative easing in the United States – a possible rise in interest rates of the NBP could increase the risk of rapid capital inflows and excessive appreciation of the zloty.

In turn, other Council members believed that the potential rise in interest rate disparity could only have a limited impact on the zloty exchange rate path. They pointed out that the exchange rate of the zloty, similarly to the currencies of other emerging economies, was significantly affected by changes in risk perception by investors in global financial markets. Therefore, any appreciation of the zloty would most probably be accompanied by the appreciation of the currencies of other emerging economies, i.e. Poland's competitors in international markets.

Moreover, some Council members pointed out that the reintroduction of quantitative easing in the United States could also foster the appreciation of the euro against the dollar, which would have a beneficial influence on the relationship between the prices of Polish exports and imports.

Some Council members also assessed that stabilisation of the share of non-residents' investment in the domestic treasury bill markets in October 2010 might be a sign of certain curbing of the inflow of capital to this market, which reduced the probability of strong appreciation of the zloty exchange rate. Those members also emphasised that this share was currently at a relatively high level which might increase vulnerability of the zloty exchange rate to changes in the risk perception in the global markets.

Some members of the Council also addressed changes in the external environment of the Polish economy driven by the financial crisis, which were likely to impact the developments of the equilibrium interest rate in Poland. They assessed that the possible decline in the potential growth of the Polish economy might not have been accompanied by a similar fall in the equilibrium interest rate in Poland due to the likely increase in the investment risk premium in the emerging economies (a decline in the current account deficit regarded as sustainable by investors).

While analysing the situation in the labour market, it was pointed out that the rise in employment in the corporate sector accompanied by the simultaneous increase in the unemployment rate in September 2010 (in seasonally adjusted terms) continued, which might be driven by the persisting growth in the number of economically active persons, contributing to curbing the wage pressure. Some members of the Council also indicated that upon recovery from the current economic slowdown, employment started to rise amidst markedly lower GDP growth than in the past, which, coupled with growing number of economically active persons, might point at favourable structural changes in the Polish labour market in the past few years. It was also pointed at the stabilisation of the ratio of new job offers to the number of unemployed. At the same time, other Council members pointed at the uncertainty about the impact of the abolition of restrictions on Polish citizens accessing the labour market in Germany and Austria starting from May 2011 on the supply of labour in Poland, in particular, the number of highly qualified workers. Some members of the Council emphasised that amidst high percentage of enterprises where output had recently been increasing considerably faster than employment, the corporate sector might be expected to see further employment growth. Moreover they assessed that high wage restraint in the enterprises in the period of economic slowdown was rather a disturbance than a structural change that should fade off together with improvement in the economic situation. As a result, over the monetary policy transmission horizon, wage pressure in the economy may be expected to intensify.

Members of the Council also discussed the developments of inflation expectations. It was argued that following a rise observed in August 2010, the subsequent months recorded a drop in the majority of measures of household inflation expectations which were currently at the level close to the NBP's inflation target. Council members pointed at a decline in the number of enterprises which, in the business condition surveys, declared increases of their own prices, despite the expected rise in the commodity prices. Yet, according to some Council members, basing on the historical data, the resulting decline in markups may be expected to have minor and quickly fading off impact on inflation. At the same time, Council members pointed at an increase of inflation expectations of enterprises and financial sector analysts concerning growth in prices in the whole economy. It was emphasised that the anticipated rise in VAT and excise tax did not result in any considerable increase in inflation expectations. Yet, some members of the Council pointed at a risk of a rise in inflation expectations at the beginning of 2011, following the implementation of the announced changes in the indirect taxes rates.

The meeting also discussed the developments of monetary aggregates. Council members pointed at the continuation of a relatively stable M3 supply growth, declining annual growth in household lending and persistently negative, albeit gradually rising annual growth in corporate lending³⁸. It was emphasised that corporate demand for credit remained weak, and debt increase in the banking sector concerned mainly large enterprises; on the other hand, no clear revival in lending to the sector of small and medium-sized enterprises could be seen. In the opinion of some members of the Council, the currently observed moderate growth in monetary aggregates did not point at a risk of growing inflationary pressure. Other members of the Council emphasised, however, that M3 growth was not low when compared to the growth of nominal GDP. Those members paid particular attention to the developments in housing loans, which increase more substantially than other categories of loans to households and enterprises. Those members pointed out that given the decline in the interest on mortgage loans as a result of reduction of bank markups and banks' expectations of rising demand for those loans, a further acceleration might be expected in the growth of housing loans which already exceeded the achievable growth of disposable income.

While considering the decision on interest rates, some members of the Council argued that the expected acceleration of economic growth supporting the improvement in labour market situation may – in the absence of monetary policy tightening – lead to a gradual rise in wage and inflationary pressure in the medium term. Those members of the Council claimed that the NBP interest rate increase would be justified in order to reduce the risk of the emergence of such pressure. Such an increase would constitute an adjustment of monetary policy parameters to the current assessment of economic situation following the period of a strong decline in economic activity caused by the global financial crisis. It would be also conducive to anchoring the inflation expectations at the level of the NBP's inflation target.

In the opinion of other members of the Council, the persistently moderate economic growth in Poland, currently low wage and demand pressure (confirmed by core inflation running at a low level) and the possibility of increasing inflow of capital to emerging economies, including Poland, amidst the extended period of expansionary monetary policy pursued by major central banks, combined with the risk of further slowdown of the global economic growth, justified keeping the NBP interest rates unchanged at the present meeting of the Council. Those members also emphasised that growing interest rate disparity combined with the appreciation of the exchange rate could support the increase in foreign currency lending.

The meeting also discussed a rise in the required reserve rate by 50 basis points. Some members of the Council pointed out that the required reserve rate was reduced as part of the anti-crisis measures undertaken in the period of strong liquidity disturbances in the financial markets. As this period ended, it was justified to increase this rate to the level maintained before the financial crisis. Such a decision would also constitute a signal of MPC's readiness to react to increasing inflationary pressure. Other members of the Council emphasised, however, that a rise in the required reserve rate would have a limited impact on the liquidity in the domestic money market and would not be a factor likely to translate into limiting the inflationary pressure in the economy. At the same time, they pointed out that a rise in reserve rate is not the best signal of MPC's readiness to react to growing inflationary pressure.

A motion to raise the required reserve rate by 50 basis points from 3.0% to 3.5% was put forward at the meeting. The motion passed. The decision applies to reserve requirement to be held from 31 December 2010. Also a motion to raise the NBP interest rates by 50 basis points was put forward at the meeting. The motion did not pass. The Council kept the interest rates unchanged:

³⁸ Adjusted for exchange rate changes.

the reference rate at 3.50%, the lombard rate at 5.00%, the deposit rate at 2.00%, the rediscount rate at 3.75% and the discount rate at 4.00%.

Minutes of the Monetary Policy Council decision-making meeting held on 23 November 2010

At the meeting, the Monetary Policy Council discussed the outlook for economic growth and inflation, the situation in the labour market, monetary and credit aggregates and the zloty exchange rate developments.

The Council emphasised further recovery of economic activity in Poland, which will most likely continue in the quarters to come. Some Council members pointed to the fact that international institutions had increased their forecasts of Poland's GDP growth for 2011. These members stressed that GDP growth was increasingly supported by domestic factors, in particular by individual consumption growth, which is encouraged by the improving labour market situation. They also pointed to the relatively high level of production capacity utilisation, which should translate into revival of enterprises' investment demand, particularly considering their very good financial situation. The continuation of high – in their assessment – GDP growth in the coming quarters should be additionally supported by the favourable outlook for exports, connected in particular with high economic activity in Germany and a fast increase in German exports. In the opinion of those Council members, in 2011 no significant demand reduction should be expected on the part of the public finance sector in Poland. On the other hand, other Council members argued that there was still a risk of a slowdown in the global economic growth, and that domestic demand was dependent on consumer sentiment, which had once again slightly deteriorated in November, and on the level of public investment, which could be delayed. In the opinion of those Council members, the postponement of public investment and the reduction of other expenditure of the public finance sector, in combination with a possible further increase in taxes, would also result from a necessary fiscal policy tightening in 2011, which in the short run would be slowing GDP growth. Moreover, some Council members pointed out that without a significant recovery in investment loans, it would be impossible to boost corporate investment.

While discussing the situation in the labour market, some Council members emphasised that the growth in the number of economically active persons meant that in the recent months the rising employment had not been matched by a declining rate of unemployment, which resulted in the fact that the level of labour market tensions was not growing, and wage pressure remained limited. The absence of significant wage pressure was also confirmed – in their opinion – by the data on wages in the economy, whose growth in 2010 Q3 was low. Other Council members, however, argued that a further increase in employment in the enterprise sector, combined with the growing number of job offers, signalled a revival in the labour market, which could contribute to a gradual build-up of wage pressure. According to those Council members, the very good financial results of companies could be conducive to accelerated wage growth, particularly in the state-controlled companies of the raw material sector. Some Council members continued to indicate that the opening of the German and Austrian labour markets in May 2011 constitute an uncertainty factor for the development of the labour supply in Poland. Some Council members emphasised that developments in the labour market, including the amount of labour supply, would also depend on changes in the tax and pension policy.

While discussing changes in credit aggregates, it was indicated that the slight slowdown in the growth of loans to households (resulting largely from the gradual implementation of Recommendation T) was accompanied by continued low growth of lending to the corporate sector. At the same time, some Council members noted that, taking into account the increasing percentage of irregular loans, banks would not be willing to ease their lending policies. This

should reduce the risk of excessive credit expansion and asset price rises, as well as of the increase of inflationary pressures. According to these Council members, the limited risk of excessive inflationary pressure was also indicated by the decelerated growth of monetary aggregates over the recent period. Other Council members argued that the monthly increases in housing loans to households remained at a relatively high level (lower only to that in 2007-2008), while loans to companies had been steadily rising for several months. These Council members believe that the expected acceleration of GDP growth may be supporting an accelerated credit growth – on the one hand, by strengthening the private sector demand for credit and, on the other hand, by encouraging banks to ease their lending conditions. They pointed out that the decline in the growth of money supply in October had been due to the base effect resulting from an increased demand for short-term credit in October 2009 fuelled by the privatisation of PGE.

While analysing the rise in CPI inflation in October 2010 to 2.8%, it was pointed out that it had resulted from higher growth of energy and food prices, i.e. factors largely beyond the influence of monetary policy. Some Council members emphasised the fact that core inflation net of food and energy prices remained low, while some forecasts indicated that, after a temporary increase, CPI inflation would decline in the second half of 2011. Other members of the Council pointed out that other measures of core inflation had risen and the subsequent months could also bring an increase in core inflation net of food and energy prices. Moreover, those members argued that the increase in food and energy prices could not be considered temporary. In their assessment, it resulted largely from the impact of global factors (i.e. from a strong increase in commodity prices in the world markets associated with rising demand from the emerging economies). These factors could support high growth of prices of those goods also in the future.

The Council also discussed about inflation expectations and the risk of second-round effects. Some Council members argued that inflation expectations in Poland were to a large extent adaptive, so the rise in current inflation would translate to higher inflation expectations, increasing the risk of second-round effects. Expectations can also be raised by the growing prices of frequently purchased goods, and also the increase of most VAT rates in 2011. Other Council members assessed that the risk of the growing inflation expectations translating into wage growth was small, since trade unions had little power in the Polish economy. They also emphasised that the growth of unit labour costs was still low, which meant that due to increasing labour productivity a possible acceleration of wage growth would have only limited impact on inflation.

While analysing the impact of external conditions on the outlook for economic growth and inflation in Poland, some Council members pointed to the relatively high economic growth in the world, including the continued recovery in developed countries and a high growth of GDP in developing countries. According to these members of the Council, the growing activity in the global economy would support acceleration of GDP growth in Poland and maintaining high growth of commodity prices in the world markets in the years to come – translating into a rise in domestic inflationary pressures. Some Council members emphasised in particular the relatively favourable situation in Germany, which, through the positive impact on Polish exports and GDP growth, could also be conducive to a gradual rise in domestic inflationary pressure. Other Council members pointed out that activity in the German economy was heavily dependent on GDP growth in China, which was tightening its macroeconomic policies, which would be conducive to reducing Chinese economic growth. At the same time, Council members emphasised that an important uncertainty factor for the global economic growth remained the difficult fiscal situation of some euro-area countries and the effects of further expansionary fiscal and monetary policy in the United States, as well as tensions between the governments of the world's largest economies related to the exchange rate policies.

While discussing the changes in the external environment of the Polish economy which are likely to impact the developments of the exchange rate of the Polish zloty, members of the Council pointed, on the one hand, at the Fed's decision on increasing the scale of monetary expansion, and, on the other hand, at the deepening of budgetary problems in Ireland. Some Council members emphasized at this point that response of financial markets to both events was weaker than to similar developments observed previously. This may indicate that any further turmoil connected with the situation in some euro-area countries would have a limited impact on the investors' sentiment in the global financial markets. Some members of the Council argued, at the same time, that developments of the zloty exchange rate might be driven not only by external factors but also by domestic ones, especially by the size of the issue of treasury securities. Those members indicated that gradual reduction of the inflow of portfolio investments to Poland in the recent period could have been caused by a decrease in the issue of new bonds, resulting from satisfying the country's borrowing needs for 2010.

While addressing the impact of the domestic monetary policy on the zloty exchange rate amidst extended period of monetary expansion of major central banks, some members of the Council emphasized that importance of a possible rise in interest rate disparity might be limited due to growing – as a result of the crisis – role of changes in the global risk aversion to exchange rate developments. In the opinion of those Council members lower responsiveness of the exchange rate to changes in the disparity is a factor speaking in favour of tightening monetary policy in Poland as soon as possible. Those members also argued that a possible appreciation of the zloty would be most likely accompanied by the appreciation of currencies of other emerging economies. They pointed out that the risk of the zloty appreciation being stronger than that of other emerging currencies was limited by high deficit in public finance sector in Poland. Other members of the Council emphasized that developments of the zloty exchange rate were an important factor affecting – together with the level of interest rates – the total restrictiveness of monetary conditions and thus they should be taken into consideration in the conduct of the monetary policy.

During the meeting, members of the Council also discussed about possible changes in the potential output growth of the Polish economy. Some members of the Council emphasized that regardless of changes in the potential output growth, two factors – on the one hand, a decline in the current account deficit considered safe by financial market participants, and, on the other hand, rising deficit in public finance – could support a possible increase of the equilibrium interest rate. Other members of the Council indicated that high level of liquidity in the global financial markets could support a possible decrease in the equilibrium interest rate.

The Council also discussed the balance of costs of a too late and too early tightening of the monetary policy.

While considering the decision on interest rates, some members of the Council assessed that the risk of growing wage and inflationary pressure connected with accelerating GDP growth and the risk of growing inflation expectations justified increasing the NBP interest rates. In their opinion, an increase of interest rates by 50 basis points could constitute a one-off adjustment of monetary policy parameters to the current economic situation, following a period of a strong economic slowdown caused by the global financial crisis. On the other hand, an increase of interest rates by 25 basis points could start a gradual tightening of the monetary policy, whose scale and pace would depend on the economic developments in the coming quarters.

In the opinion of the majority of Council members, the absence of a significant wage and inflationary pressures, persistently weak demand pressure and limited lending justified keeping the NBP interest rates unchanged in November. In the opinion of those members of the Council the persisting risk of excessive zloty appreciation connected with a strong monetary expansion in

major developed economies as well as uncertainty related to economic developments abroad spoke also in favour of keeping the interest rates unchanged.

A motion to raise the NBP interest rates by 50 basis points was put forward at the meeting. The motion did not pass. Also a motion to raise the NBP interest rates by 25 basis points was put forward at the meeting. The motion did not pass. The Council kept the interest rates unchanged: the reference rate at 3.50%, the lombard rate at 5.00%, the deposit rate at 2.00%, the rediscount rate at 3.75% and the discount rate at 4.00%.

Minutes of the Monetary Policy Council decision-making meeting held on 22 December 2010

At the meeting, the Monetary Policy Council discussed issues related to developments in the external environment of the Polish economy, the outlook for domestic economic growth and inflation, and the situation in the public finance sector.

While addressing the external developments it was pointed out that the recovery in the global economy continued, with a slight acceleration of GDP growth in 2010 Q3 in the United States and slower GDP growth in the euro area. At the same time, a deepening divergence in the economic situation among EU Member States was stressed, in particular, favourable economic conditions observed in Germany, Great Britain and France, the main recipients of Polish exports, contrasted with the intensification of problems in the EU peripheral countries. Some Council members emphasized that positive economic developments in major trading partners of Central and Eastern European countries translated into higher economic growth forecasts for those countries, including Poland.

Members of the Council pointed out that tensions connected with the deep fiscal imbalance gradually spread to other countries and in the future might affect major developed economies. In this context it was argued that further turmoil in the financial markets is possible, which might limit the scale of the capital inflow to the emerging economies, including to Poland. At the same time some Council members emphasized that the necessary reduction of the fiscal imbalance in the euro area countries in the short term would contribute to the decline of GDP growth in those countries. Other members of the Council pointed to the possibility of non-Keynesian effects of the planned fiscal tightening in the euro area countries.

Some members of the Council indicated that the expansionary monetary policy, including non-standard measures undertaken by major central banks, coupled with improved sentiment in the financial markets contributed to a strong rise in commodity prices in the global markets, thus intensifying long-term tendencies. This, in turn, boosted the cost pressure and thereby also inflationary pressure in the emerging economies, which translated into high PPI growth in Central and Eastern European countries, including Poland. In the longer term, the expansionary monetary policy and long-term upward trends in commodity prices might lead to an inflation rise also in the developed economies. Those Council members argued that those conditions should be taken into account in the conduct of monetary policy. In particular, monetary policy should take into account that the growing demand for commodities from developing countries would support further rises in their prices in the medium and long term. Other members of the Council reasoned that the rise in the world prices would be a factor beyond the impact of the monetary policy conducted by central banks of countries regarded as small open economies.

Members of the Council pointed to a gradual acceleration of economic growth in Poland which in 2010 Q3 exceeded expectations. Yet, some Council members assessed that subsequent quarters were not likely to witness a marked increase in economic growth which was indicated by the lack of significant improvement in leading indicators of business sentiment. GDP growth might also

be curbed by the announced tightening of the fiscal policy. Those Council members emphasized that there was persistent uncertainty about the sustainability of GDP growth acceleration, connected with a possible weakening of households' consumption growth at the beginning of 2011, when factors which strengthened it on a temporary basis would fade away. Yet, other members of the Council assessed that factors weakening consumption growth would be offset by a gradual improvement in the labour market situation, including growing employment, which would have a positive impact on the consumer sentiment.

Among the factors increasing the uncertainty about the sustainability of economic growth acceleration some members of the Council mentioned the hitherto observed absence of recovery in corporate investment. They pointed out that the investment activity of enterprises might be curbed by the uncertainty about the situation in the external environment of the Polish economy, limited lending, relatively high fiscal burden, as well as by administrative and legal barriers. However, other members of the Council pointed out that the level of production capacity utilization in the economy had been growing steadily and at that time slightly exceeded the long-term average which should support the recovery in investment demand. The good liquidity situation of enterprises, especially large ones that invest more than small and medium-sized companies, may also be a factor contributing to a rise in investment.

While addressing inflation, some members of the Council emphasized that although CPI inflation declined slightly in November 2010 it was still running above the inflation target of 2.5%. Moreover, due to a rise in the majority of VAT rates and an increase in the prices of energy the coming months may be expected to bring a rise in inflation. While analyzing the risk that heightened inflation persists those members of the Council pointed out that this risk was enhanced by the gradually increasing GDP growth which, in their opinion, was likely to exceed potential output growth in the subsequent quarters. According to those members of the Council, a factor which, on the one hand, boosts demand and, on the other hand, is likely to weaken potential output growth are zloty exchange rate developments. Some Council members also pointed out that heightened inflation might be supported by adaptive inflation expectations. Other members of the Council argued that the hitherto observed rise in inflation was mainly driven by supply-side factors, that are to a large extent beyond the impact of monetary policy. In the opinion of those Council members, the absence of a clear demand pressure is indicated by the still low and stable level of core inflation net of food and energy prices. Those members also emphasized that the moderate scale of the expected inflation rise in the coming quarters would reduce the risk that heightened inflation persists.

While discussing the situation in the labour market, some members of the Council indicated that the still low wage growth and relatively high unemployment rate – driven, among other things, by a rise in economic activity – would limit the rise in wage pressure, and, in consequence, also inflationary pressure. Those members pointed out that according to the results of the NBP's survey there was a considerable decline in the number of the employed who are to benefit from wage increases in 2011 Q1. Yet, other members of the Council argued that due to the growing number of the long-term unemployed the high level of unemployment rate will curb wage growth to an ever lesser extent.

Some members of the Council also emphasized that the impact of the opening of the labour market in Germany and Austria to Polish citizens in mid-2011 remains an important uncertainty factor with respect to the size of the labour supply. Other members of the Council indicated that as the differences in wages offered in Poland and abroad shrank, incentives to economic migration became weaker and, as a result, the opening of the German and the Austrian labour markets should not result in a considerable outflow of labour from Poland; it should rather lead to the legalization of employment of Poles already working in Germany and Austria.

While addressing bank lending, some members of the Council pointed out that monthly increases in housing loans to households were close to the ones observed during the credit boom of 2007-2008, and the annual growth in those loans markedly exceeded disposable income growth considered neutral with respect to the risk of rising inflation. Moreover, in the opinion of those Council members, the acceleration in economic growth increased the risk of excessive lending growth in the future as, on the one hand, it encourages banks to ease their lending conditions and, on the other hand, it results in increasing private sector demand for credit. Other members of the Council emphasized that the increase in lending to enterprises remained very limited, and a significant increase of irregular loans in banks' portfolio might urge banks to tighten their lending policies, which would counteract the revival in lending. It was also pointed out that the availability of foreign currency loans to households was very important for the efficiency of the domestic monetary policy.

While analyzing the situation in the public finance sector, some Council members pointed out that the scale of the planned fiscal tightening in Poland in 2011-2012 was lower than in other European countries with a similar level of the public finance deficit. In the opinion of those Council members, amidst high borrowing needs of many countries, this may have a negative impact on Poland's ability to raise funds from foreign investors to finance public debt. Other members of the Council assessed that the scale of fiscal tightening in Poland in 2011 would not be lower than in the majority of European countries. Some members of the Council emphasized that apart from a limited reduction of the fiscal imbalance in Poland, also a possible change in the rules of allocating old-age pension contributions between the repartition and the capital funded part of the pension system might contribute to deterioration in investor confidence, increasing, as a result, the volatility of the zloty exchange rate and of financial instruments prices. Yet, other Council members assessed that introducing changes to the pension system might improve the credibility of the Polish economy.

While discussing the level of interest rates in the Polish economy some Council members indicated that the risk of inflation running above the NBP inflation target in the medium term, which increases along with the gradual acceleration of economic growth, justified starting the cycle of gradual tightening of the monetary policy at the current meeting. Those Council members also argued that increasing interest rates before the expected inflation rise would support the stabilization of inflation expectations of economic agents. At the same time some members of the Council emphasized that the lower than in the past zloty exchange rate sensitivity to the interest rate differential raises the costs of a possible too late a reaction of the central bank to the inflationary pressure.

Other members of the Council pointed out that wage and demand pressures continued to be limited, there were no signs of revival in lending and the hitherto observed and expected in the short term rise in inflation resulted mainly from factors beyond the impact of monetary policy. In the opinion of those Council members those arguments justified keeping the NBP interest rates unchanged. At the same time, some of those members of the Council emphasized that a rise in economic growth increasing the risk of inflation continuing above the inflation target in the medium term might require monetary policy tightening in near future. Yet, gradual increasing of the NBP interest rates should start after some improvement in the financial market sentiment.

A motion to raise the NBP interest rates by 25 basis points was put forward at the meeting. The motion did not pass. The Council kept the interest rates unchanged: the reference rate at 3.50%, the lombard rate at 5.00%, the deposit rate at 2.00%, the rediscount rate at 3.75% and the discount rate at 4.00%.

Minutes of the Monetary Policy Council decision-making meeting held on 19 January 2011

At the meeting, the Monetary Policy Council discussed issues related to the external environment of the Polish economy, including developments in commodity prices and the situation in the financial markets, as well as the outlook for economic growth and inflation in Poland.

While addressing the external developments it was pointed out that although many countries reported a considerable rise in CPI inflation, global economic growth was still accompanied by low core inflation. It was emphasized that despite the persisting risk of further turmoil in the global economy, the hitherto observed recovery in major developed economies – although not very strong – seems relatively sustainable. At the same time, in the opinion of some Council members previously formulated concerns about a considerable GDP slowdown in major emerging economies are diminishing.

While analysing the situation in the euro area, some members of the Council indicated that recovery in this economy was rather weak and proceeded amidst persistently high unemployment. According to those Council members, in the short term, the announced reduction of the fiscal imbalance may be conducive to lowering GDP growth in the euro area countries. Those Council members emphasized that strong dependence of the Polish economy on the economic developments in Germany might imply that an expected slight deceleration of GDP growth in Germany could be followed by a reduction of GDP growth in Poland. Other members of the Council argued that the economic developments in Great Britain, where significant fiscal tightening might be observed, confirm the limited scale of negative – in the short term – effects of fiscal consolidation on economic growth. Moreover, in the opinion of those Council members, favourable economic developments expected in Poland's major trading partners, including Germany, where GDP is supposed to run above its long-term average, and further economic recovery in the Central and Eastern European countries, will support the growth of Polish exports, and consequently, of GDP.

While discussing the outlook for inflation, attention was paid to the further rise in the prices of energy and agricultural commodities in the global markets. Members of the Council emphasized that this trend was driven, to a large extent, by long-term factors, i.e. growing demand, especially from emerging countries amidst limited supply growth over the next few years. Factors conducive to growing prices of certain commodities include also unfavourable weather conditions in some countries and growing production of biofuels. At the same time, some Council members argued that expansionary monetary policy of major central banks combined with improved sentiment in financial markets supported intensified speculation in the commodity markets. Some members of the Council pointed to the attempts undertaken by American supervisory institutions to limit the scale of this activity.

While discussing the issue of appropriate response of the monetary policy to price hikes in the global commodity markets, some members of the Council made reference to the experience of the 1970s oil crises. They emphasized that countries which at that time decided to conduct a relatively restrictive macroeconomic policy managed to keep inflation at a fairly low level. In the opinion of those Council members, although commodity shocks are external in nature, they should be taken into consideration when determining domestic monetary policy in order to prevent inflation from remaining at a heightened level. In this context, those Council members pointed out that currently the increase in global commodity prices translated into a rise in inflation in majority of countries.

Some Council members pointed to the unprecedented scale of fiscal expansion in major developed economies which, amidst a limited possibility of its reduction, would be another factor likely to boost inflation in the external environment of the Polish economy in the longer term.

While addressing the outlook for domestic economic growth, members of the Council pointed out that data on GDP in 2010 Q3, monthly data on economic activity in 2010 Q4 and indicators of economic conditions in January 2011 confirm that economic growth in Poland was continuing at a relatively high level. It was emphasized that in the subsequent quarters GDP growth might translate into gradual intensification of the domestic inflationary pressure, though GDP growth will probably not exceed its long-term average.

Some members of the Council pointed to a relatively fast growth in private consumption whose further rise might be supported by growing employment. In the opinion of those Council members, consumption growth might also be supported by fast growth in housing loans to households exceeding disposable income growth considered neutral with respect to the risk of rising inflation. Those Council members also pointed out that a relatively high and still growing production capacity utilization and very good financial results of companies, especially large ones using capital-intensive technologies, should contribute to a recovery in investment. Favourable outlook for demand of the private sector, combined with favourable economic developments abroad should – in the opinion of those Council members – support relatively fast GDP growth.

Other members of the Council emphasized that persistently high unemployment, which had been growing in the last months of 2010 and which is likely to limit the growth of individual consumption, constituted an uncertainty factor with respect to the scale of further recovery. According to those Council members, the absence of a revival in lending to the corporate sector and a possible tightening of banks' lending policies due to the deterioration of their loan portfolio might be conducive to the reduction of corporate investment, especially of small and medium-sized enterprises. Moreover, it was pointed out that the risk of a slowdown in domestic economic growth should be reckoned with in the case of strong turmoil connected particularly with the strong fiscal imbalance in certain euro area countries.

Some members of the Council pointed out that the possible crowding out by household lending of other types of bank activity, including the financing of corporate investment, and the relatively weak exchange rate of the zloty, which, among other things, boosts the costs of imports of capital goods, might be conducive to the reduction of the potential output growth of the Polish economy. Those Council members argued that the reduction of the capital part of the pension system might also have a negative impact on potential output growth. Other members of the Council assessed that changes in the allocation of contributions to the pension system would not adversely affect either GDP growth or potential output growth.

While addressing inflation it was pointed out that – in line with expectations – CPI inflation in December 2010 had risen to 3.1%, remaining above the NBP's inflation target of 2.5%. Some members of the Council emphasized that although the coming months were likely to bring a further rise in CPI inflation due to factors independent of domestic monetary policy such as increases in most VAT rates, inflation might be expected to fall in the second half of 2011. Other members of the Council pointed out that a rise in inflation in December 2010 was partly connected with a rise in core inflation and that available forecasts suggested that over the horizon of monetary policy's strongest transmission CPI inflation would remain above the inflation target. Those Council members emphasized that the rise in global commodity prices was a risk to price stability. This rise translates into increasing costs of production, which manifests itself in fast PPI growth. Continued economic recovery in Poland, combined with rising inflation abroad will, in the opinion of those members of the Council, make it easier for enterprises to shift growing costs onto consumers. Members of the Council agreed that the risk of inflation consolidating at a heightened level was enhanced by a considerable rise of inflation expectations of individuals and enterprises at the end of 2010, accompanied with upward revisions of inflation forecasts by financial sector analysts.

While analyzing the impact of increases in VAT rates on inflation developments, some members of the Council assessed that it would be insignificant and temporary since in the case of certain goods increases in VAT rates would be offset by reduced markups. Other members of the Council indicated that if, in line with preliminary estimates, the increase in VAT rates had the strongest impact on the costs of road transport, its secondary inflation effect might prove stronger than earlier assessed. Some members of the Council also argued that a stronger translation of the increase in VAT rates into inflation might also be due to a psychological effect resulting in a rise in inflation expectations.

While discussing the situation in the labour market, some members of the Council pointed to the persistent relatively high unemployment rate and a fall in unit labour costs in 2010 Q3 which limit the rise in wage pressure. However, other Council members argued that further recovery in the economy would boost wage demands of employees and reduce enterprises' ability to resist to those demands. The scale of wage demands may be additionally enhanced by persistently heightened inflation. On the other hand, in addition to increased staff turnover, enterprises' resistance to wage demands may be diminished by very good financial results of companies, especially commodity companies with relatively powerful trade unions.

While discussing the level of interest rates in the Polish economy, members of the Council assessed that the consolidation of the economic recovery abroad and the acceleration of economic growth in Poland, combined with further strong increases in global commodity prices and heightened inflation expectations, increased the risk of inflation running above the NBP's inflation target in the medium term. In the Council opinion this warranted a tightening of the monetary policy which, considering a certain improvement in the financial markets' sentiment, should take place at the current meeting. At the same time some members of the Council emphasized that the lower than in the past zloty exchange rate sensitivity to the interest rate differential raises the costs of a possible too late a reaction of the central bank to the inflationary pressure.

The majority of the Council members acknowledged that the raising of interest rates at the January meeting was the beginning of a gradual tightening of the monetary policy, the scale and pace of which would depend on incoming macroeconomic data. Yet, certain members of the Council assessed that at that moment it was difficult to decide whether a further tightening of the monetary policy would be necessary. According to those Council members, in its decisions the Council should take into account, among other things, the monetary policy of the European Central Bank which might start increasing interest rates only in the second half of 2011.

A motion to raise the NBP interest rates by 25 basis points was put forward at the meeting. The motion was passed. The Council decided to raise the interest rates to the following levels: the reference rate to 3.75%, the lombard rate to 5.25%, the deposit rate to 2.25% and the rediscount rate to 4.00%.

Information from the meeting of the Monetary Policy Council held on 1-2 March 2011

The Council decided to keep the NBP interest rates unchanged, i.e.: reference rate at 3.75% on an annual basis; lombard rate at 5.25% on an annual basis; deposit rate at 2.25% on an annual basis; rediscount rate at 4.00% on an annual basis.

Incoming data confirm consolidating recovery of the global economy at the turn of 2010 and 2011. In 2010 Q4 GDP accelerated slightly in the United States and the economic growth in the euro area stabilized at a moderate level. Rising external demand and the recovery in domestic demand have contributed to maintaining favourable economic conditions in Germany, Poland's main trading partner. Yet, economic growth in the majority of developed countries is still being curbed

by high unemployment and ongoing adjustments in the balance sheets of households, enterprises and financial institutions. Major emerging economies and some small open developed economies have been tightening monetary policy. The effects of high fiscal imbalance and its planned reduction in the developed economies, as well as the effects of monetary expansion, including non-standard measures undertaken by major central banks, continue to add uncertainty for global economic growth outlook.

Favourable macroeconomic data on major developed economies supported an improvement in financial market sentiment, yet, in the recent period, uncertainty about the political situation in the Middle East and Northern Africa has enhanced risk aversion. At the same time it strengthened growth of commodity prices in the global markets. High growth of those prices has triggered a rise in headline inflation in the global economy, especially in emerging economies. Surging commodity prices may also weaken economic activity.

Data on GDP in Poland confirm that economic growth in 2010 Q4 stabilized at a level close to the previous quarter. Continuing relatively high economic growth was supported by a strong increase in consumption. The latter was driven by a rise in employment and accelerated growth in wages in the economy. It was also strengthened by a surge in advance purchases by households in anticipation of VAT rates increases in January 2011. Investment growth, on the other hand, remained low. The latest monthly data point to a continuing rapid growth in industrial output at the beginning of 2011 as well as to the absence of clear signals of recovery in investment demand and a decline in retail sales growth. At the same time, wage growth in enterprises remained moderate and employment growth accelerated, whereas unemployment rate (in seasonally adjusted terms) increased again. A further rise in labour force participation is conducive to an increase in unemployment.

Lending to enterprises remains limited mainly due to reasons related to demand for credit. On the other hand, a relatively rapid growth in mortgage lending to households has continued (adjusted for the impact of foreign exchange rate fluctuations) whereas consumer loans declined.

In January 2011, CPI inflation rose to 3.8%, i.e. considerably above the NBP's inflation target of 2.5%. The rise in CPI inflation resulted largely from the increase in most VAT rates, increases in the prices of agricultural commodities and crude oil in the global markets and a rise in administered prices. According to preliminary estimates, core inflation also increased. The rise in inflation was accompanied by a pick-up in inflation expectations.

The Council got acquainted with the projection of inflation and GDP prepared by the Economic Institute of the NBP, which is one of the inputs into the Council's decision-making on the NBP interest rates. In line with the March projection – under the assumption of constant NBP interest rates – there is a 50-percent probability of inflation running in the range of 2.8-3.7% in 2011 (as compared to 2.5-3.5% in the October projection), 2.2-3.4% in 2012 (as compared to 2.4-3.7%) and 2.1- 3.7% in 2013. In turn, the March projection sees the annual GDP growth, with a 50-percent probability, in the range of 3.3-5.1% in 2011 (as compared to 3.3-5.5% in the October projection), 2.3-4.8% in 2012 (as compared to 2.8-5.5%) and 1.7-4.4% in 2013.

In the assessment of the Council, continuing economic recovery in Poland, which should support employment growth, may gradually increase wage and inflationary pressures in the medium term. At the same time, a considerable increase of current inflation - amidst economic recovery – creates a risk that heightened inflation expectations persist and may require further tightening of monetary policy. Yet, the Council decided that the January interest rates increase combined with uncertainty about the sustainability of acceleration in consumer demand and no signs of considerable recovery in investment, as well as sustained moderate wage pressure in the corporate sector and continuing rise in unemployment decrease the risk of inflation remaining

above the inflation target in the medium term. Therefore, the Council decided to keep the NBP interest rates unchanged.

An important factor affecting the monetary policy is the situation of public finances. An implementation of decisive measures aimed at permanently reducing the deficit of the general government sector and at curbing the increase of the public debt is necessary for macroeconomic stability and will allow the meeting of euro adoption criteria.

In the opinion of the Council, introducing measures aimed at preventing fast growth in foreign currency lending to households is important for macroeconomic stability. Such measures can also contribute to increasing the effectiveness of the monetary policy transmission mechanism. Therefore, the Council expects that measures aimed at curbing the supply of new foreign currency loans to households will be introduced.

The Council maintains its view that Poland should join the ERM II and the euro area at the earliest possible date, after meeting the necessary legal, economic and organisational conditions.

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

Chapter 4.

Projection of inflation and GDP

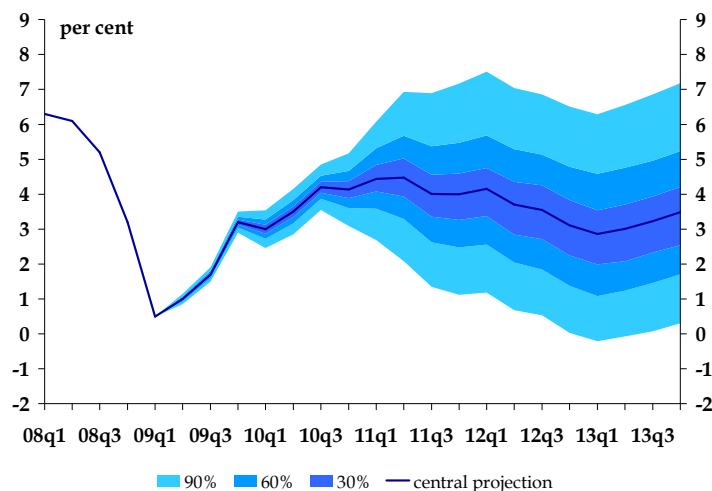
The inflation and GDP projection was prepared at the Economic Institute of the National Bank of Poland and presents forecasted economic developments under the assumption of constant NBP interest rates. The content-related supervision over the work connected with the projection was entrusted to a member of the NBP's Management Board, Mr. Zbigniew Hockuba. The works on the projection were coordinated by the Bureau of Macroeconomic Forecasts of the Economic Institute. The projection was prepared with the use of the macroeconomic model NECMOD³⁹. The projection is an outcome of an iterative process in the course of which the paths of some variables were adjusted if they diverged from NBP experts' economic intuition based on their knowledge of economic processes. The Management Board of the NBP approved the projection to be submitted to the Monetary Policy Council. The projection is one of the inputs to the Monetary Policy Council's decision-making process concerning interest rates.

International environment

Data for 2011 Q3 indicate that economic growth in the euro area, the United States and United Kingdom in 2010 was stronger than assumed in the October projection. In the euro area particularly high GDP growth was recorded in Germany (3.9% y/y in 2010 Q3), Poland's main trading partner. Economic growth in Germany was supported by growing demand on the part of developing countries, including, in particular, China. Within the projection horizon it is assumed that economic recovery in the economies of the euro area, the United States and United Kingdom will be slower than during the previously observed recessions. At least by the end of 2012, GDP growth in those countries will remain below the potential level, which will partially result from the fading effects of a loose fiscal and monetary policy and the relatively high prices of energy commodities in the global markets. Due to the sovereign debt crisis in some euro area countries, concerns about sustainability of economic recovery and economic activity being considerably lower than potential output, financial markets expect that the start of the interest rate hike cycle by the ECB and the Fed will occur at the turn of 2011/2012. The prices of energy commodities in the short-term projection horizon will continue on an upward trend as a result of a recovery in the global economy, especially in the developed countries, and then will stabilize at a relatively high level. Also the prices of agricultural commodities will remain, within the short-term projection horizon, at a relatively high level which will be driven by a decline in their supply in 2010, growing demand for food and the possible engagement of speculative capital. Within the medium- and long-term projection horizon, those effects are expected to wear off, yet the rising production costs and expected institutional measures aimed at the protection of markets in some countries will restrict a considerable decline of the prices of agricultural commodities.

³⁹ Current version of the model's documentation is available at the NBP website.

Figure 4.1
Central GDP projection and fan chart.



Source: NBP.

Aggregate demand

A relatively rapid recovery in domestic demand, being the main driving force behind economic growth in the last few quarters, will continue only in 2011. In 2012-2013, along with a lower rate of growth of public investment (driven, among other things, by lower transfers of EU funds) and a decreasing growth contribution of change in inventories (end of the process of rebuilding), growth of domestic demand will decline which, coupled with the net export contribution to growth being close to zero, will translate into a slowdown in GDP growth in this period to an average of 3.4% y/y.

Within the projection horizon a stable, slightly lower than in the second half of 2010, private consumption growth will continue at an average level close to 3% y/y. Faster consumption growth is curbed by a moderate increase in household disposable income due to limited improvement in the situation in the labour market, limited growth in revenues of self-employed (the effect of a higher effective VAT rate since 2011 and lower economic activity in the long-term projection horizon) and a relatively high increase in food and energy prices, reducing the purchasing power of households. Additionally, within the short-term projection horizon, along with the wearing off of the observed within the past few months effect of increased household purchases driven by tax changes starting from 2011, the demand for durable consumer goods will go down.

Following the decline observed in 2009 and 2010, investment ratio will increase in 2011-2013, with an average growth of gross fixed capital formation of approx. 6% y/y. During the short-term projection horizon, total investment growth will be largely fuelled by high, albeit slower than in the previous years, growth of public sector gross fixed capital formation, supported by the inflow of EU structural funds. Starting from 2012, the inflow of EU funds and capital expenditure by the general government sector connected with their co-financing will decline, contributing to the wearing off of public investment growth in 2012, followed by its decline by almost 10% in 2013. An additional argument in favour of this scenario is the path of expenditure on the construction of roads assumed in the Government's *National Roads Construction Programme for the Years 2011-2015*, as well as a possible curbing of investment expenditure by some local governments units due to their growing debt.

Growth in gross fixed capital formation will be, at the beginning to a moderate extent, and subsequently in the long-term projection horizon to a considerable extent, supported by growing investment demand on the part of enterprises. The gradual rise in corporate investment will be driven by: growing production capacity utilization, a gradual improvement in the economic situation abroad and declining, in relation to labour costs, real cost of capital utilization (resulting from rise in PPI inflation and a constant NBP reference rate assumed in the projection). The improvement in the situation of households and low interest rates will translate into a rise in housing investment slightly exceeding consumption growth. This scenario is supported by favourable data on the growth rate of newly granted housing loans, observed in the last few months.

Following a high increase in external trade turnover in 2010, the years 2011-2013 are expected to bring a decline in the growth rate of exports and imports – yet, their levels will continue to exceed GDP growth. While in the short-term projection horizon the contribution of net exports will remain negative, within following years, due to a slowdown in the growth rate of domestic demand, given a stable level of the exchange rate, it will be slightly positive (an average of 0.2 percentage points in 2012-2013).

Macroeconomic equilibrium

A relatively rapid GDP growth in the short-term projection horizon and lower, after the period of slowdown, potential product growth will lead to the closing in 2011 Q2 of the negative output gap and its slight widening in the subsequent quarters. In 2012-2013, potential growth will gradually accelerate which, amidst slower economic growth will translate into stabilization of the output gap at a slightly positive level.

Apart from slower private capital accumulation, connected with a decline in corporate investment in 2009-2010, having a lagged effect, the factor contributing to a slowdown in potential product growth in the short-term projection horizon is the growing equilibrium unemployment rate (NAWRU), which is among other things, due to a relative growth in consumer prices as compared with producer prices (effect of a sharp rise in food prices and increases in VAT rates) as well as growing production costs (effect of rising prices of imported intermediate goods, including oil and natural gas). 2011 is also expected to bring a slower population growth connected with the reversal of trends observed in 2009-2010, i.e. limited return migration and a rise in emigration to Germany and Austria, among others. Those factors are only partly offset by a relatively high, albeit lower than in 2010, rise in the labour force participation rate. In the long-term projection horizon, potential product growth will be fuelled by faster capital accumulation reflecting a rise in corporate investment and a gradual reversal of the growth rate of total factor productivity (TFP) to the level observed before the global financial crisis.

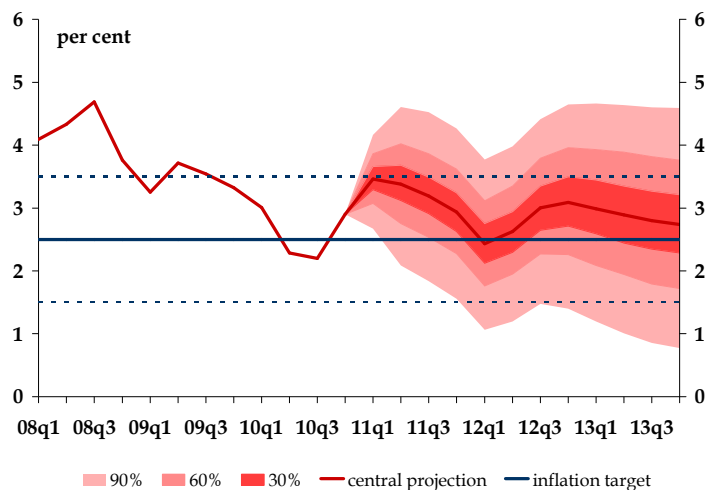
In the short-term projection horizon the situation in the labour market will be improving steadily – employment and real wages growth will continue on an upward trend. In the long-term projection horizon, along with the expected slowdown in economic growth rate, these trends are wearing off. A moderate rise in the number of the employed is translated into a drop in unemployment rate by 0.7 percentage point from the beginning of the projection horizon to the end of 2013. Due to the concurrent rise in the equilibrium unemployment rate, the unemployment rate will fall below the NAWRU and in 2013 real wages growth will slightly exceed labour productivity growth.

Trade and income deficits persisting in the subsequent quarters at a relatively stable level will be largely offset by the inflow of EU funds. As a result, external imbalance, measured by the ratio of

current and capital account deficit to GDP will range between -2.8% in the short-term and -1.5% in the long-term projection horizon.

Figure 4.2

Central inflation projection, fan chart of inflation and NBP inflation target.



Source: NBP.

Exchange rate and inflation

Throughout the projection horizon, forces working towards a strengthening and a weakening of the exchange rate will remain in balance, rendering it relatively stable. The steadily strengthening equilibrium exchange rate will exert an upward pressure on the zloty. This will be related to the positive balance of current and capital transfers associated with the inflow of EU funds, and the country's potential output growing faster than in the euro area. Factors working towards a weaker zloty will include a decreasing interest rate differential (resulting from assumption of a constant NBP reference rate) and a high level of fiscal risk premium (under the assumption of no systemic changes to the country's fiscal policy and without taking into account probable additional consolidation measures between 2012-2013).

In the short term projection horizon, the rise in core inflation will be driven by the increase in the VAT effective rate from the beginning of 2011, accompanied by the lagging impact of import prices, which have been rising since 2010 Q3. In 2012-2013, core inflation will continue to rise as a result of growing unit labour costs (related to a gradual recovery in the labour market), while a stable exchange rate will restrain moderate growth of import prices.

In the short term projection horizon, a sharp rise in the prices of agricultural commodities in the world markets, combined with a stable exchange rate of the zloty against the dollar and a restricted supply of cereals in the domestic market will translate into further rapid growth in food prices. In the medium term horizon, prices may be expected to rise less rapidly, as supply should improve in the domestic market, although global commodity prices will remain high.

Energy prices inflation will remain elevated in the short term (6.2% in 2011), due to the increasing energy commodities prices in the world markets, an increase of the effective VAT rate at the start of 2011, and higher tariffs on electric power, starting from the beginning of 2011, and on natural gas, starting from April 2011, approved by the Energy Regulatory Office. In the longer term projection horizon, the prices of energy commodities in the world markets will settle down at a

relatively high level. As a result, the rate of growth of energy prices will decrease, albeit will be higher than the headline inflation.

Throughout the projection horizon (except for the early 2012), CPI inflation will remain above the inflation target – at an average level of approximately 3% y/y. In the short term projection horizon, the rise in inflation will be attributable to the increase in the VAT rate as of 1 January 2011, and supply factors causing high increase of food and energy prices. In the longer term, inflation will remain above the target due to rising labour costs, while the slower growth in food and energy prices will inhibit the rise in overall consumer prices. Assuming a constant central bank's reference rate throughout the projection horizon, the probability of annual inflation rate remaining within the 1.5%-3.5% range grows from 64% in 2011 to 72% in 2012, and subsequently falls back to 60% in the last year of the projection horizon.

Table 4.1

Balance of probabilities for future inflation path.

	Probability of inflation running:				
	below 1.5%	below 2.5%	below 3.5%	below the central path of the projection	within the range (1.5%-3.5%)
2011q1	0.00	0.02	0.52	0.49	0.52
2011q2	0.01	0.12	0.55	0.48	0.54
2011q3	0.02	0.19	0.65	0.50	0.63
2011q4	0.04	0.28	0.75	0.50	0.71
2012q1	0.13	0.53	0.90	0.50	0.77
2012q2	0.09	0.45	0.84	0.50	0.75
2012q3	0.05	0.29	0.70	0.50	0.65
2012q4	0.06	0.28	0.65	0.50	0.59
2013q1	0.09	0.32	0.67	0.50	0.59
2013q2	0.11	0.37	0.70	0.50	0.60
2013q3	0.13	0.41	0.72	0.49	0.59
2013q4	0.15	0.43	0.73	0.50	0.58

Source: NBP.

Current versus previous projection

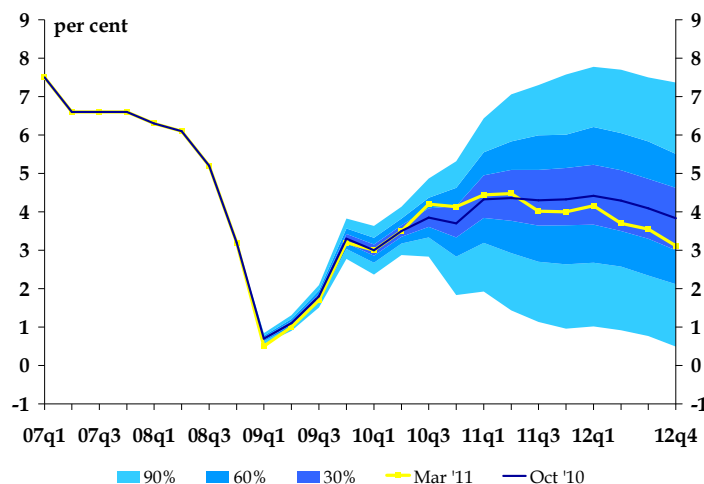
In the March projection, the average annual CPI anticipated for 2011 and 2012 does not deviate significantly from the level envisaged during the previous forecasting round. Similarly, there has been no significant change in the outlook for economic growth, for 2011, which, however, is expected to be lower by 0.6 percentage point in 2012.

In the first half of 2011, GDP will rise at a rate slightly higher than the one assumed in the October projection, due to a higher starting point (2010 Q4). However, in the subsequent quarters, factors with a dampening effect on GDP growth will come to the force. An important consideration behind the downward revision of GDP forecasts is the expected lower gross fixed capital formation, in part a result of smaller government investment growth rate in 2012 (this will primarily follow from the postponement of the absorption of some EU transfers from 2012 to the subsequent years), in part of less robust corporate investment (as a consequence of higher world prices of energy commodities and a slower GDP growth in the projection horizon). Lower aggregate wages and hence households' lower disposable income will weigh down on the path of

individual consumption growth. Assuming a steady rise in exports, the modest imports – as seen under the current forecasting round (due to weaker domestic demand) – will translate into a higher contribution from net exports to GDP growth from the end of 2011, notwithstanding the appreciation of the zloty.

Figure 4.3

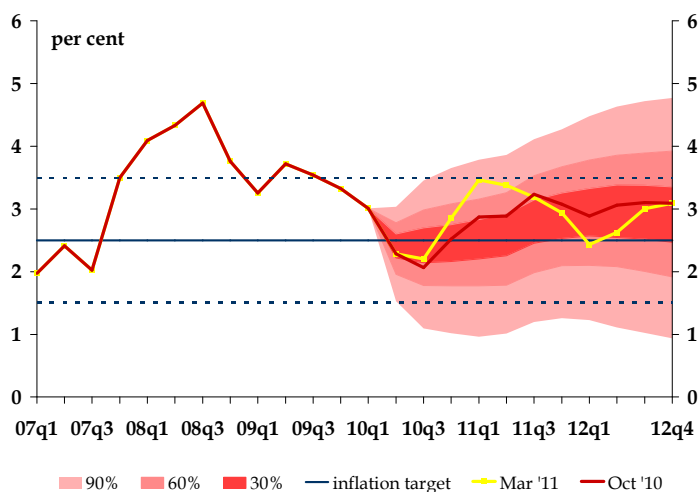
March projection compared to October projection: GDP.



Source: NBP.

Figure 4.4

March projection compared to October projection: CPI.



Source: NBP.

In the short term projection horizon, consumer prices are rising faster than in the October projection. This is the effect of – apart from a higher starting point – elevated oil prices in the global markets as compared to the previous projection (despite the favourable trend in the zloty exchange rate against the dollar), and smaller supply of cereals in the domestic market in 2010. Higher than in the October projection level of food and energy prices is also a product of a hike in domestic producer prices in the short-term projection horizon (as measured with gross value added deflator). In the medium-term projection horizon, food and energy prices are higher than previously forecasted due to the increase in the world prices of commodities. On the other hand, a deceleration in food price growth is expected as early as the second half of 2011 – especially with regard to unprocessed food. This will result from a negative base effect not fully accounted for in the previous projection (and caused by a sharp increase in the prices of fruits, vegetables,

bread and cereal products in the same period of the previous year). A restraining influence on core inflation (but also producers' prices inflation, which has a bearing on the remaining components of CPI) is a lower than anticipated rise in unit labour costs, as wage pressure is assumed to be modest and labour productivity remains unchanged. The stronger zloty exchange rate is an additional factor contributing to a downward revision of CPI inflation projection.

Sources of uncertainty for the projection

The various factors of risk to GDP growth for the projection horizon are deemed to be balanced. On the other hand, the data released after 26 January 2011 increase the probability of inflation running above the central path of the projection. The main sources of uncertainty in the projection of these variables are listed below.

External environment

The external environment remains the main source of uncertainty for the inflation and GDP projection. The outlook for economic growth in the developed countries continues to be volatile. The response of these economies to the inevitable withdrawal of their governments and central banks from strongly expansionary monetary and fiscal policies remains difficult to predict. Furthermore, concerns persist as to the possible effects of the mounting debt of several euro area countries. Another significant source of uncertainty is the development of energy and agricultural commodity prices.

Foreign exchange rate

The future path of the zloty exchange rate continues to be an inevitable source of uncertainty for inflation and GDP projections. On the one hand, high budget deficit and the possibility of public debt exceeding subsequent prudential thresholds poses a risk of zloty exchange rate depreciation, especially amidst persisting uncertainty in the global financial markets. On the other hand, a relatively high level of economic growth in Poland, as compared to the countries of the region and the euro area countries, may - amidst persisting liquidity surplus in the global financial markets - attract the inflow of foreign direct and portfolio investment and contribute to the appreciation of the zloty.

Food and energy prices in Poland

Because of the significant impact of regulatory activity on energy and food prices, similarly to the previous forecasting rounds, the regulations remain an important source of risk for inflation projection. Considerable uncertainty is also associated with the future EU environmental protection policy (including the implementation of standards on emissions of carbon dioxide), regulatory activity in the food market, and future tariff policy of the Energy Regulatory Office.

Fiscal policy

Fiscal policy remains a major risk factor for future inflation and GDP, especially in the long-term projection horizon. The projection is elaborated under the assumption of no systematic changes to fiscal policy, thus only reflecting the legislation in force, or, in exceptional cases, clearly formulated planned changes, likely to be legislated. The response of the government to the

growing debt of the general government sector may involve adjustments designed to increase the revenues and limit the expenditure of the sector in the years 2012-2013. As a result, the probability of GDP running below the central path is growing, while the impact of changes in fiscal policy on CPI inflation is subject to high uncertainty, since – depending on the adopted solutions – this may be a factor conducive to higher or lower consumer prices. An additional risk for GDP level in the projection horizon are public investments associated with the level of EU funds' utilisation by the public sector.

Discussion of the data released after 26 January 2011

The gross wages in the last quarter of 2010 increased by 6.0% y/y, a higher increase than assumed in the projection, which means higher-than-expected growth of unit labour costs in this quarter. Data released in late January and early February 2011 suggest possibility of agricultural commodities prices settling above the level forecasted in the projection. This information increases the likelihood of inflation forming above the central path of projection in the short horizon.

Table 4.2

Central path of inflation and GDP projection.

	2009	2010	2011	2012	2013
Consumer Price Index CPI (per cent y/y)	3.5	2.6	3.2	2.8	2.9
Food prices (per cent y/y)	4.1	2.7	3.9	2.5	2.4
Energy prices (per cent y/y)	5.5	6.2	6.2	5.3	4.9
Core inflation net of food and energy prices (per cent y/y)	2.7	1.6	2.2	2.3	2.5
GDP (per cent y/y)	1.7	3.8	4.2	3.6	3.1
Domestic demand (per cent y/y)	-1.0	3.9	4.4	3.5	2.8
Individual consumption (per cent y/y)	2.1	3.2	3.3	3.0	2.9
Collective consumption (per cent y/y)	1.8	2.6	2.0	2.3	2.4
Gross fixed capital formation (per cent y/y)	-1.1	-2.0	7.2	6.4	4.5
Contribution of net exports (percentage points y/y)	2.8	-0.1	-0.2	0.1	0.3
Exports (per cent y/y)	-6.8	11.1	8.8	8.7	8.8
Imports (per cent y/y)	-12.4	11.4	9.1	8.3	7.8
Gross wages (per cent y/y)	5.2	3.7	4.8	6.3	6.6
Total employment (per cent y/y)	0.4	0.6	0.8	0.3	0.0
Unemployment rate (per cent)	8.2	9.7	10.0	9.5	9.5
NAWRU (per cent)	9.7	9.9	10.1	10.2	10.5
Labour force participation rate (per cent)	55.0	55.8	56.3	56.3	56.3
Labour productivity (per cent y/y)	1.3	3.2	3.4	3.3	3.1
Unit labour costs (per cent y/y)	3.8	0.4	1.3	2.9	3.4
Potential output (per cent y/y)	4.5	3.5	3.1	3.1	3.5
Output gap (percentage of potential GDP)	-1.2	-1.1	0.0	0.5	0.2
Index of agricultural commodity prices (USD; 2008=1.00)	0.84	0.95	1.03	1.02	0.99
Index of energy commodity prices (USD; 2008=1.00)	0.54	0.72	0.92	0.90	0.90
Foreign price level (per cent y/y)	1.4	0.7	1.6	2.0	2.0
Foreign GDP (per cent y/y)	-4.0	1.8	1.8	1.9	2.1
Current account and capital account balance (per cent GDP)	-0.5	-1.5	-2.8	-1.6	-1.5
3M WIBOR (per cent)	4.32	3.89	4.05	4.00	4.00

Source: NBP.

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 on motions and resolutions adopted in September - December 2010

- **Date:** 28 September 2010

Subject matter of motion or resolution:

Resolution No. 8/2010 on setting the ceiling for liabilities arising from loans and credits drawn by the NBP at foreign banking and financial institutions.

Voting of the MPC members:

For: M. Belka

A. Bratkowski

E. Chojna-Duch

Z. Gilowska

A. Glapiński

J. Hausner

A. Kaźmierczak

A. Rzońca

J. Winiecki

A. Zielińska-Głębocka

Against:

- **Date:** 29 September 2010

Subject matter of motion or resolution:

Resolution No. 7/2010 on adopting *Monetary Policy Guidelines for 2011*.

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:** 29 September 2010

Subject matter of motion or resolution:

Motion to raise the NBP interest rates by 0.50 percentage point.

MPC decision:

Motion did not pass.

Voting of the MPC members:

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

- **Date:** 27 October 2010

Subject matter of motion or resolution:

Motion to raise the NBP interest rates by 0.50 percentage point.

MPC decision:

Motion did not pass.

Voting of the MPC members:

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

- **Date:** 27 October 2010

Subject matter of motion or resolution:

Resolution No. 9/2010 amending the resolution on the required reserve rate and the remuneration of required reserve rate.

MPC decision:

The MPC raised the required reserve rate from 3.0% to 3.5%.

Voting of the MPC members:

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

- **Date:** 17 November 2010

Subject matter of motion or resolution:

Resolution No. 10/2010 on approving the Financial Plan of the National Bank of Poland for 2011.

Voting of the MPC members:

For: M. Belka

A. Bratkowski

E. Chojna-Duch

Z. Gilowska

A. Glapiński

J. Hausner

A. Kaźmierczak

A. Rzońca

J. Winiecki

A. Zielińska-Głębocka

Against:

- **Date:** 23 November 2010

Subject matter of motion or resolution:

Motion to raise the NBP interest rates by 0.50 percentage point.

MPC decision:

Motion did not pass.

Voting of the MPC members:

For: J. Hausner

A. Rzońca

J. Winiecki

A. Zielińska-Głębocka

Against: M. Belka

A. Bratkowski

E. Chojna-Duch

Z. Gilowska

A. Glapiński

A. Kaźmierczak

- **Date:** 23 November 2010

Subject matter of motion or resolution:

Motion to raise the NBP interest rates by 0.25 percentage point.

MPC decision:

Motion did not pass.

Voting of the MPC members:

For: J. Hausner

A. Rzońca

J. Winiecki

A. Zielińska-Głębocka

Against: M. Belka

A. Bratkowski

E. Chojna-Duch

Z. Gilowska

A. Glapiński

A. Kaźmierczak

- **Date:** 14 December 2010

Subject matter of motion or resolution:

Resolution No. 11/2010 amending the resolution No. 16/2013 from 16 December 2003 on accounting principles, the layout of balance sheet assets and liabilities and profit and loss of the National Bank of Poland.

Voting of the MPC members:

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

- **Date:** 14 December 2010

Subject matter of motion or resolution:

Resolution No. 12/2010 on the principles for creating and releasing provision against the foreign exchange rate risk of the zloty at the National Bank of Poland.

Voting of the MPC members:

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

J. Winiecki did not participate in the voting.

- **Date:** 22 December 2010

Subject matter of motion or resolution:

Motion to raise the NBP interest rates by 0.25 percentage point.

MPC decision:

Motion did not pass.

Voting of the MPC members:

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

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

J. Hausner was absent.

- **Date:** 22 December 2010

Subject matter of motion or resolution:

Resolution No. 13/2010 amending the resolution on the level of the reference rate, lombard rate, deposit rate and rediscount rate of the National Bank of Poland.

Voting of the MPC members:

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

Against: