NBP Narodowy Bank Polski

Monetary Policy Council

November 2015

Inflation Report

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 Narodowy Bank Polski. In terms of the contents, works on the projection were supervised by Andrzej Sławiński, General Director of the Economic Institute. The projection was prepared with the use of the NECMOD macroeconomic model. The NBP Management Board approved the submission of the projection to the Monetary Policy Council. The inflation projection is one of the inputs to the Monetary Policy Council's decision-making process.

The time frame of the analysis presented in the Report is conditioned by the availability of macroeconomic data. In turn, the periodisation of the analysis (breakdown into sub-periods) is conditioned by the development of particular variables. The cut-off date for the data in this Report was 23 October 2015.

This *Inflation Report* is a translation of Narodowy Bank Polski *Raport o inflacji* in Polish. In case of discrepancies, the original prevails.

Contents

Summary

Global economic activity remains moderate, with the pattern of growth highly differentiated across countries. While recovery continues in advanced economies, many emerging market economies experience decelerating GDP growth. In the United States, good economic conditions have been sustained, supported by a marked improvement in the labour market. Recovery also continues in the euro area, although recent data have increased uncertainty about its sustainability. In China, GDP growth has been slowing down, while recession persists in Russia and Brazil.

Amid moderate global activity growth and a renewed decline in the prices of many commodities in recent months, inflation in many countries remains at very low level. Both in the United States and in the immediate environment of the Polish economy, i.e. the euro area and the countries of Eastern and Central Europe, price growth stays close to zero. High inflation is only observed in a few emerging market economies, including Russia.

Global monetary conditions remain very accommodative. The European Central Bank (ECB) and the Federal Reserve (Fed) maintain their interest rates close to zero, even though uncertainty about the monetary policy outlook of these central banks has recently risen. For several months, the Fed has been pointing to a possible interest rate increase, yet expectations about its timing are highly volatile. In turn, the ECB continues its asset purchases without ruling out an extension of its scope or duration. Ongoing asset purchases by the ECB have encouraged further monetary policy easing in some European countries. Monetary policy has also been loosened by the People's Bank of China. Moreover, the People's Bank of China relaxed its exchange rate regime, as a result of which the yuan has depreciated.

Heightened uncertainty about monetary policies of the Fed and the ECB, along with the rising risk of a sharper slowdown in emerging market economies – above all China – triggered a fall in stock market indices across the world, which, however, levelled off in September. The stock market slump was accompanied by a depreciation of currencies of many emerging market economies and a rise in yields on bonds of major advanced economies.

In Poland, the annual consumer price growth remains negative, though it was higher in 2015 Q3 than in the previous quarters. Price decline is primarily driven by external factors, mainly a fall in global commodity prices and a low price growth in Poland's external environment. The decline in consumer prices is also supported by the absence of demand pressure at home, amid continued producer price deflation and limited wage pressure. In turn, the cutbacks in production of certain fruit and vegetables, along with this year's drought, reduced the scale of price decline in 2015 Q3.

Economic growth in Poland slowed down somewhat in 2015 Q2, dragged by a weaker rise in investment – particularly in the public sector – and a lower contribution of net exports. Despite slight deceleration, GDP growth continued at a pace close to the estimated potential output growth. Rising consumer demand remained the primary driver of GDP growth, supported by high employment and further rise in households' income. Factors adding to economic growth also included a relatively fast rise in corporate investment and a marked increase in households' housing investment. Data incoming in 2015 Q3 pointed to a stabilisation of GDP growth.

Stable economic growth, favourable labour market conditions and lower interest rates than in previous years are conducive to growth in lending. Currently, lending is rising at a rate which neither hampers economic growth, nor should lead to the build-up of imbalances in the economy.

In response to slightly weaker than expected data on the global and domestic economy, and higher risk of longer period of inflation returning to the target, market participants have recently revised their expectations about the NBP interest rates outlook downwards. This, together with the ECB's and Fed's policies, led to a rise in prices of Polish government bonds. At the same time, prices of Polish financial assets have been adversely affected by deteriorating sentiment in the global financial markets and an rise in concerns about a sharper slowdown in China. Despite a strong rise in volatility in the international financial markets, the zloty exchange rate remained relatively stable in recent months.

In 2015 Q2, Poland's external trade growth continued. The high competitiveness of the Polish economy and the sustained positive effect of falling commodity prices helped increase the current account surplus – including surpluses on trade and services accounts – even further. Owing to the positive current account balance, the Polish economy's dependence on external financing has been reduced and the majority of external imbalance indicators have improved.

The *Report* is structured as follows: Chapter 1 presents the analysis of economic conditions in the external environment of the Polish economy in terms of their impact on inflation developments in Poland. These developments and domestic factors that might affect them have been described in Chapter 2. *Minutes of the Monetary Policy Council decision-making meetings* held in July-November 2015, together with the *Information from the meeting of the Monetary Policy Council* in November 2015 are presented in Chapter 3. *Minutes* from the MPC meeting held in November will be published on 19 November 2015 and so will be included in the next *Report*. The MPC voting records in meetings held in June-September 2015 can be found in Chapter 5. This *Report* also includes three boxes: *Impact of the slowdown in China on the global and Polish economy*, *Explaining the trade slowdown – globally and in Poland* and *Is Poland at risk of the zero lower bound?*.

Chapter 4 of the *Report* presents the projection of inflation and GDP based on the NECMOD model, which is one of the inputs into the Council's decision-making process on the NBP interest rates. In line with the November projection – prepared under the assumption of unchanged NBP interest rates and taking into account data available until 19 October 2015 – there is a 50-per cent probability that the annual price growth will be in the range of -0.9 – -0.8% in 2015 (compared to -1.1 – -0.4% in July 2015 projection), 0.4 – 1.8% in 2016 (as against 0.7 – 2.5%) and 0.4 – 2.5% in 2017 (compared to 0.5 – 2.6%). At the same time, the annual GDP growth – in line with this projection – will be, with a 50-per cent probability, in the range of 2.9 – 3.9% in 2015 (as compared to 3.0 – 4.3% in the July 2015 projection), 2.3 – 4.3% in 2016 (as against 2.3 – 4.5%) and 2.4 – 4.6% in 2017 (compared to 2.5 – 4.7%).

1 External developments

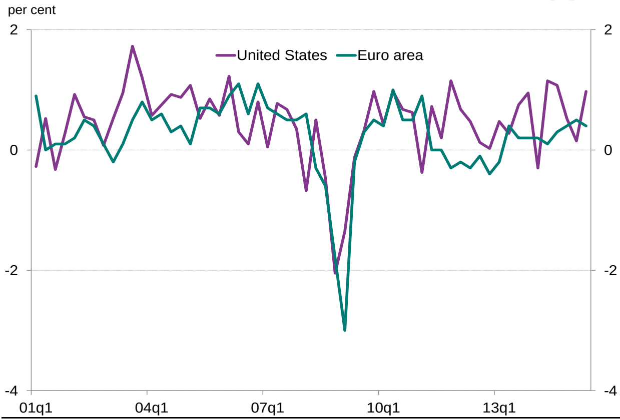
1.1 Economic activity abroad

Global economic activity remains moderate, with the pattern of growth mixed across countries. In the largest advanced economies, recovery is supported by improved labour market conditions, expansionary monetary policy, slower pace of fiscal consolidation, and in many of them, also low commodity prices. At the same time, many emerging market economies – among which some are commodity exporters – see weaker GDP growth or continue in recession.

In the United Stated, GDP growth – following a temporary slowdown in 2015 Q1 – rebounded in 2015 Q2 (Figure 1.1).[1] In 2015 Q3, economic conditions remained favourable, which was supported by a further rise in employment and declining unemployment rate, which went down close to its long-term pre-crisis average.[2] Improved labour market conditions continued to boost consumer demand. Alongside that, industrial output growth remained subdued, which may be largely attributed to lower activity in oil and gas production sectors.

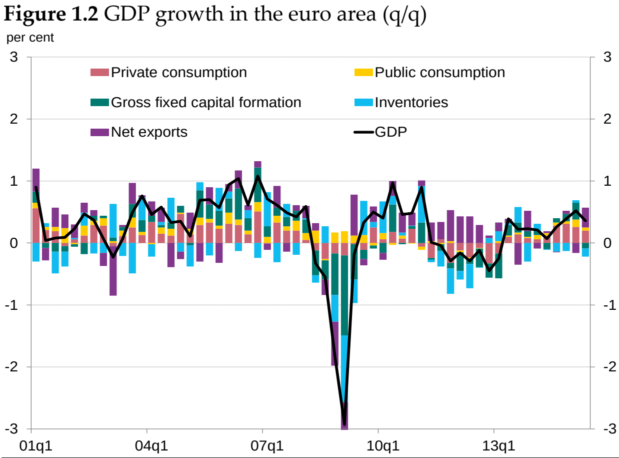
In the euro area, the gradual recovery continues, yet its pace is lower than in the United States (Figure 1.2). In 2015 Q2, GDP growth was fuelled by rising consumption, supported by improved labour market conditions (Figure 1.3) and further export growth, driven by the earlier depreciation of the euro. The euro area exports followed an upward trend despite a slump in Russia's and China's demand, which was offset by faster growth in demand from the United States and the

Figure 1.1 GDP growth in selected advanced economies (q/q)



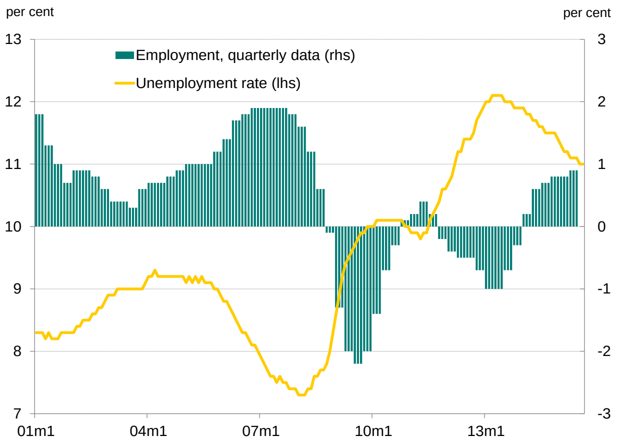
Source: Bloomberg and Eurostat data.

Figure 1.2 GDP growth in the euro area (q/q)



Source: Eurostat data.

Figure 1.3 Employment growth and unemployment rate in the euro area



Source: Eurostat data.

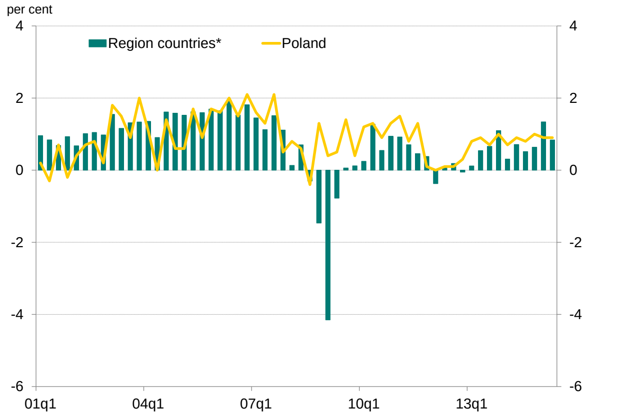
[1] The data on quarter-on-quarter GDP growth presented in this chapter are seasonally adjusted.
[2] Yet, in September employment growth slowed down, and the unemployment rate remained unchanged on the previous month, standing at 5.1%.

United Kingdom. Despite favourable sentiment in the corporate sector, investment in 2015 Q2 fell and growth in industrial output in 2015 Q2, and at the beginning of Q3 declined close to zero, which increased uncertainty about the sustainability of the recovery.

The upturn in the euro area in recent quarters contributed to continued recovery in the Central and Eastern European countries. However, in these countries – like in major advanced economies – it was consumer demand that remained the main driver of rising economic activity (Figure 1.4). In many economies in the region, GDP growth was also fuelled by high investment growth.

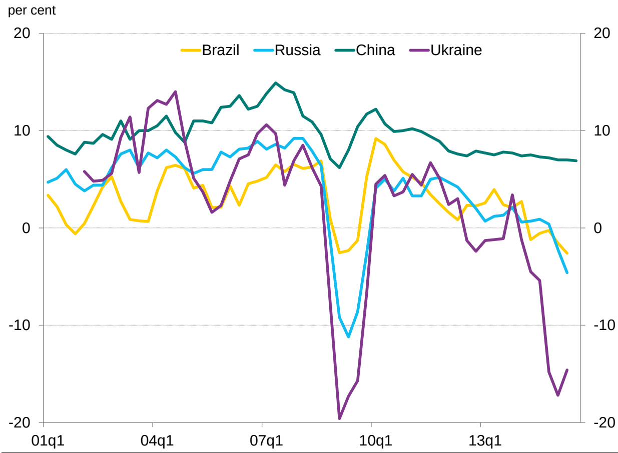
At the same time, in most major emerging market economies, growth in economic activity continued to weaken. In China, GDP growth has followed a downward trend for several quarters, primarily due to the ongoing significant slowdown in investment growth (see Box 1 *Impact of the slowdown in China on the global and Polish economy*, Figure 1.5). In Brazil and Russia, recession deepened further in 2015 Q2, partly on the back of the previously seen fall in commodity prices. Additional factors behind the decline in GDP in Russia included the earlier sharp depreciation of the Russian ruble, which has led to substantial increase in inflation, and the effects of economic sanctions imposed by many European countries. In Brazil, strong tightening of macroeconomic policy, related to a significant increase in public debt, still high inflation and the outflow of foreign capital, had a negative impact on economic conditions.

Figure 1.4 GDP growth in Poland and the CEE countries* (q/q)



Source: Eurostat data, NBP calculations.
* Czech Republic, Slovakia, Hungary, Lithuania, Romania, Latvia, Estonia, Bulgaria, weighted average (by the share of Polish exports).

Figure 1.5 GDP growth in selected emerging market economies (y/y)

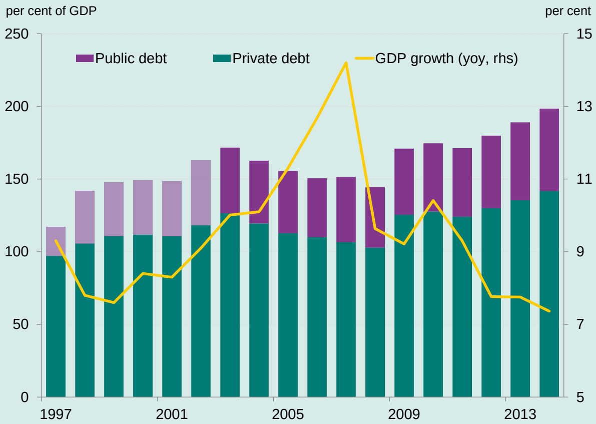


Source: Bloomberg data.

Box 1: Impact of the slowdown in China on the global and Polish economy

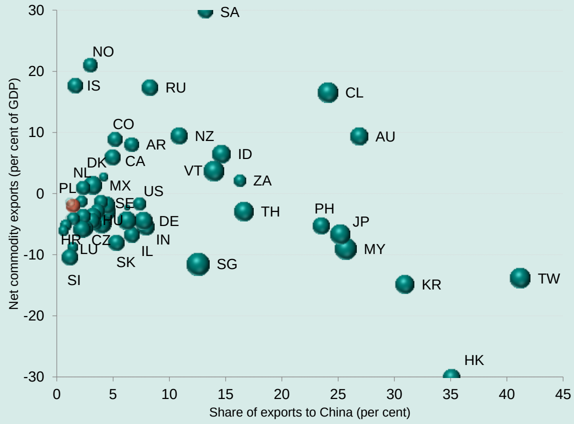
Economic growth in China has been slowing down for a couple of years, recording 7.3% last year compared to 10.6% on average in 2001-2008, and 8.8% in 2009-2014. According to the IMF forecast of October 2015, growth in China will probably recede by another percentage point, while more recent data releases point to even sharper slowdown. Concerns about the economic outlook for China have intensified since mid-August 2015, when a decision to relax the exchange rate regime resulted in a relatively strong depreciation of the Chinese yuan (see 1.3 *Monetary policy abroad*). Given China's considerable share in the global economy, the impact of lower growth in this country on global economic activity is significant. Below, we briefly discuss the key causes of slower economic growth in China and how it might impact the global and Polish economy.

Figure B.1.1. Economic growth and debt (public and private) in China



Source: NBP compilation based on World Bank and IMF data.
Note: 1997-2003 – IMF estimates excluding off-balance sheet debt of local governments (in lighter shade), private debt data are the World Bank estimates.

Figure B.1.2 Sensitivity of selected economies to slowdown in China



Source: NBP compilation based on the OECD database TiVA, data of the Chinese Customs Office, data of national statistical offices, IMF and UNCTAD.
Note: The size of bubbles denotes the magnitude of the impact of the Chinese slowdown on economic growth in the respective countries. The estimation is based on the elasticity of exports of these countries to China in real terms in relation to GDP growth in China.

One of the main reasons for weaker GDP growth in China in recent years is the transition towards a more consumer-demand driven economy. Hitherto, exports as well as infrastructural and residential investment fuelled by relatively low wages, have been the key contributors to growth in China. Although the rebalancing of the economy reflects to a large extent the Chinese authorities' efforts, the deterioration in the conditions for further investment growth in the face of a sharp rise in private and public debt plays an equally important role (Figure B.1.1). In addition, the activity in construction-related industries has also declined.

Given China's position in the global economy, the slowdown in this country may have an adverse impact on macroeconomic developments in the global and Polish economy. The following factors determine the role of China in the world economy.

Firstly, China has a material share in consumption of many commodities. Therefore, commodity prices are particularly sensitive to economic conditions in this country. The share of China in the global commodity consumption ranges from 11.3% in the case of oil to 43.9% for metals. Weaker GDP growth in China has been creating a downward pressure on global commodity prices. This resulted in lower inflation, both in Poland and abroad, as well as in a deterioration in economic conditions in commodity-exporting countries.

Secondly, 16% of global GDP is produced in China. This translates into a sizeable contribution of China to global GDP growth (on average, slightly over 1 percentage point in the past ten years, which has accounted for 1/3 of the global GDP growth). China generates also a considerable share of the global trade (10% of imports and 12% of exports). This indicates a considerable impact of slower GDP growth in China on global economic growth through the trade channel. However, it should be smaller than in case of the United States or the euro area, as their trade and financial links to other economies are stronger than those of China.

Thirdly, if the Chinese economy is slowing down more than expected, it may undermine the sentiment in the global financial markets, triggering a decline in financial asset prices, also in emerging market economies, and depreciation of their currencies. As concerns about the extent of the slowdown in China intensified in 2015 Q3, the global stock index fell by 9.5%, while the corresponding index for the emerging market economies went down by 18.5%, and the emerging market currency index by 8.3%. At the same time, the volatility of exchange rates of emerging market currencies and stocks increased most since the escalation of the sovereign debt crisis in the euro area.

The impact of the weaker GDP growth in China will vary across the economies and its magnitude will depend on the strength of their economic links to China and their balance of commodity exports (Figure B.1.2). European economies, and Germany in particular, are sensitive to slowdown in China, but to a smaller extent than Asian economies or net commodity exporters. Exports from Germany to China account for about 7% of Germany's total exports (against an average of 23% in South-East Asia). Yet, the sensitivity of the German economy to slower growth in China may prove larger, as products sensitive to fluctuations in investment demand and non-staple goods play a material role in German exports. In particular, 46% of German exports are machinery and devices used in industry, and further 27% are transport vehicles.

The slowdown in China may affect economic growth in Poland directly, through weaker exports to this country, and via indirect trade links. The direct impact of China's slowdown on GDP growth in Poland will probably be very limited, considering negligible share of China in Polish exports. In 2008-2014, exports of Polish goods to China rose by 10.4% on average. Yet, these exports still make up a mere 1% of Poland's total exports, with only 13% of Polish exporters selling their goods to China. Exports to China are highly diversified and not particularly significant to a vast majority of Polish branches. Furthermore, only larger Polish enterprises with geographic diversification of their sales are present in the Chinese market. As a result, they might redirect some of their sales from China to other markets. However, the slowdown in China has yet not had any significant impact on sales expectations of Polish companies. This notwithstanding, the decline in China's demand might influence noticeably mining of copper and some other non-precious metals (where China's respective share in the exports of the entire industry was about 15% and 90% in recent years).[3] Additionally, although only a small fraction of Polish commodities are exported to China – apart from some non-precious metals – the fall in global commodity prices may erode the profitability of the Polish mining industry, especially in case of coal mining.

The indirect impact of lower GDP growth in China on economic activity in Poland may be effected through weaker growth in Germany, and through slower external trade expansion via global supply chains. Germany is the main target market for the products manufactured by Polish companies under global supply chains (about 22%), with cars and car spare parts being an important export product, followed by other machinery and devices, i.e. products sensitive to economic downturns. Altogether they constitute around 36% of Polish exports to Germany. At the same time, the increase in Polish exports in the past few years has been driven to a large extent by a rise in demand for consumer goods, which is less affected by cyclical fluctuations (see Box 2 *Explaining the trade slowdown– globally and in Poland*). Finally, the share of Chinese demand in the value added generated in Poland amounts to as little as slightly over 2%.

Although, as stated above, weaker economic growth in China may limit the extent of the recovery in some countries, it is a necessary stage to more sustainable growth in this country. This in turn should be supportive of the global economic growth over longer run. Moreover, despite the slowdown, China will remain an important contributor to global demand. In line with the IMF forecast, the output produced in China in 2015-16 will be over 1.5 times larger than in 2001-2010. Due to rebalancing of the Chinese economy, this growth will probably be more consumer demand-driven than currently. This may boost China's import demand, and, consequently, contain the impact of the Chinese slowdown on global and Polish economic growth. Furthermore, low energy commodity prices will have a positive effect on economic growth in Poland as well as in Germany and other net commodity importers, as it would boost consumer and investment expenditures in these economies. At the same time, according to NBP estimates, even very strong slowdown in China and resulting renewed decline in commodity prices should not influence the pace of inflation return to target in Poland to a significant extent.

To conclude, the direct impact of the slowdown in China on economic conditions in Poland is limited, which results from relatively low share of China in Polish exports. Weaker economic growth in China may nonetheless influence Polish economy indirectly, through global supply chains, in which Poland participates, and through lower growth in Germany. The decline in commodity prices driven by the Chinese slowdown may have a significant adverse effect on some sectors of the Polish economy (commodity producers). Yet, it boosts real

[3] Besides, China is the target export market for the following industries: the automotive industry (mainly spare parts) – 37% of exporters, production of electrical appliances – 29% of exporters, production of electronics and optics – 40% of firms exporting these services.

disposable income of households and reduces production costs, and stimulates activity in consequence. However, there is a considerable uncertainty about the overall impact of the weaker growth in Chinese on the Polish economy, both with respect to the scale of this slowdown, its transmission to other economies and its effect on the global sentiment and financial markets.

1.2 Inflation developments abroad

Global inflation remains very low, largely due to a strong decline in commodity prices over the past year (Figure 1.6, see Chapter 1.3 *Global commodity markets*).

In many advanced economies, including the United States, consumer price growth has approached zero or turned slightly negative. This notwithstanding, the core inflation rates have been close to their long-term averages and larger than the respective CPI inflation rates, supported by moderate recovery in these countries.

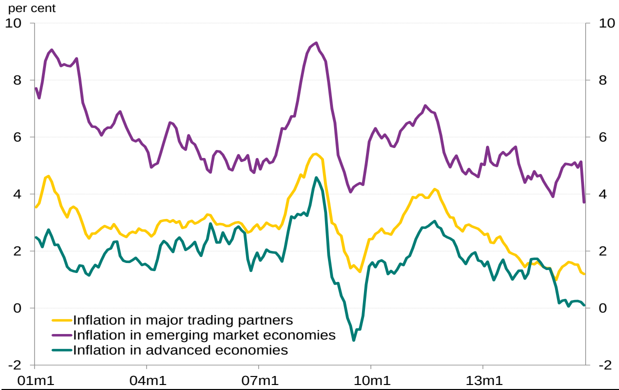
Also in the immediate environment of the Polish economy, inflation remains very low. In the euro area it fell slightly below zero again (Figure 1.7, Figure 1.8) as a result of declining energy prices and – contrary to the United States – low demand pressure. Inflation in the euro area may return to the level consistent with the ECB's price stability objective later than previously expected, which is reflected in a slight decline in market inflation expectations in this economy (Figure 1.7).

Inflation is relatively low also in most emerging market economies (Figure 1.6). Only in some of these economies, notably in Russia, inflation remains high as a result of depreciation of their currencies last year and country-specific factors.

1.3 Global commodity markets

The majority of commodity prices in global markets, following a temporary increase in 2015 Q2, declined markedly in 2015 Q3. This fall was triggered by rapidly growing supply and the weakening of global demand for commodities.

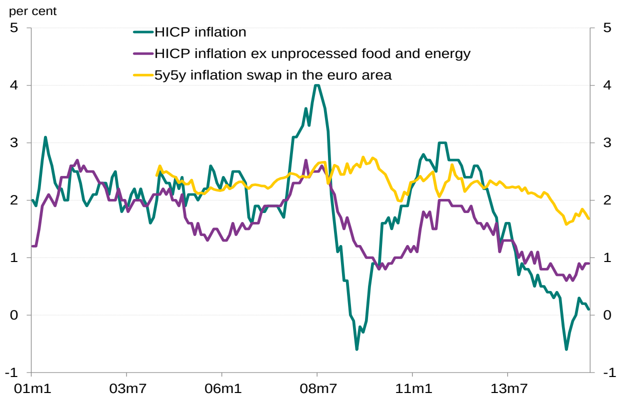
Figure 1.6 CPI inflation in advanced and emerging market economies and in Poland's major trading partners* (y/y)



Source: Bloomberg data., NBP calculations.

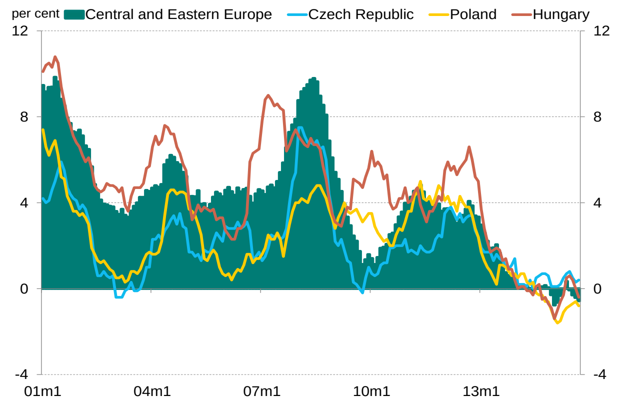
* GDP-weighted average inflation in emerging market economies that in aggregate constitute 80% of global GDP. External trade-weighted average inflation in Poland's major trading partners (euro area, UK, Russia, China, US, Ukraine, Korea and Norway).

Figure 1.7 HICP and core inflation, and longer-term inflation expectations in the euro area (y/y)



Source: Bloomberg data.

Figure 1.8 CPI inflation in the CEE economies* (y/y)



Source: Bloomberg data, NBP calculations.

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

Still high production level of crude in many countries, including OPEC members, which led to a continued strong rise in its stocks, coupled with the expected decrease in global demand for this commodity (mainly in the wake of economic slowdown in China), resulted in a renewed drop in oil prices (Figure 1.9). Brent crude oil prices – following a temporary rise in 2015 H1 – fell in August to their lowest level since March 2009. The weakening demand from the Chinese economy was also the main factor behind the fall in the prices of industrial metals and a further slide in the prices of coal. In turn, the declining prices of natural gas in recent months were primarily attributable to supply factors, in particular to growing deliveries of this commodity from Russia (Figure 1.10).

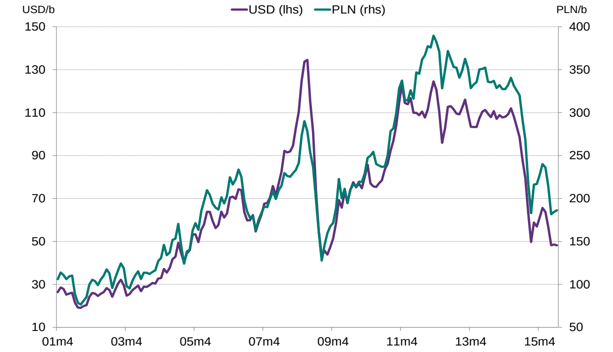
Since the publication of the previous *Report*, prices of key agricultural commodities, in particular those of wheat and pork meat, have fallen as well (Figure 1.11). That was mainly due to the high supply of these commodities, which persisted despite the drought in Europe. An increase in the supply of some agricultural products (coffee and sugar) was also spurred by higher profitability of their production, related to an earlier depreciation of the currencies of the main producers (Brazil, Colombia and Vietnam) against the US dollar.

1.4 Monetary policy abroad

Major central banks have been keeping their rates close to zero. At the same time, the monetary policy outlook of the Federal Reserve (Fed) and the European Central Bank (ECB) has diverged and is increasingly uncertain (Figure 1.12, Figure 1.14).

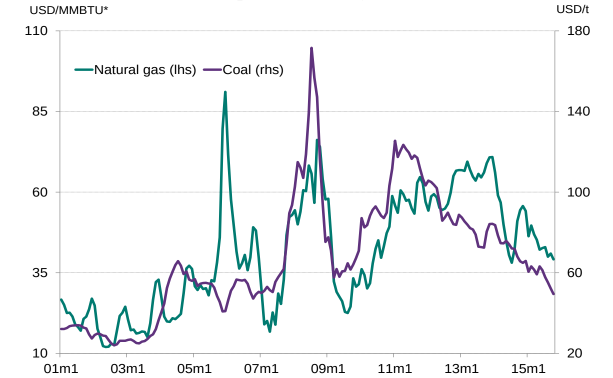
For several months, the Fed has been pointing to a possible increase in the fed funds rate, though its timing is subject to labour market conditions and inflation developments. Nonetheless, improvement in labour market conditions in the United States

Figure 1.9 Brent oil prices in USD and PLN



Source: Bloomberg data, NBP calculations.

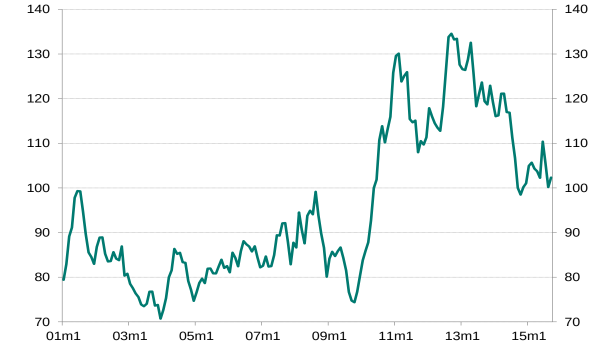
Figure 1.10 Gas and coal prices in the global markets



Source: Bloomberg data.

* The amount of energy needed to raise the temperature of 1 lb of water by 1F.

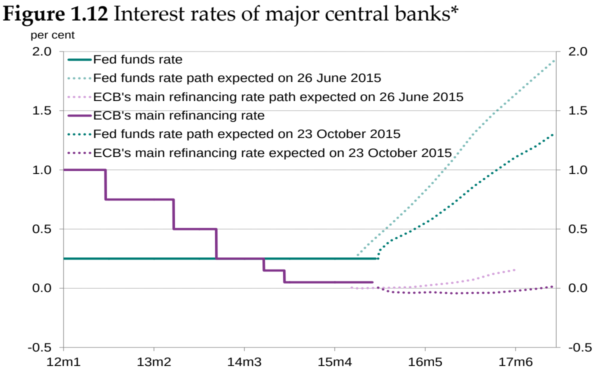
Figure 1.11 Index of agricultural commodity prices in the global markets in EUR (January 2010=100)*



Source: Bloomberg data, NBP calculations.

* Wheat, rape, pork, potatoes, sugar, cocoa, coffee, skimmed milk powder, butter, frozen orange juice concentrate. Weights reflect the consumption structure of Polish households.

Figure 1.12 Interest rates of major central banks*



Source: Bloomberg data.

* Market expectations based on 90-day Eurodollar and EURIBOR options.

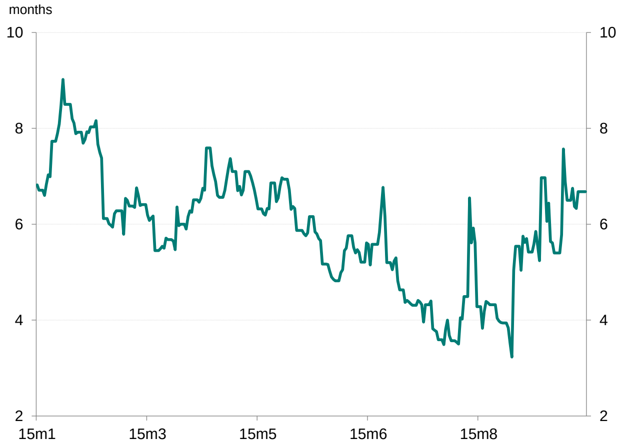
(see Chapter 1.1 *Economic activity abroad*) has yet not resulted in an increase in the fed funds rate. However, the Fed has not ruled out such a decision later this year. This notwithstanding, in mid-October, market participants did not expect an increase in the fed funds rate before 2016 Q1, yet market expectations regarding monetary policy tightening in the United States are highly volatile (Figure 1.13).

In turn, the ECB continued its asset purchases (mainly euro area government bonds) launched in March 2015. They are to be carried out at least until September 2016, but the ECB does not rule out extending their scale, scope or timing of their conclusion. Moreover, the ECB conducted another TLTRO, though demand for this operation was lower than in previous rounds.

Ongoing asset purchases by the ECB have encouraged monetary policy easing in some non-euro area EU member states. Since the publication of the previous *Report*, Riksbank has again decreased its interest rates to more negative level and expanded the asset purchase programme, while Ceska Narodni Banka has been intervening to keep the koruna below its exchange rate floor.

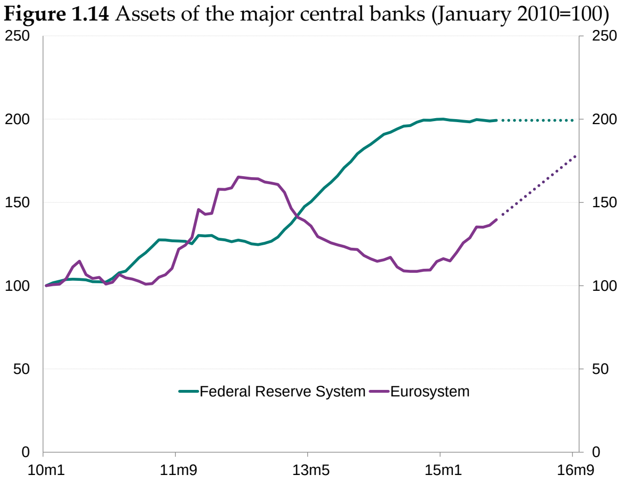
Monetary policy easing continued also in China, where the central bank proceeded with interest rate and the required reserve rate decreases that it had initiated in mid-2015, and extended the scope of liquidity provision to the banking sector. Moreover, the People's Bank of China has relaxed its exchange rate regime, as a result of which the yuan depreciated most in over 20 years. Following that, the Chinese central bank has been taking measures to stabilize the exchange rate.

Figure 1.13 Months to monetary policy tightening in the United States as expected by the markets*



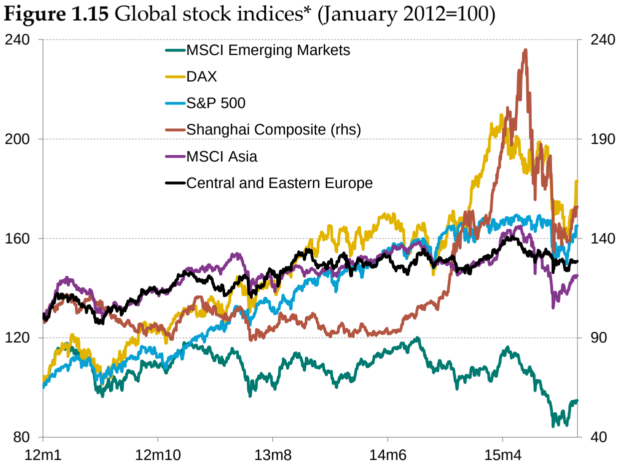
Source: Bloomberg data.
* MSM1KE.

Figure 1.14 Assets of the major central banks (January 2010=100)



Source: Bloomberg data, NBP calculations.
* Dotted lines denote forecasts, prepared under an assumption of constant Fed's balance sheet and the Eurosystem's assets growing by 60 bn EUR a month.

Figure 1.15 Global stock indices* (January 2012=100)



Source: Bloomberg data, NBP calculations.
* For Central and Eastern Europe – GDP-weighted average of major stock indices in the region.

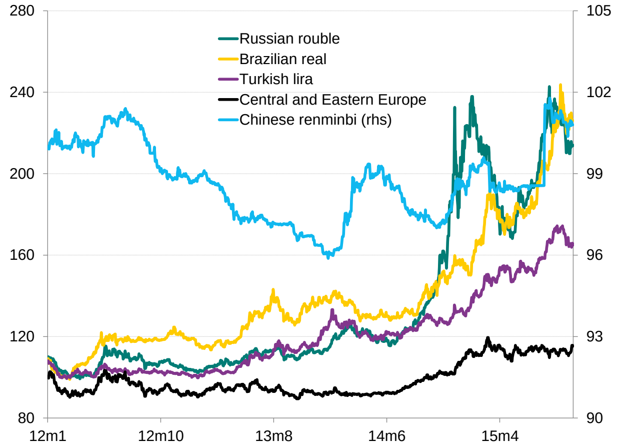
1.5 Global financial markets

In August 2015, global stock indices fell, which was associated with the uncertainty regarding monetary policy tightening in the United States, and deteriorating economic outlook for emerging market economies, particularly China. The fall in share prices came to a halt in September, but in many countries, especially in Asia, they remain significantly lower than several months ago (Figure 1.15).

The fall in global stock indices was accompanied by a temporary depreciation of several emerging market currencies. However, the Central and Eastern European currencies remained relatively stable (Figure 1.16).

At the same time, yields on bonds of major emerging market economies declined due to the deterioration in global economic outlook, a fall in inflation expectations resulting from a renewed drop in commodity prices, the delay in monetary policy tightening in the United States and the likely extension of ECB's quantitative easing (Figure 1.17).

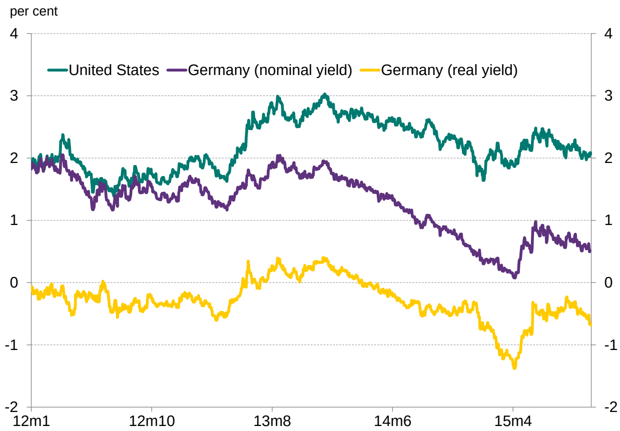
Figure 1.16 Selected emerging market exchange rates* in relation to the United States dollar (January 2012=100, rise indicates depreciation)



Source: Bloomberg data, NBP calculations.

* For Central and Eastern Europe – GDP-weighted index of currencies with floating exchange regime.

Figure 1.17 10-year government bond yields in Germany and the United States



Source: Bloomberg data.

2 Domestic economy

2.1 Consumer prices

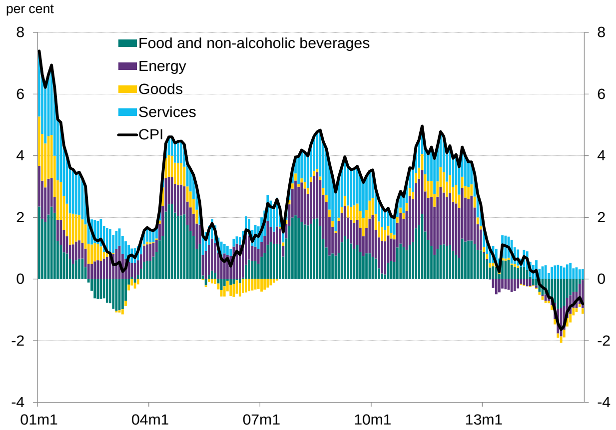
Deflation continues in Poland, although its pace is slower in 2015 Q3 than in the previous quarters (Figure 2.1). Price decline is primarily driven by external factors, mainly a fall in global commodity prices resulting, in particular, in lower energy prices.

The decline in commodity prices – along with moderate economic conditions and still negative output gap in Poland's main trading partners – has also weighed on sustained slow price growth in Poland's external environment. These factors were pulling down import prices, yet the effect was mitigated by the weaker than the year before exchange rate of the zloty against the US dollar. Consequently, the growth of import prices remained close to zero (Figure 2.2).

Falling consumer prices can also be attributed to both the absence of demand pressure in Poland, as reflected in low levels of core inflation (Figure 2.3), and the lack of cost pressure, evidenced by falling producer prices in industry (Figure 2.4). At the same time, wage pressure – amidst deflation and low inflation expectations of households (Table 2.1) – continued to be limited.

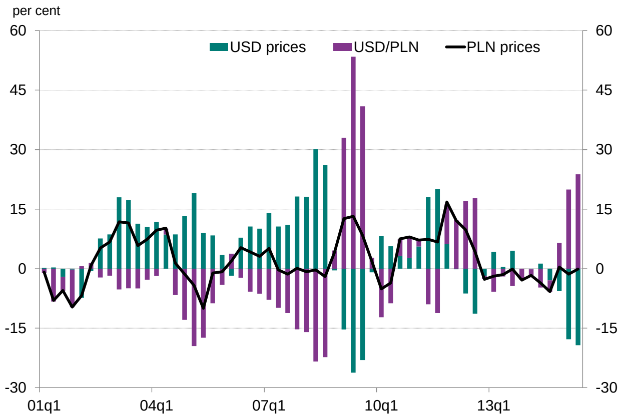
Consumer price deflation is additionally related to lower food prices in comparison to a year ago. This especially concerns the prices of meat, whose fall has been associated with the loss of some external markets for pork.[4] Moreover, the decline in food prices has been driven by a fall in global agricultural commodity prices. In recent months,

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



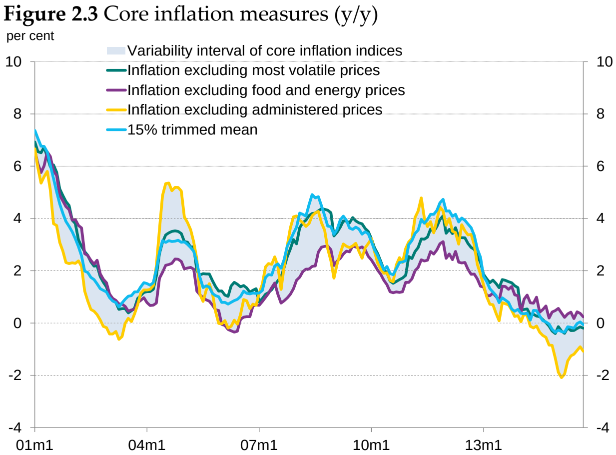
Source: GUS data, NBP calculations.

Figure 2.2 Composition of annual growth of import prices in PLN terms



Source: GUS data, NBP calculations.

Figure 2.3 Core inflation measures (y/y)



Source: GUS data, NBP calculations.

[4] As of 2014 Q1, many countries have introduced restrictions on the imports of pork from Poland, which was related to the discovery of the outbreaks of the African swine fever in the country.

however, food prices have been falling less steeply mainly on the back of rising prices of vegetables and fruits. Their rise has been related to this year's drought and the cutbacks to the scale of production of some fruit and vegetables. This is because the profitability of their production could be similarly low as in the last year.[5]

In coming months, price growth should gradually pick up, supported by the waning effect of the earlier declines in commodity prices, amidst sustained stable economic growth and favourable labour market conditions. A gradual rise in inflation is also forecasted by the financial sector analysts and the surveyed economists (Table 2.1).

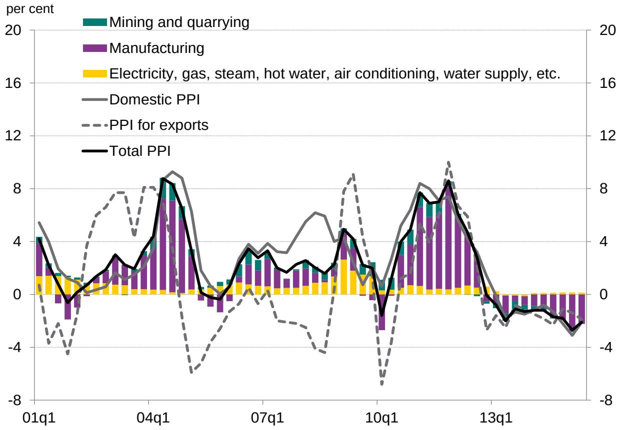
2.2 Demand and output

In 2015 Q2, GDP growth was slightly lower than in the previous quarter, remaining close to the estimated potential output growth (Figure 2.5, Table 2.2). Still rising consumer demand – fuelled by favourable labour market conditions and stable growth in lending to households – continued to be the primary driver of economic growth. The rise in investment, which was supported by high capacity utilization, good financial position of the corporate sector and relatively low costs of financing, also had a significant contribution to GDP growth, though lower compared to 2015 Q1. At the same time, the contribution of net exports fell to zero, driven by a deeper slowdown in exports than in imports, amid weakening growth in global trade.

2.2.1 Consumption

In 2015 Q2, household consumption rose at a rate close to that observed in the previous quarters (2.9% y/y as compared to 3.1% y/y in 2015 Q1, Figure 2.6). The increase in consumption was supported by a further rise in employment and a

Figure 2.4 Composition of annual growth of total PPI by sections of industry, domestic PPI and PPI for exports



Source: GUS, Eurostat data.

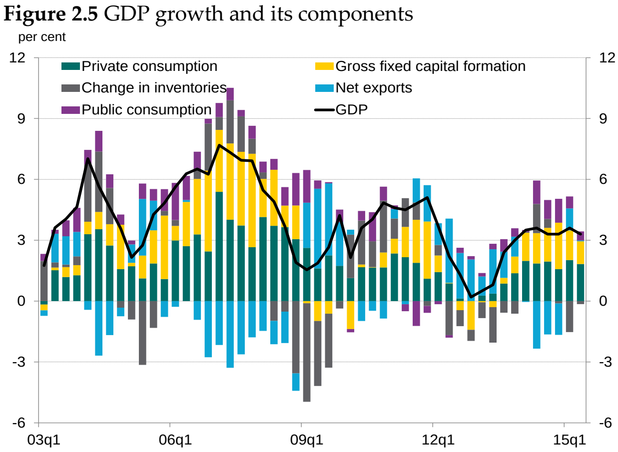
Table 2.1 Inflation expectations of consumers, enterprises, bank analysts and participants of the *NBP Survey of Professional Forecasters* (in per cent)

	Jun	Jul	Aug	Sep	Oct
CPi inflation expected in 12 months					
Consumers*	0.2	0.2	0.2	0.2	0.2
Enterprises	0.2	-	-	0.2	-
Expected average annual CPI inflation					
Bank analysts					
- in 2015	-0.6	-0.7	-0.7	-0.8	
- in 2016	1.5	1.5	1.4	1.5	
- in 2017	2.0	2.0	2.0	2.2	
NBP Survey of Professional Forecasters					
- in 2015	-0.6	-	-	-0.8	-
- in 2016	1.4	-	-	1.3	-
- in 2017	2.0	-	-	1.9	-

Source: GUS, NBP, Thomson Reuters data.

*In periods of non-positive current CPI inflation, calculation of the objectivized measure of inflation expectations poses some difficulty, and the values obtained should be treated as approximations.

Figure 2.5 GDP growth and its components



Source: GUS data.

[5] Vegetable price growth has also been driven up by the positive base effect related to the unusual decline in their prices in the corresponding period of the previous year, resulting from good harvest and the imposition of embargo by the Russian Federation.

decline in unemployment (see Chapter 2.4 *Labour market*). Moreover, continued growth in nominal wages, together with a further decline in food and energy prices, increased real disposable income of households, thus boosting consumer sentiment (Figure 2.8). Consumption growth was also fuelled by the stable rise in consumer loans (see Chapter 2.6 *Lending and money supply*). Nonetheless, the impact of increasing household income on consumption growth was curbed by households' growing propensity to save.

Data incoming in 2015 Q3 show that consumption growth may remain at the level close to that seen in 2015 Q2. This is suggested by consistently favourable labour market conditions and optimistic sentiment of consumers, despite its slight weakening. Retail sales growth declined, yet the persistence of this phenomenon is so far difficult to assess.

2.2.2 Investment

Investment growth in the economy slowed down and remains at a moderate level (running at 6.4% y/y in 2015 Q2 against 11.4% y/y in 2015 Q1).[6] Slower pace of investment reflected primarily weaker growth in investment of local governments, which was related to lower co-financing of the EU projects (Figure 2.9).

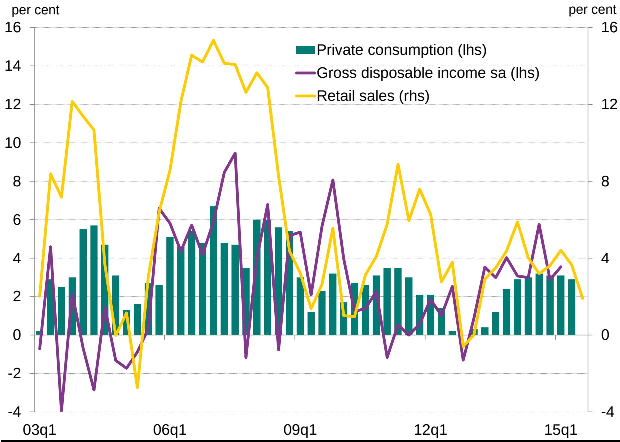
At the same time, corporate investment also decelerated slightly, but remained above its long-term average. The slowdown can be attributed to heightened uncertainty about the outlook for global demand growth and consequently for demand for goods produced under international supply chains. Yet, other factors such as high capacity utilization (Figure 2.10), firms' good financial performance – which enables them to finance projects with their own funds – as well as

Tabela 2.2 Growth of GDP and its selected components (y/y) and contribution of inventories and net export to GDP

	2011	2012	2013	2014 q1	2014 q2	2014 q3	2014 q4	2015 q1	2015 q2
GDP (per cent)	4.8	1.8	1.7	3.4	3.5	3.3	3.1	3.6	3.3
Private cons. (per cent)	3.0	1.0	1.1	2.9	3.0	3.2	3.1	3.1	3.0
Public cons. (per cent)	-2.3	0.2	2.1	0.1	3.7	3.5	3.7	3.3	2.4
Gross fixed capital form. (per cent)	9.3	-1.5	0.9	11.2	8.7	9.9	9.0	11.4	6.4
Change in inventories (pps)	0.7	-0.7	-1.0	0.0	1.4	0.4	-0.1	-1.5	-0.2
Net exports (pps)	0.9	2.2	1.5	0.0	-1.9	-1.6	-1.5	1.1	0.0

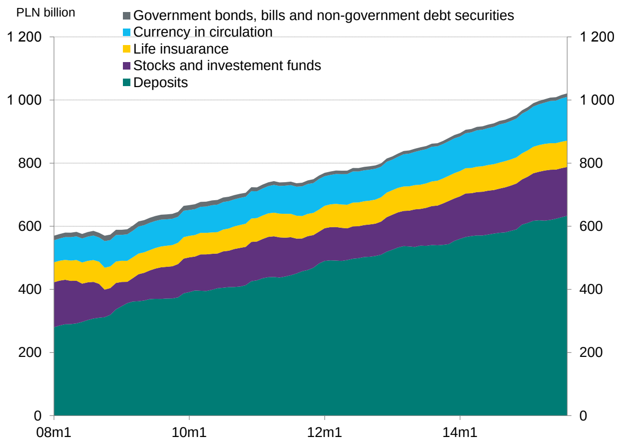
Source: GUS data.

Figure 2.6 Growth of private consumption, gross disposable income and retail sales (y/y, constant prices)



Source: GUS data, NBP calculations.

Figure 2.7 Households' financial assets



Source: NBP data.

[6] Investment growth based on preliminary GDP estimates by GUS, the remaining data based on estimates derived from the NECMOD model.

high availability and low interest rates on loans, supported further increase in gross fixed capital formation in the enterprise sector.[7] As these factors should continue into the next quarter, the outlook for corporate investment activity remains favourable.[8]

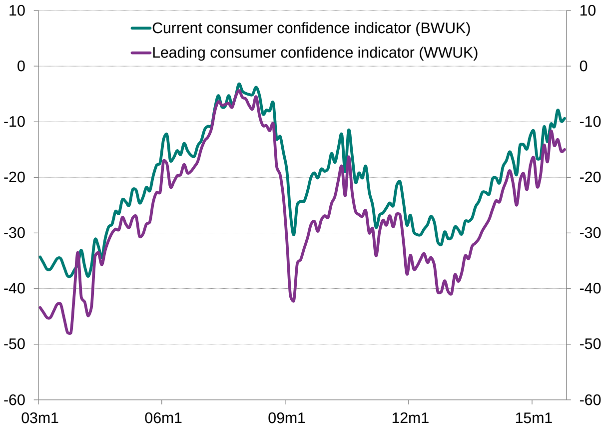
Investment growth was also fuelled by a marked pick-up in housing investment. The rebound in housing investment was driven by a relatively high rate of return, supported by historically low levels of nominal interest rates. Also a favourable labour market conditions, observed since the beginning of 2014, added to the rise in housing investment by both enhancing the ability to finance home purchases with buyers' own funds and – together with a relatively low level of mortgage interests – increasing the availability of mortgage lending.

2.2.3 Public finance

The impact of the general government sector on aggregate demand was close to neutral. In January-September 2015, the central budget deficit was higher than in the corresponding period of the previous year, mainly due to the one-off factor on the expenditure side (Figure 2.11).[9] At the same time, fiscal position of local governments has improved somewhat.[10]

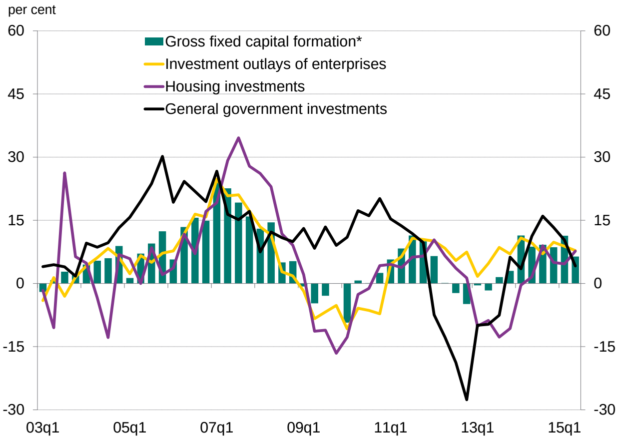
Between January and September 2015, central government expenditure was 4.1% y/y higher (and 1.8% y/y higher excluding the one-off factor). In turn, the revenue growth was slow (0.4% y/y), which was driven by a decline in VAT income (related to deflation and the approved legislative

Figure 2.8 Consumer confidence indicators



Source: GUS data.

Figure 2.9 Investment in the economy (y/y, NBP estimates for the NECMOD model, data seasonally adjusted)



Source: GUS data, NBP calculations.
*GUS data (not seasonally adjusted).

[7] In 2015 Q2, companies increased their investment outlays in all categories, primarily – as in the previous quarter – in the construction sector. Also the scale of newly started projects rose (by 20.7% y/y in 2015 Q2, according to their cost estimate). Particularly high growth was seen in upgrade investment.
[8] *NBP Quick Monitoring. Economic climate in the enterprise sector in 2015 Q3 and forecasts for 2015 Q4*, NBP, October 2015.
[9] Partial settlement of the postponed payments resulting from the purchase of multi-task aircraft F16. The transaction has no impact on the general government sector balance in ESA 2010 terms.
[10] Data on central budget relate to the period January-September 2015, while data on the budget of the local government units – to the first half of 2015.

changes).[11] Yet, the favourable labour market conditions and sound financial position of enterprises supported the rise in other tax revenues.

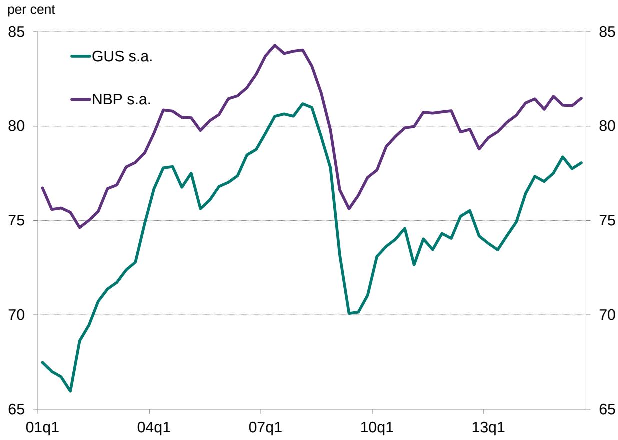
The surplus of local government units in the first half of 2015 was higher than in the corresponding period of the previous year. The improvement was due to a relatively steep growth in receipts from own income (4.8% y/y), amidst a slow rise in expenditure (1.9% y/y).

The financial position of the main special purpose funds was slightly better than a year before. The balance of the Labour Fund has improved, which was related to the better labour market conditions, generating higher income from contributions, and to lower spending on unemployment benefits. The position of the Social Insurance Fund and the National Health Fund has not changed significantly in comparison to the corresponding period of the previous year.

According to the Ministry of Finance estimates presented in the October fiscal notification, general government deficit will narrow from 3.3% of GDP in 2014 to 2.8% of GDP in 2015 (ESA2010). The expected improvement is mainly driven by the changes in the contributions transfer to the Open Pension Funds from July 2014[12] and the one-off revenue from spectrum auctions.

The Government estimates that the central budget deficit will not exceed the threshold of 3% of GDP in 2016. The *Draft 2016 Budget Act*, submitted to the Parliament at the end of September 2015, was constructed on the assumption of no legislative

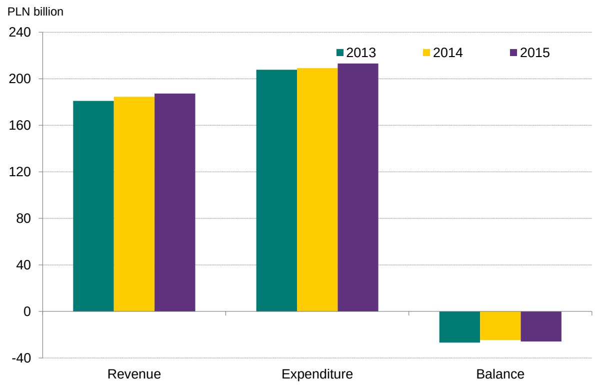
Figure 2.10 Production capacity utilisation in industry (GUS) and in the corporate sector (NBP)*



Source: GUS data, NBP economic climate survey.

*The degree of capacity utilisation based on the GUS business tendency survey is significantly lower that quoted in NBP surveys. However, trends in both indicators are similar in both surveys. The difference in the data results from the difference in the enterprise sample on which surveys are based on. The difference may also stem from the fact that large enterprises are overrepresented in the NBP sample, while the GUS sample is representative in terms of the enterprise size.

Figure 2.11 Central budget performance in January – September



Source: NBP, Ministry of Finance.

[11] Growth of VAT revenue in 2015 is limited by the shift in the timing of receipts related to the introduction at the beginning of 2015 of more favourable conditions for the calculation of this tax by the so-called Authorised Economic Operators and by the possibility to claim as expense 50% of the fuel for the vehicles used in a dual (private and business) purposes since July 2015. In addition, the rise in VAT revenue in the first few months of 2014 was exceptionally steep, which was the result, among others, of numerous purchases of cars for business use in anticipation of changes – from April 2014 – in the conditions of the deduction of VAT from the value of their purchases.

[12] According to the Social Insurance Fund data only 18% of the Open Pension Funds members submitted applications for further transferring pension contributions to the second pillar. Reduced amount of transfers to the Open Pension Funds improves the general government sector balance in the ESA2010 terms.

changes influencing the level of tax revenue. With regard to government expenditure, the *Draft* assumes higher spending on social transfers and on defence, as well as a partial de-freezing of the government sector wages. Despite this, the expected rate of growth of the central budget primary expenditure[13] will be fairly moderate in 2016, owing to, among others, reduced expenditure related to co-financing the EU projects, as the projects of 2007-2013 perspective are near the completion.

2.2.4 External trade

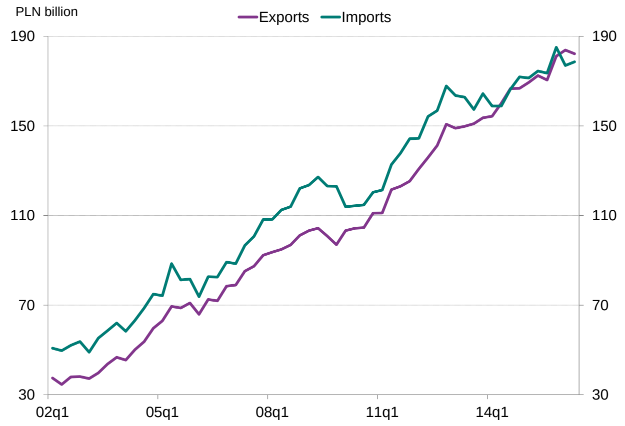
In 2015 Q2, Poland continued to post a surplus in foreign trade (Figure 2.12). However, as the slowdown in exports was stronger than that in imports, the surplus was lower compared to the previous quarter.

Weaker export growth reflected mainly a further decline in sales to non-EU countries (Figure 2.13), driven by deteriorating economic conditions in Russia and Ukraine as well as by one-off factors.[14]

In turn, the ongoing economic recovery in the euro area and in the majority of other EU countries, coupled with accelerating growth in their foreign trade, were the factors supporting Polish exports. At the same time, however, a fall in investment in the euro area and certain appreciation of the zloty against the euro could weigh on a slight deceleration of Polish exports to this economy.

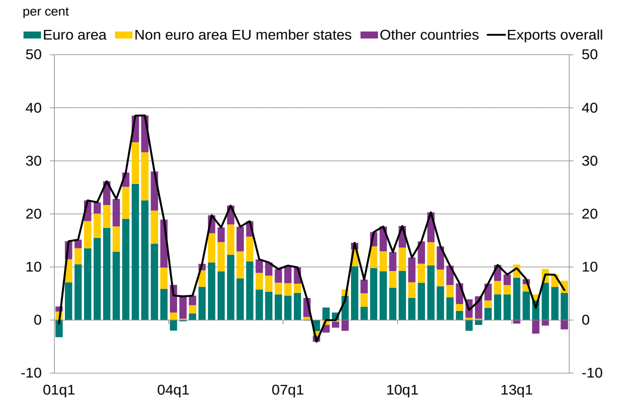
Although the slowdown in exports partly resulted from temporary factors, there are no signs of its marked reversal in H2 2015. Persisting moderate growth of exports will largely stem from the still relatively weak global trade growth (see Box 2 *Explaining the trade slowdown – globally and in Poland*). Consequently, both the volume of exports

Figure 2.12 Value of Polish exports and imports



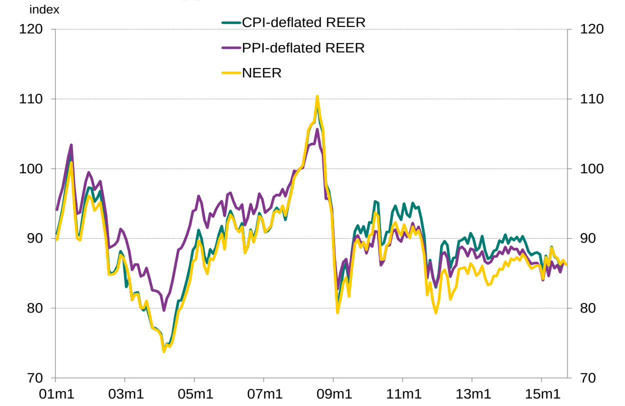
Source: GUS data.

Figure 2.13 Polish export growth by destination



Source: GUS data, NBP calculations.

Figure 2.14 Zloty real and nominal effective exchange rate (increase denotes appreciation, January 2008=100)



Source: NBP, European Commission data, NBP calculations.

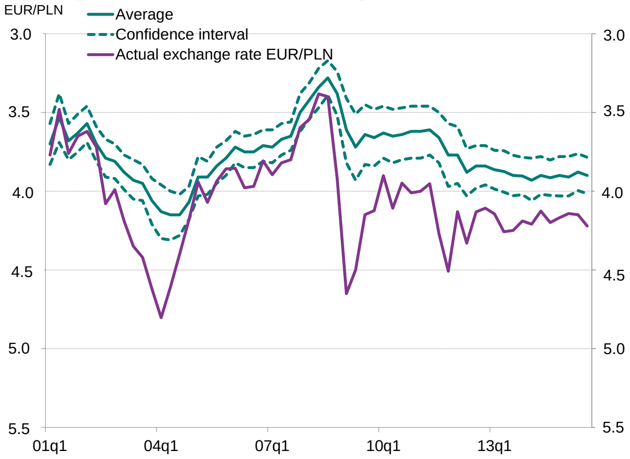
[13] Expenditures without interest payments on government securities.
[14] Decline in the annual growth of exports, among others, to Singapore, the United Arab Emirates and Algeria was due to the base effect related to significant sales of goods (ships, machinery and equipment) to these countries in 2014 Q2.

expected by enterprises and the number of new export contracts are below their long-term averages.[15]

In 2015 Q2, deceleration in exports was accompanied by weaker import growth (down to 2.4% y/y as compared to 3.3% y/y in 2015 Q1).[16] Apart from slower growth in export sales, import growth was reduced by a slight slowdown in domestic demand, particularly in investment, which is the demand component of high import intensity. Lower prices of commodities, including oil, in the global markets – as compared to their last year's level – also had a dragging effect on the growth in import value.

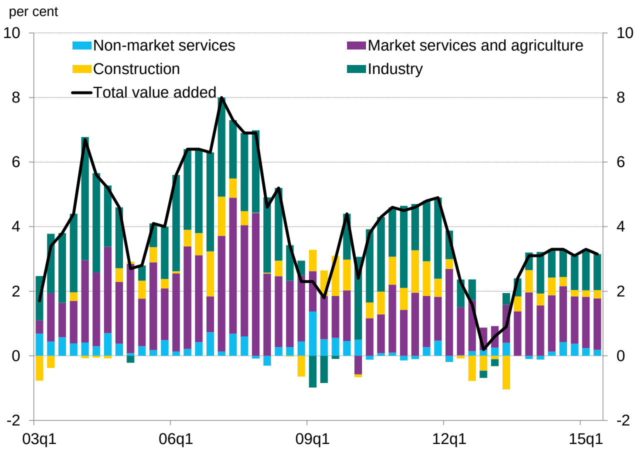
In 2015 Q2, the zloty appreciated against currencies of many Poland's trading partners, including the euro and the US dollar (Figure 2.14). Nevertheless, the profitability of Polish exports remained high (Figure 2.15) as indicated by a very low percentage of companies declaring their exports to be unprofitable. Yet, a relatively strong exchange rate of the US dollar against the Polish zloty contained the profitability of imports settled in this currency. This was reflected in the rising share of the costs of imports of intermediate goods in total importers' costs.[17]

Figure 2.15 Average threshold exchange rate (EUR/PLN) of exports profitability declared by enterprises



Source: NBP data and calculations.

Figure 2.16 Sector contribution to gross value added y/y growth



Source: GUS data, NBP calculations.

Box 2: Explaining the trade slowdown – globally and in Poland

Global trade growth slowed down markedly after 2010, which has also affected the Polish economy (Figure B.2.1). This box sets out the main drivers of the slowdown as indicated in literature, and their impact on a deceleration in Poland's external trade growth.

Global trade

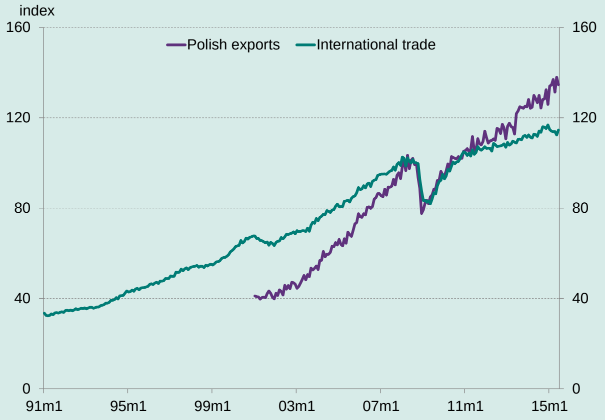
Although a significant slowdown in global trade in recent years (from an average of 7.0% in 1992-2007 to 3.5% in 2011-2014, Figure B.2.1) was subject to many studies, still there is no consensus in literature about it reasons.

[15] *NBP Quick Monitoring. Economic climate in the enterprise sector in 2015 Q3 and forecasts for 2015 Q4*, NBP, October 2015. Foreign trade figures for July and August confirm the absence of a marked pick-up in exports (export growth in this period stood at 6.3% y/y as compared to 5.6% y/y in 2015 Q3).

[16] In July and August 2015 import growth accelerated slightly (to 3.6% y/ y).

[17] *NBP Quick Monitoring. Economic climate in the enterprise sector in 2015 Q3 and forecasts for 2015 Q4*, NBP, October 2015.

Figure B.2.1 International trade and Polish exports volume (September 2009=100)



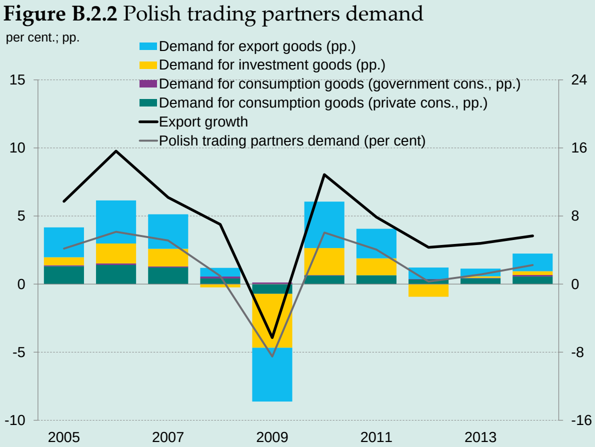
Source: CPB and Eurostat data.

Some analyses suggest that lower global demand has been the main factor dragging down growth in the world trade (see Boz et al., 2015, ECB, 2015). Yet, other studies show that – while this element has played a major role during and directly after the crisis – in recent years it was lower income elasticity of trade that added considerably to the effect (see Constantinescu et al., 2015, Gaulier et al., 2015). This, in turn, could have been related to slower trade liberalisation and probably weaker development of global supply chains as well as a strong decline in the global growth of highly import-intensive investment, coupled with more stable growth in less import-intensive consumption. While fall in investment growth is likely to be, at least in part, cyclical, it may also – to some extent – reflect structural factors. In particular, a permanent slowdown in investment growth could be accounted for by a decline in relative prices of investment goods and decreasing capital intensity of investment in modern branches of industry (Summers 2014). As a result, while negative impact of the slowdown in investment on global trade may weaken in the years to come, investment activity is not likely to remain as strong a driver of global trade as it was in the last decade.

Poland's external trade

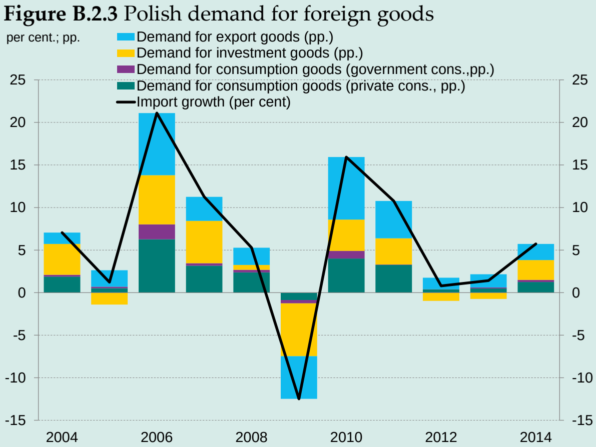
The slowdown in global trade has also affected the Polish economy. Between 2011 and 2014, the average annual growth in the volume of exports declined to 6% y/y from nearly 14% in the years 2001-2007. Despite this deceleration, Poland's export sales expanded faster in that period than the demand of the country's trading partners, and faster than the world's exports (Figure B.2.1). At the same time, growth in imports lowered from nearly 8% y/y to 3% y/y. Since 2010, Poland's external trade growth has probably been dampened by the same factors as those dragging down global trade growth.

Figure B.2.2 Polish trading partners demand



Source: NBP calculations based on WIOD, OECD.
Definition of Polish trading partners demand in footnote 18 and 19.

Figure B.2.3 Polish demand for foreign goods



Source: NBP calculations based on WIOD, Eurostat.
Definition of particular demand categories in footnote 20.

Firstly, the demand growth in the country's trading partners slowed down even more sharply than in the global economy.[18] Moreover, its deceleration was to a large extent due to weaker growth of the most import-

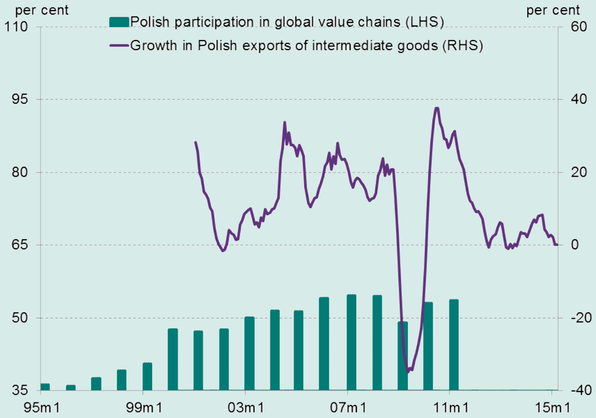
[18] Demand growth in Poland's trading partners stood at 1.9% on average, as against 2.1% in the global economy. The demand of Poland's trading partners has been defined as the sum of their domestic demand and exports weighted by their share in Polish exports according to the World Input-Output Database (WIOD). In turn, demand for exports in the global economy has been weighted by the share of a given economy in the global GDP. The estimation of the demand covered the countries featuring in the OECD database. Export sales to these countries represent 75% of total Polish exports.

intensive components of demand – that is, investment and exports. Consequently, the contribution of these categories to aggregate external demand for Polish goods fell considerably, particularly after 2012 (Figure B.2.2.) However, the negative impact of the above changes has been mitigated by the favourable, in this context, structure of the Polish exports, which is characterised by the following qualities: (i) a significant - and higher than the world average – share of consumer goods and (ii) the relatively low share of capital goods.[19]

Weaker growth of Polish imports in recent years, in turn, can probably be largely attributed to lower domestic investment growth (Figure B.2.3).[20] Slower export growth has been another factor to dampen the expansion of import demand. Consumer demand, in turn, has had a relatively small bearing on demand for imports over the past few years.

Secondly, the slowdown in Poland's external trade of recent years could be partly related to the lack of strong structural stimuli, which supported the country's trade recovery in the earlier period.

Figure B.2.4 Polish participation in global value chains



Source: NBP calculations based on WIOD, Eurostat.

In particular, steep acceleration in Poland's foreign trade growth in the previous decade was largely driven by trade liberalisation and Poland's integration with the countries of Western Europe, resulting in a rising participation of Polish enterprises in global supply chains (Figure B.2.4).[21] However, over the past few years, these processes have weakened. Following Poland's accession to the EU, trade liberalisation lost momentum. In 2006-2008, the rise in participation of Polish firms in global supply chains also stabilised and, following a temporary dip in 2009, by 2011 it returned to its pre-crisis level. After 2011, growth in external trade in intermediate goods, i.e. those related to the operation of the supply chains, has subsided. This, however, could have been driven by a weaker growth in foreign demand for these goods, and so have a transitory character.

To sum up, the slowdown in Poland's exports has been largely due to the same factors as those dragging down global trade growth. Yet, their dampening effect was mitigated by a significant share of consumer goods in Polish exports. While – together with improving global economic conditions – Poland's external trade is likely to accelerate, its growth may be weaker than in the previous decade because of the lack of equally strong stimuli.

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[19] Consumer, capital and export goods have been defined, for the purposes of this box, as goods which serve to satisfy a trading partner's given demand component, and their share in the total exports has been calculated based on the WIOD tables.

[20] The demand for foreign goods has been calculated as the growth in real values of exports and the individual components of domestic demand weighted by their import intensity. Consumer, investment and export goods have been defined as goods dedicated to satisfy a given component of demand, and their value has been calculated based on WIOD data.

[21] A country's participation in global supply chains is measured as the sum of the share of foreign value added in the exports of this country and the share of the analysed country's value added in the exports of third countries.

2.2.5 Output

In 2015 Q2, the annual growth in gross value added was close to that seen in 2015 Q1 (3.1% y/y as compared to 3.3% in 2015 Q1). The increase in gross value added was further driven by rising activity in services and – albeit to a lesser extent – industry (Figure 2.16). Contribution of construction to gross value added continued to be low.

Data incoming in 2015 Q3 indicated that growth in economic activity could have stabilized, and the economic conditions in various sectors of economy most likely remained similar to that observed in the previous quarter.

Further improvement in the sentiment in retail trade, transportation and warehousing point to the continued relatively good economic conditions in services. Activity in services should also be supported by further growth in household consumption (see Chapter 2.2.1 *Consumption*).

Growth in industrial output and orders remained similar to those in 2015 Q2. A moderate increase in industrial activity is also reflected in business confidence indicators (Figure 2.17).

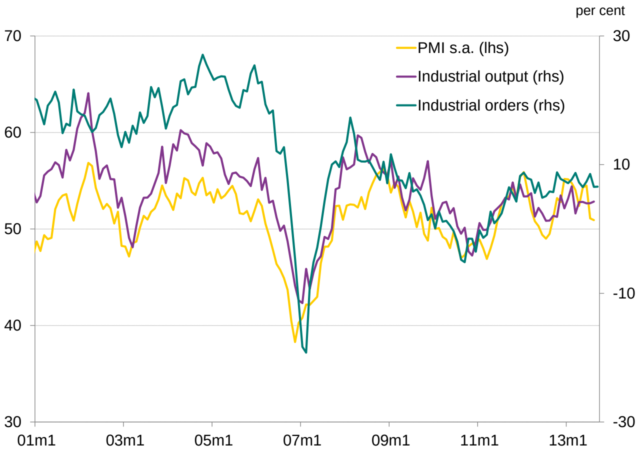
At the same time, output growth in construction remained close to zero, with further negative growth in orders portfolio (Figure 2.18).

2.3 Financial situation in the enterprise sector

Financial situation of the enterprises sector is improving. The sector posts continued high liquidity and stable structure of financing.

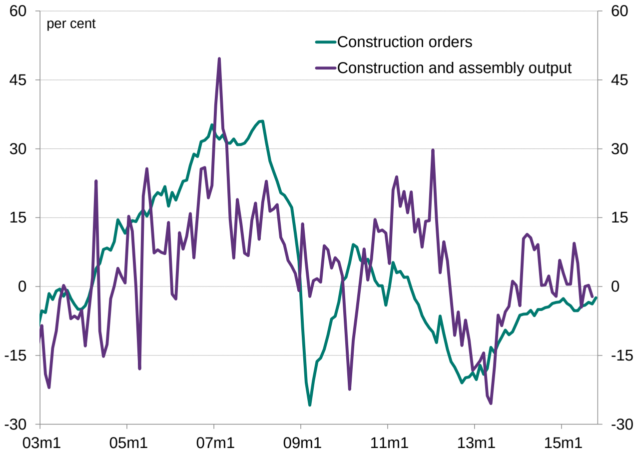
Gross financial results of enterprises in 2015 Q2 saw a significant improvement, yet, this was largely due to better results on financial operations, which are not related to firms' core business (Figure 2.19, Table 2.3). However, improved

Figure 2.17 PMI and annual growth of sold production of industry and of industrial orders



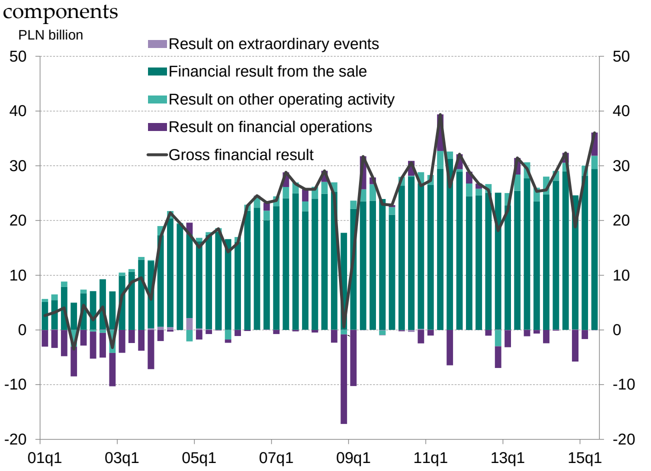
Source: GUS, Markit data (seasonally adjusted), NBP calculations.

Figure 2.18 Annual growth of construction and assembly output and construction orders



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

Figure 2.19 Gross financial result of enterprises and its components



Source: GUS data based on F-01/I-01 forms, NBP calculations.

financial results led to a rise in the share of profitable enterprises.

Corporate profits from sales also increased, albeit to a lesser extent, which translated into a rise in sails profitability ratio. The improvement of corporate results on sales was limited by declining producer prices, dragging down growth in corporate revenues. However, growth in revenues continued to outstrip that in costs of sales, which continued to be constrained by low commodity prices. The absence of a marked negative impact of declining producer prices on the financial situation in the corporate sector is also confirmed by the results of the NBP surveys, which do not indicate significant changes in sales margins.

2.4 Labour market

In 2015 Q2, employment in the economy, including in the corporate sector, stood at the highest level in history (Figure 2.20). However, at the same time, growth in the number of people working in the economy weakened, which might suggest that improvement in the labour market could be gradually slowing down. Nevertheless, 2015 Q3 has seen a further growth in employment in the corporate sector, which – according to the results of the NBP survey – should continue in the coming quarters.[22]

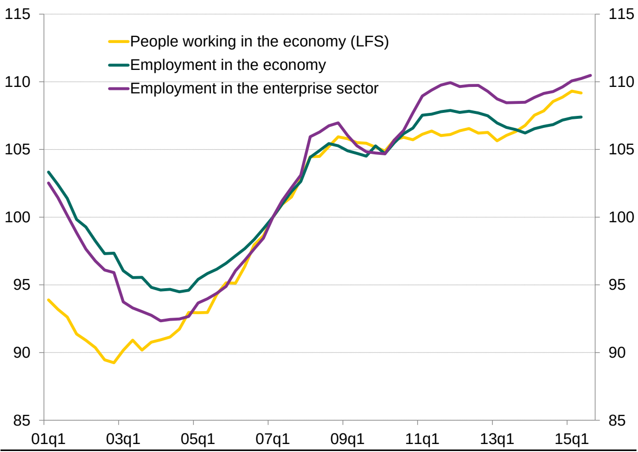
The increase in the number of people working in the economy was conducive to a continued decline in the unemployment rate. According to the Labour Force Survey, in 2015 Q2 the unemployment rate stood at 7.5% (seasonally adjusted), thus approaching the levels recorded at the end of 2008 (Figure 2.21). Data from labour offices also confirm further fall in unemployment

Table 2.3 Selected financial efficiency ratios in the enterprise sector

	2010	2011	2012	2013	2014 q1	2014 q2	2014 q3	2014 q4	2015 q1	2015 q2
	Period average data (per cent)									
Sales profitability ratio	5.2	5.3	4.3	4.3	4.5	4.7	4.8	3.9	4.8	4.9
Net turnover profitability ratio	4.4	4.5	3.4	3.8	3.8	4.1	4.5	2.4	3.9	5.0
Percentage of profitable enterprises	78.4	78.0	76.8	79.6	67.6	73.9	77.0	81.6	68.7	75.0
	End of period data									
Liquidity ratio of the first degree	0.40	0.38	0.34	0.35	0.34	0.35	0.36	0.39	0.38	0.36

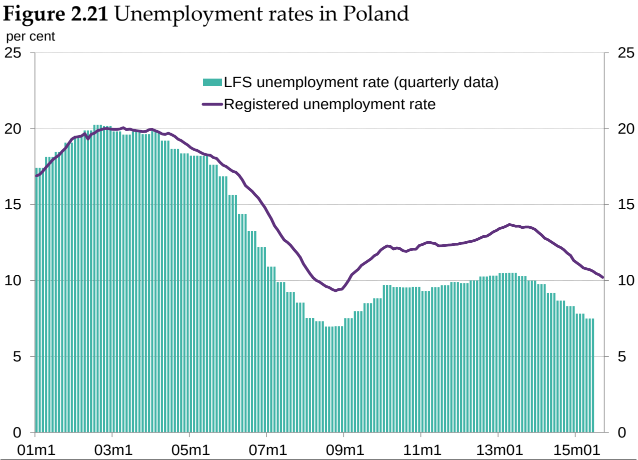
Source: GUS data.

Figure 2.20 Employment growth in the economy (2007 Q1=100)



Source: GUS data, NBP calculations.

Figure 2.21 Unemployment rates in Poland



Source: GUS data (seasonally adjusted).

[22] This is indicated by persistently positive value of the employment forecast indicator (balance of companies planning to increase employment and those planning to reduce it) for 2015 Q4, *NBP Quick Monitoring. Economic climate in the enterprise sector in 2015 Q3 and forecasts for 2015 Q4*, NBP, October 2015.

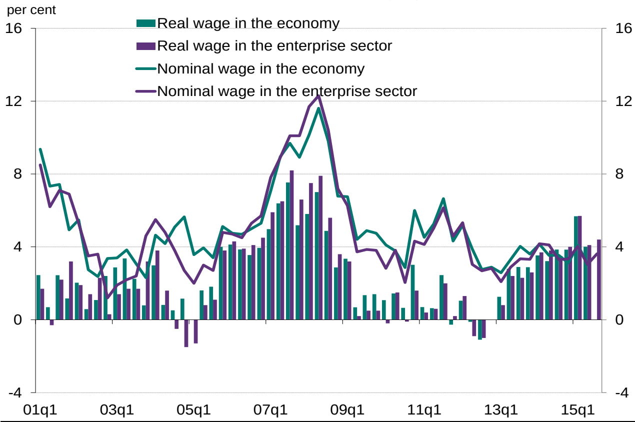
in 2015 Q2 and at the beginning of 2015 Q3[23].

The relatively low unemployment rate and a high likelihood of finding a job – confirmed by a rise in the number of offers per one unemployed – indicate an improvement in the position of both employees and job seekers in wage negotiations. Despite this, however, growth in nominal wages in the economy continues at a moderate pace, and in 2015 Q2 it even decreased (to 3.1% y/y as compared to 4.1% y/y in 2015 Q1 (Figure 2.22).

Continued moderate wage growth may be attributed to higher level of unutilized workforce in the economy than might be suggested by the unemployment rate. This is indicated by the lower actual working time than that preferred by employees and, consequently, the level of underemployment index exceeding that of unemployment (Figure 2.23).[24] Employers' willingness to raise wages may be limited by moderate labour productivity growth (Figure 2.24). Wage pressure, in turn, can be mitigated by a decline in consumer prices, which increases employees' disposable income in real terms.

The NBP survey shows that 2015 Q3 posted a marked increase in the number of companies planning wage rises. Also the size of the average envisaged wage rise grew, which may signal an acceleration in wage growth in the coming quarters.[25]

Figure 2.22 Nominal and real annual wage growth

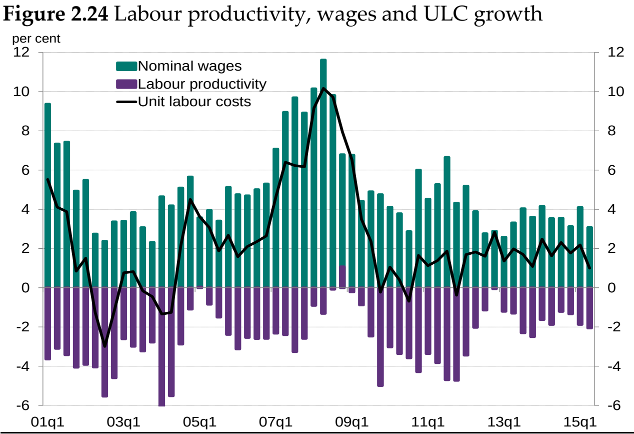


Source: GUS data.

Figure 2.23 Unemployment index and underemployment index

Source: GUS data, NBP calculations.

Figure 2.24 Labour productivity, wages and ULC growth



Source: GUS data, NBP calculations.

[23] In September 2015, the registered unemployment rate (seasonally adjusted) stood at 10.2% as compared with 11.0% in March. There are two reasons for the differences between the registered unemployment rate and the LFS unemployment rate: (1) the definition of an unemployed person is different, (2) the definition of population to which the number of unemployed persons is referred is different.
[24] The underemployment index is calculated by referring the level of unutilized workforce to that of economically active, and adjusting it further for the difference between the employees' preferred working time and the time they actually worked. The index of unemployment is the unemployment rate converted into hours.
[25] *NBP Quick Monitoring. Economic climate in the enterprise sector in 2015 Q3 and forecasts for 2015 Q4*, NBP, October 2015.

2.5 Asset markets

2.5.1 Financial market

In recent months, yields on Polish government bonds have declined, which was related to the downward revision of market participants' expectations regarding the level of NBP interest rates (Figure 2.25) and to the ECB's and Fed's policies. At the same time, an increase in risk aversion driven by an increase in concerns about a steeper slowdown in the Chinese economy (see Chapter 1.5 *Global financial markets*) was a factor negatively affecting prices of Polish government bonds (particularly strongly in late August and early September).

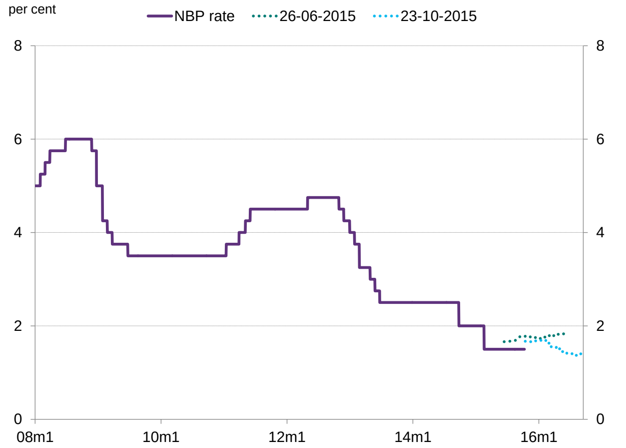
Growing concerns about world economic outlook and deteriorating sentiment in the global markets had an adverse impact on share prices on the Warsaw Stock Exchange (Figure 2.26). Another driver of the fall in these prices were concerns about regulatory changes regarding foreign currency loans, which lowered the valuation of banks.

Despite the strong rise in volatility in the international financial markets, the zloty exchange rate remained relatively stable. Since the publication of the previous Report, the zloty has depreciated only slightly against the euro and the US dollar, while strengthening against the Swiss franc (Figure 2.27).

2.5.2 Monetary policy

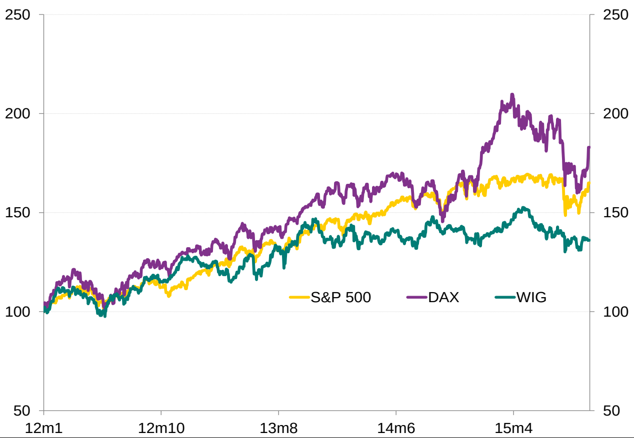
In recent quarters, the Monetary Policy Council kept the NBP interest rates unchanged. In response to slightly weaker than expected data on the global and domestic economy, and higher risk of longer period of inflation returning to the target, market participants have recently revised downward their expectations regarding future changes in the NBP

Figure 2.25 NBP reference rate and FRA-implied 1M interest rate



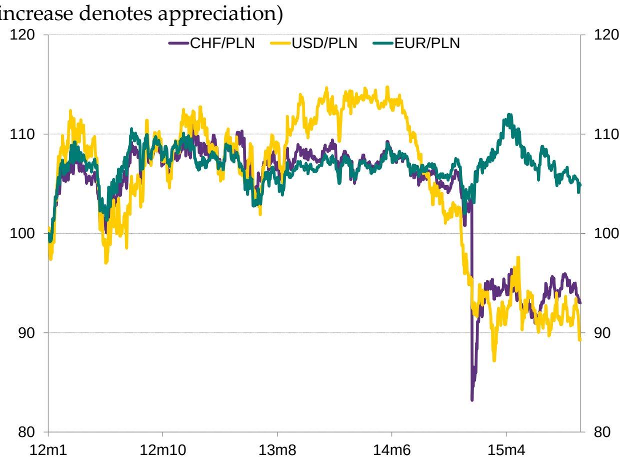
Source: NBP, Bloomberg data, NBP calculations.

Figure 2.26 WIG and stock indices abroad (January 2012=100)



Source: Bloomberg data.

Figure 2.27 Exchange rate of the Polish zloty (January 2012 = 100, increase denotes appreciation)



Source: Bloomberg data.

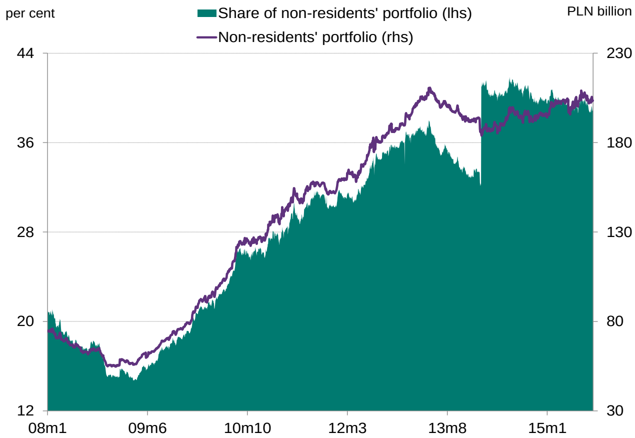
interest rates. Currently, they point to the possibility of interest rate cut by 0.25 percentage points at the turn of 2016 Q2 and 2016 Q3 (Figure 2.25).

2.5.3 Residential real estate prices[26]

The housing market in Poland continues to recover, as reflected in further increase in the number of dwellings sold (Figure 2.30). High housing demand is fuelled by the favourable labour market conditions and the historically low nominal interest rates, which increase both the availability of mortgage loans and the relative profitability of rental housing. The government-subsidized programme "Flat for the Young" could also have added to the rise of residential property sales in the primary market.

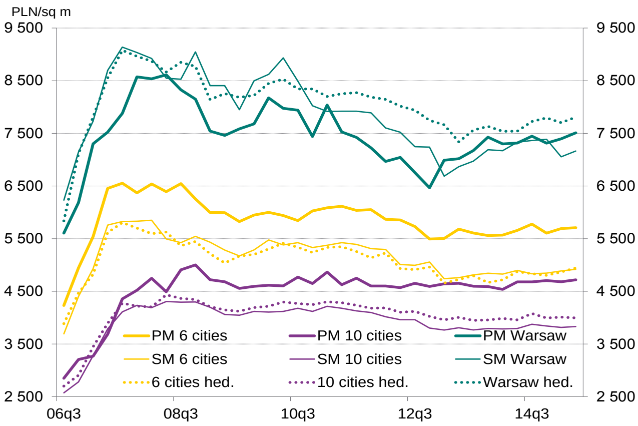
Despite growing demand, house prices in major cities remain relatively stable due to the continued high supply of unsold flats and steadily growing number of newly built dwellings (Figure 2.29). The rise in apartment sales and relatively low construction costs encourage real estate developers to launch new investments, which will in turn increase future supply of flats.[27]

Figure 2.28 Non-residents in the Polish sovereign bond market



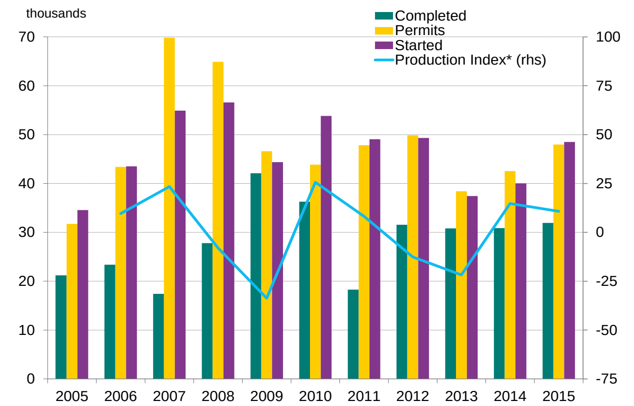
Source: KDPW data.

Figure 2.29 Average prices of flats in six and ten major cities[28]



Source: NBP calculations based on the NBP survey.

Figure 2.30 Housing construction in Poland in second quarters



Source: GUS data, NBP calculations.

* Production index is a number of development projects started in the real estate market less introduced into the market (12-month moving value).

[26] For more information on the situation in the housing real estate market in Poland see the NBP report: *Information on home prices and the situation in the housing and commercial real estate market in Poland in 2015 Q2* (available on NBP's website: www.nbp.pl, in Polish only).

[27] This is indicated by an increase in the number of building permits as compared to 2014 Q2.

[28] PM – primary market, SM – secondary market, hed. – hedonic price index. Sale prices in the primary market weighted with the share of the housing stock in a given city in the total housing stock of all cities. Sale prices in the secondary market adjusted for differences in the qualities of flats. The index for six cities includes: Gdańsk, Gdynia, Kraków, Łódź, Poznań and Wrocław, and the index for ten cities – Białystok, Bydgoszcz, Katowice, Kielce, Lublin, Olsztyn, Opole, Rzeszów, Szczecin and Zielona Góra.

Box 3: Is Poland at risk of the zero lower bound?

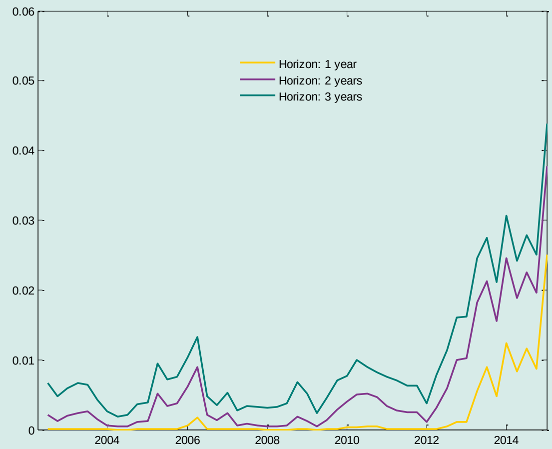
Since the onset of the global economic crisis, central banks in many advanced economies have lowered short-term nominal interest rates to near-zero levels. As a consequence, central banks have lost the capacity to stimulate the economy with further interest rate redutions[29] and further monetary expansion could have been achieved only trough unconventional monetary policy tools.

Reaching the zero interest rate bound may have an adverse effect on the economy. On the one hand, it restricts the central bank's room for manoeuvre. On the other hand, it boosts the impact of negative shocks in the economy, while curbing the effect of the positive shocks. As a result, the economic crisis may be exacerbated, and the economy may enter a different, unfavourable equilibrium.

NBP economists have analysed the probability and potential effects of this phenomenon occurring in Poland, assuming that monetary policy is conducted in line with the estimated Taylor rule.[30] A model of the Polish economy has been constructed and estimated for the years 2002-2014. It was subsequently used to estimate the historical probabilities of the occurrence of the zero lower bound implied by the model, to assess the relationship between this probability and the level of the inflation target and to examine the change in the response of economy to shocks in the environment of the liquidity trap.[31]

The first of the issues addressed were historical levels of probability that the zero interest rate bound would bind. As can be seen from the chart, the probability was close to zero until 2012, after which it rose considerably. Despite this, the risk is still small and has never exceeded 5%.

Figure B.3.1 Probability of the zero lower bound in a one-, two- and three-year horizon



Source: M. Brzoza-Brzezina, M. Kolasa, M. Szetela (2015), Czy Polsce grozi pułapka deflacyjna?, Materiały i Studia NBP No. 320
Note: The curves show the probability of hitting the zero lower bound in the horizon of one year (yellow line), two years (purple line) and three years (green line).

Next, it was examined how the level of the inflation target affects the probability of zero interest rates.[32] Simulations[33] have shown that the current inflation target provides a significant protection against this

[29] A few central banks cut policy interest rates below zero, which shows that the discussed constraint is binding at a slightly negative level. For the sake of clarity of the discourse, we have disregarded this aspect

[30] M. Brzoza-Brzezina, M. Kolasa, M. Szetela (2015), Czy Polsce grozi pułapka deflacyjna?, *Materiały i Studia NBP No. 320*.

[31] Long term supply-side effects of the zero lower bound are not analysed in the publication. More on these effects can be found in A. Rzońca (2015) *„Kryzys banków centralnych. Skutki stopy procentowej bliskiej zera"*.

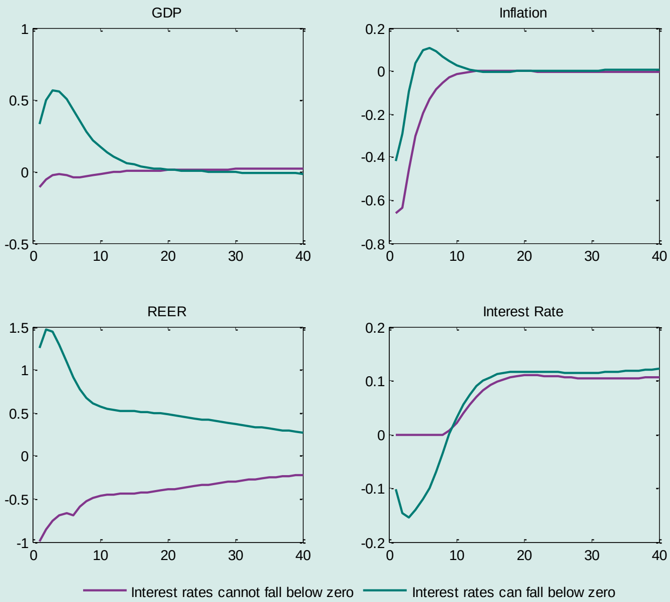
[32] In the longer term, the increase in the inflation target quoted in the example translates into higher inflation expectations. In line with the Fisher equation, which defines the nominal interest rate as the sum of the real interest rate and expected inflation, this renders higher nominal interest rates in the long-term equilibrium (assuming an unchanged real interest rate). As a result, the central bank will have more room for manoeuvre in the event of a recession, and thus, the probability of hitting the zero lower bound will be smaller.

eventuality – the zero lower bound occurs not more frequently than once every hundred years. Yet, a decrease in the inflation target of 1 percentage point would lead to a situation in which NBP would hit the constraint approximately every 22 years. What is more, 25% of such events were observed no later than 7 years from the start of the simulation.

The model enabled researchers to provide answers to the question about possible changes in shock transmission under close-to-zero interest rates in the economy. To illustrate the point, below we present the economy's response to a positive productivity shock (such as falling oil prices or launch of a new production technology). Under normal circumstances, such a shock would lead to an increase in output, a decline in inflation, a decrease in the central bank interest rates and a resultant depreciation of the real exchange rate. In the absence of the possibility to adjust interest rates, the real exchange rate appreciates instead of depreciating, and domestic and external demand decline. As a result, we see GDP contracting rather than expanding.

To sum up, the probability of the zero interest rate bound materialising in Poland has been low in the past. This is due to the fact that the 2.5% inflation target has provided sufficient protection against the NBP interest rates getting close to zero.

Figure B.3.2 Productivity (supply) shock



Source: Source: M. Brzoza-Brzezina, M. Kolasa, M. Szetela (2015), Czy Polsce grozi pułapka deflacyjna?, Materiały i Studia NBP No. 320

Note: Green line shows how the shock would unfold if the central bank was not constrained by the interest rate bound. Purple line shows the propagation of the shock in a situation where the bank has no capacity to lower interest rates.

[33] 10 000 stochastic simulations were conducted for each inflation target, starting from the steady state. Next, the first encounter of zero rates was recorded.

2.6 Lending and money supply

Lower interest rates than in the previous years, stable economic growth and favourable labour market conditions are conducive to a steady rise in lending activity (Figure 2.31, Figure 2.32).[34]

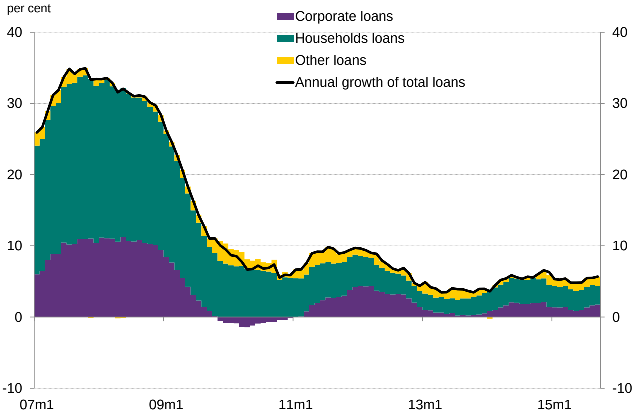
Total annual lending growth amounted to 5.6% in 2015 Q3, and had not changed significantly since the second half of 2014. The current lending growth, which is close to the nominal GDP growth. Therefore, it should neither hamper economic growth, nor lead to build-up of imbalances in the economy.[35]

Loans to households remain the main driver of lending growth, with housing and consumer loans rising at similar pace (Figure 2.32).

Although the annual growth in housing loans has been slowing down (to 2.8% y/y in 2015 Q3, from 3.1% and 3.5% y/y, respectively, in 2015 Q2 and 2015 Q1), the volume of zloty-denominated housing loans has risen by 8.2% since the beginning of the year. Factors behind this growth included good labour market conditions and the decline in the interest charged on these loans (Figure 2.34). At the same time, there is a steady decline – at an annual rate of about 6 per cent – in the value of the portfolio of foreign currency housing loans, which reduces the risk related to this credit category.

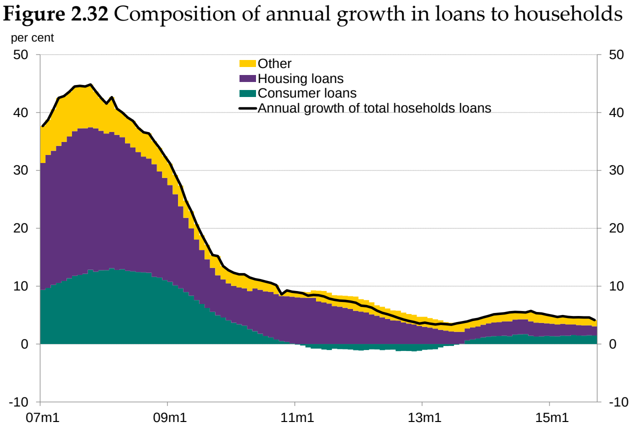
Since August 2013, there has also been a gradual increase in consumer loans, at a rate which has recently stabilised at 6% y/y. High effective interest rates on these loans (Figure 2.34), together with relatively low capital requirements, make consumer loans the most profitable for banks.

Figure 2.31 Composition of annual growth in liabilities



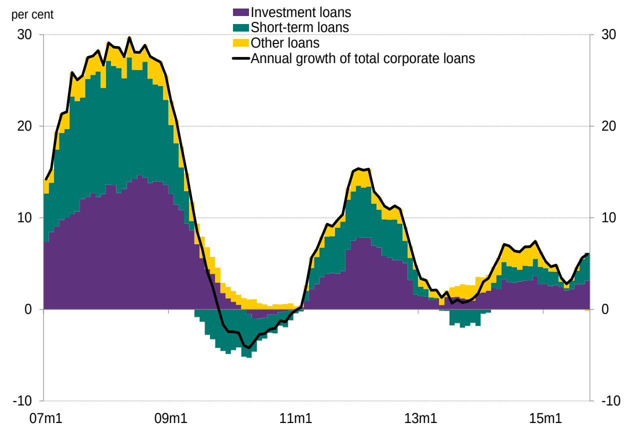
Source: NBP data.

Figure 2.32 Composition of annual growth in loans to households



Source: NBP data.

Figure 2.33 Composition of annual growth in loans to companies



Source: NBP data.

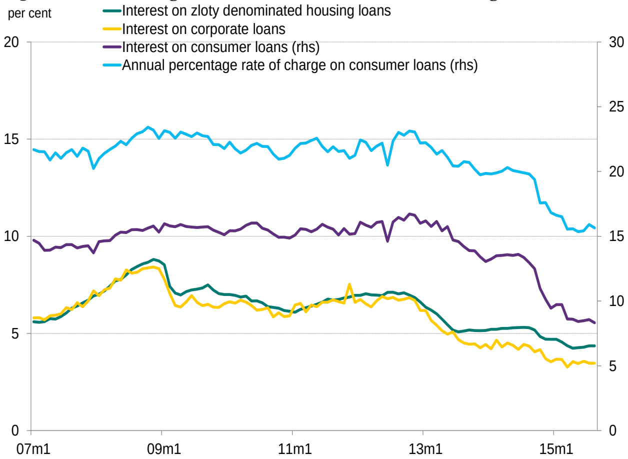
[34] In the present chapter, growth in lending to a given sector of the economy is defined as the growth in receivables of monetary financial institutions from this sector.
[35] See: Box 1 "Method of identifying the risk of excessive lending" in: *Financial Stability Report*, NBP, July 2015.

Hence, in line with their plans for 2015,[36] banks intend to intensively build their portfolios of these loans.

Banks are also developing their portfolios of corporate loans. Following a temporary slowdown in lending to the enterprise sector in 2015 Q2, credit growth accelerated significantly (up to 5.4% in 2015 Q3 as against 3.2% y/y in Q2 and 4.7% in Q1, respectively). The temporary slackening and the subsequent rebound in corporate lending was seen mainly in short-term loans, while investment loans continued to rise at a stable rate (Figure 2.33). Lending to the enterprise sector benefited from the government's programme of support to micro-, small and medium-sized enterprises in the form of the Portfolio Guarantee Line *de minimis* launched in March 2013, and further expanded in November of that year to include investment loans.[37]

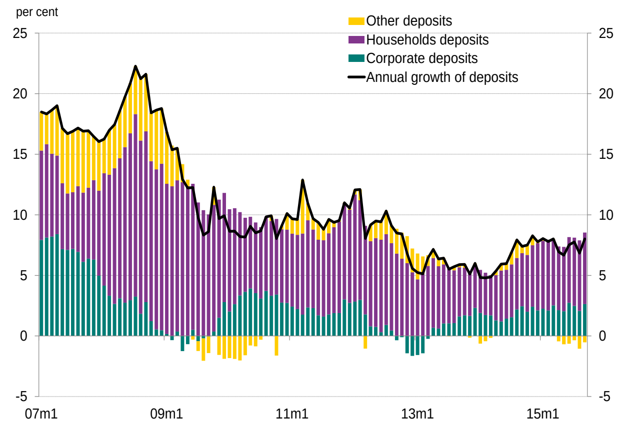
Lending is funded predominantly by rising deposits of households and firms, which limits the risk of imbalances arising in the economy (Figure 2.35). Good labour market conditions and the improving financial performance of firms were the factors conducive to the stable growth in deposits. At the same time – amidst low interest rates – the term structure of deposits has changed: slowdown in term deposit was accompanied by acceleration in short-term deposits growth (Figure 2.36).

Figure 2.34 Average interest rates on main loan categories



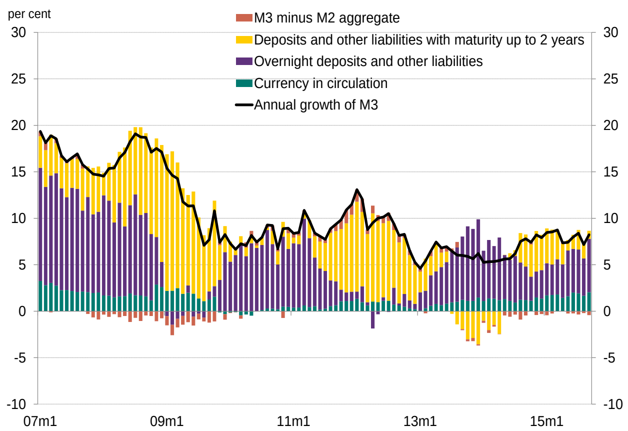
Source: NBP data.

Figure 2.35 Composition of annual growth in bank deposits



Source: NBP data.

Figure 2.36 Composition of annual growth in M3



Source: NBP data.

[36] See: *Banks' financial plans for 2015*, Polish Financial Supervision Authority http://www.knf.gov.pl/Images/Plany_finansowe_bankow_2015_tcm75-41114.pdf (available in Polish only)
[37] By the end of August 2015, banks had granted loans amounting to a total of PLN 40.25 bn, while the total volume of receivables from the corporate sector increased by PLN 37.4 bn.

2.7 Balance of payments

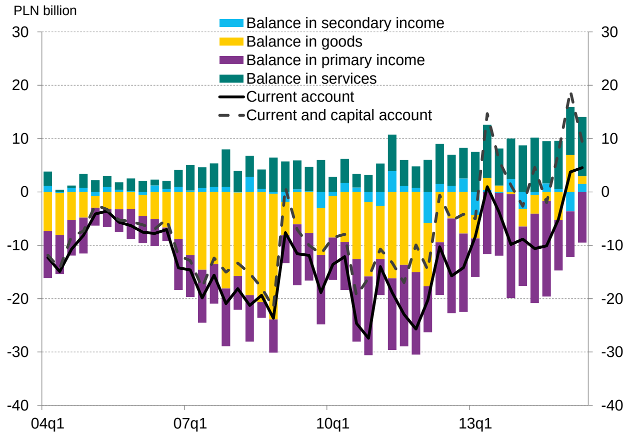
Sound developments in the balance of payments initiated in previous quarters continue. In 2015 Q2, the current account surplus widened, reflecting improving competitiveness of Poland, its smaller dependence on external financing and the positive impact of a fall in commodity prices on the balance of payments (Figure 2.37).[38,39]

Trade balance remained positive and was higher than a year before. It was still the main source of the current account surplus, but was narrowed by foreign direct investors' income, which was lower than a year before (see Chapter 2.2.4 *External trade*).[40]

In 2015 Q2, the further inflow of EU funds added to the surplus on the capital account (however, as the inflow of some EU funds had been shifted from 2015 Q2 to 2015 Q1, the balance was lower than a year before).[41] The surplus on the combined current and capital account was, however, higher than in the corresponding period of the previous year.

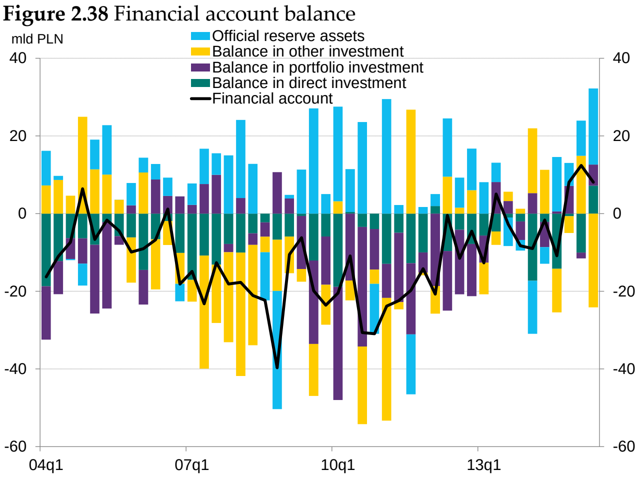
Continued surplus on the combined current and capital account resulted in accumulation of net foreign assets, confirmed by a positive and higher than a year before balance on the financial account. The increase in the balance on this account was driven by a significant rise in foreign exchange reserves and a marked decline in foreign investment in Poland. Foreign direct investment fell – largely due to one-off factors[42] – and foreign

Figure 2.37 Current account balance



Source: NBP data.

Figure 2.38 Financial account balance



Source: NBP data.

[38] As from 2015 Q1 data, statistics on Polish balance of payments are published in the zloty, instead of the euro.
[39] The preliminary data for July and August 2015 indicated a current account deficit driven by higher growth in imports than in exports and lower surplus on the balance of services.
[40] The decline in the income of foreign direct investors was related to both the distribution of dividends being postponed from 2015 Q2 to the subsequent quarter and the dividend payments being cut down by some companies.
[41] The EU funds are recorded on different balance of payments accounts. The structural and cohesion funds are recorded on the capital account, the social funds on the secondary income account, and the inflows from the Common Agricultural Policy fund on the primary income account.
[42] The decline in direct investment was connected with the withdrawal of non-residents from special purpose vehicles, and – to a large extent – also with the valuation changes and exchange rate differences.

portfolio investment in debt securities.[43] This was accompanied by a considerable increase in deposits of foreign monetary financial institutions to the Polish banking sector.

As a consequence of these developments, the majority of Poland's external imbalance indicators continued to improve. The four-quarter moving averages of trade and current account balances to GDP ratios rose to the highest levels since 2004 (Table 2.4). Poland's negative international investment position improved further.

Table 2.4 Selected external stability indicators*

	2010	2011	2012	2013	2014				2015	
					q1	q2	q3	q4	q1	q2
Current account balance	-5.4	-5.2	-3.7	-1.3	-1.3	-1.9	-2.3	-2.0	-1.3	-0.4
Current and capital account balance	-3.6	-3.3	-1.5	1.0	1.1	0.5	0.1	0.4	1.7	1.9
Trade balance/GDP	-3.0	-3.5	-2.1	-0.1	0.0	-0.4	-0.5	-0.8	-0.2	0.1
Official reserve assets (in monthly imports of goods and services)	5.5	5.7	5.5	5.2	5.0	4.9	5.2	5.3	5.5	5.8
Foreign debt	66	71	71	70	69	70	72	72	72	73
Net international investment position	-65	-63	-66	-69	-69	-68	-69	-68	-66	-65
Official reserve assets/foreign debt (up to 1Y) plus estimated CAB (per cent)**	76	80	100	85	94	97	103	109	100	100
Official reserve assets/foreign debt (up to 1Y) (per cent)**	98	93	106	94	100	99	104	111	104	108

Source: NBP, Ministry of Finance data.

* As the data in Table 2.4 are four-quarter moving averages (unless states otherwise), they might differ from presented in Table XXV of Balance of payments of the Republic of Poland in Q2 2015 (available only in Polish).

** Indicators include foreign debt and level of official reserves at the end of the period.

[43] Lower non-residents' exposure to debt securities could have been driven by a decrease in the Polish government bond issues.

3 Monetary policy in July – November 2015

At the meeting between July and November 2015 the Council kept the NBP interest rates unchanged at the following levels: reference rate 1.50%, lombard rate 2.50%, deposit rate 0.50%, rediscount rate 1.75%.

What follows in the next part of the chapter are the previously published *Minutes of the Monetary Policy Council decision-making meetings* held between July and October 2015 as well as the *Information from the meeting of the Monetary Policy Council* in November 2015. *Minutes of the Monetary Policy Council decision-making meeting* in November 2015 will be published on 19 November, and thus included in the next *Report*.

Minutes of the Monetary Policy Council decision-making meeting held on 8 July 2015

Members of the Monetary Policy Council discussed monetary policy against the background of the current macroeconomic developments in Poland and abroad as well as the results of the July projection of inflation and GDP.

Analysing economic conditions abroad, the Council emphasised the consolidation of the euro area recovery. It was observed that the sustained growth in economic activity in the euro area was supported by a further decline in unemployment, the earlier strong depreciation of the euro and positive business and consumer sentiment. It was pointed out that as the economic activity improved and financing became more available, lending growth gained momentum. Good economic performance and favourable GDP forecasts for Germany – which is Poland's main trading partner – were also brought to attention. Moreover, some Council Members pointed to the temporary nature of the 2015 Q1 economic slowdown in the United States. Those members observed that the favourable outlook for the US economy was good labour market conditions, improving real estate market and the increasingly robust retail sales growth.

Some Council members emphasised that economic activity in the euro area – despite recovery – remained relatively weak. It was also indicated that the continuation of the euro area recovery may be jeopardised by Greece’s possible default and the country's exit from the common currency area. It was emphasised that the response of the financial markets to the situation in Greece had been moderate so far. At the same time, it was pointed out that should Greece’s negotiations with its creditors fail, this might hurt sentiment and economic activity in the euro area and worldwide. Certain Council members believed that the impact of a Greek default would probably be weaker now than if it had happened in the previous years.

Some Council members also highlighted the continued weakness of business activity in the largest emerging economies as a considerable risk to global economic growth. It was argued that the relatively subdued output growth in these economies was dragging on export growth in the developed countries, including Germany. Particular attention was paid to the weaker than in the previous years economic activity in China and the effects of excessive investment in the real estate market in this country. In this context, certain Council members considered that the developments in China – as well as the sentiment in the global financial markets – might also suffer from the slump in share prices on stock exchanges in this country.

With regard to global inflation developments, the Council pointed to the recent pickup in price growth in many economies. It was emphasized, however, that amidst the merely modest global economic recovery and the persistence of relatively low commodity prices, inflation pressure in the global economy remained very weak, with price growth in the euro area, the United States, and – on average – the countries of Central and Eastern Europe hovering barely above zero.

While analysing the situation in the global commodity markets, it was observed that oil prices had edged down recently. In turn, agricultural commodity prices had risen sharply on the back of concerns about poor harvest due to unfavourable weather conditions.

When discussing monetary policy in Poland's external environment, it was pointed out that the main central banks were keeping interest rates close to zero. At the same time, while the ECB had announced the continuation of asset purchases until at least September 2016, the Fed had signalled the commencement of interest rate hikes as early as this year. Certain Council members emphasised, moreover, that some central banks in Poland's most immediate environment, i.e. in Sweden, Norway and Hungary, had eased their monetary policy in the recent period, as well as banks of the largest emerging economies – India, Russia and China.

While analyzing the situation in the real sphere of the Polish economy, some members expressed the opinion that GDP growth in 2015 Q2 might have continued close to the previous quarter's level. Members of the Council assessed that consumption, fuelled by further increase in real income of households and their positive sentiment, was likely to have remained the key driving force behind growth in economic activity. It was pointed out that growth in economic activity in 2015 Q2 was also supported by a further rise in investment. It was argued that corporate investment activity was driven by good financial conditions of corporations, enabling them to finance investment projects with their own funds. At the same time, some Council members pointed to a slowdown in both industrial production at the beginning of 2015 Q2 and sales in construction and assembly production in May 2015, as well as a merely moderate increase in retail sales. Certain Council members assessed that this might indicate a stabilization of economic growth in the coming quarters at the level close to that in 2015 Q1, or even its slight weakening.

In the opinion of the Council members situation in the labour market remained good. In particular, employment continued to rise and unemployment was still falling. Some members of the Council emphasized, however, that employment growth in the enterprise sector had levelled off, while the nominal wage growth in the sector had slowed down in the recent period. Nevertheless, certain Council members pointed that the real wage growth remained high and exceeded labour productivity growth. In the opinion of those members this situation, if continued – as indicated in the July projection – might bring about adverse structural changes in the economy; in particular, it might inhibit further increase of the share of industry in value added. Other Council members were of the opinion that the relatively rapid growth in real wages was justified given a relatively modest ratio of wages to GDP in Poland. Those members were of the opinion that high real wage growth did not necessarily have a negative impact on the economy, as labour productivity would increase with growing technological advancement and innovation.

While analyzing the situation in the financial sphere of the Polish economy, members of the Council remarked that the increase in lending to the private sector had slowed down somewhat in the recent period. It was pointed out that the rise in current account deposits was accompanied by a decline in term deposits. At the same time, growth of cash in circulation picked up. Certain members of the

Council assessed that sustained high growth in mortgage lending in PLN, combined with a rising share of households whose income net of interest payment had fallen below the subsistence level, might be a source of risk to financial stability. Those members also expressed the opinion that the rising percentage of companies unable to cover interest expenses out of their profits was a negative phenomenon. Yet, the majority of Council members concluded that the financial sector showed no sign of imbalances or any tangible risk of their occurrence in the future. Some of those members of the Council emphasized that the growth of housing loans in transaction terms, had fallen to its lowest level in more than a decade. They also pointed out that the risk of excessive growth in housing loans in the future would be limited by the steady tightening of macro-prudential policy as the ceiling on the LtV ratio was progressively reduced. Referring to the ability of enterprises to repay their loan obligations, those members pointed out that the share of loans with payment delays was not increasing and remained at a moderate level.

When discussing the outlook for economic growth in the context of the July projection, it was indicated that GDP growth would be relatively stable at close to 3.5% over the whole projection horizon. Certain members of the Council pointed out that the central path of the July projection was slightly above that of the March projection. According to the current projection, economic growth throughout the projection horizon would be primarily supported by rising consumption, as well as the still relatively high – despite a certain weakening in the second half of 2016 – investment growth. Some Council members emphasized that given the projected GDP growth, the output gap would close in 2015 and would remain near zero in the subsequent years.

In the opinion of certain members of the Council, economic growth may, however, be stronger than indicated by the central projection path. According to these Council members, higher GDP growth may result from a slightly weaker exchange rate of the zloty than that accounted for in the projection. In this context, the above Council members indicated that the political risk related to the parliamentary elections and also the beginning of interest rate increases by the Fed might lead towards depreciation of the zloty.

In turn, some Council members highlighted downside risks to the forecasted path of economic growth. In particular, it was pointed out that Greece's possible default and its exit from the euro area might enhance risk aversion in the financial markets. This in turn, according to these Council members, could result in a rise in debt servicing costs, an outflow of portfolio capital from Poland and a depreciation of the zloty, which would increase the charges on economic entities resulting from foreign currency denominated loans. Unfavourable developments in Greece could also weigh down on business conditions in the euro area, which in turn would have an adverse impact on economic activity in Poland. However, the majority of Council members were of the opinion that the impact of turmoil related to the situation in Greece on the Polish economy would probably be limited.

Some Council members pointed to the shape of fiscal policy next year as a factor of uncertainty. These Council members emphasized that there was a risk of fiscal policy easing, particularly as the excessive deficit procedure against Poland had been lifted.

Discussing inflation developments in the economy, the Council members drew attention to the gradual increase in price growth. However, some Council members stressed that the weakening of deflation resulted exclusively from the increased growth of food and energy prices. At the same time, the majority of Council members assessed that given the moderate growth in demand and nominal wages as well as the persistently negative output gap, there was no inflationary pressure in the economy. In the opinion of these Council members, this was indicated by the still very low core inflation and continued decline in producer prices in annual terms. The Council members also drew attention to inflationary expectations remaining at a very low level.

Addressing the outlook for inflation, it was emphasized that in accordance with the July projection, assuming unchanged interest rates, price growth in 2015 Q4 would increase above zero and in the coming years would gradually move towards the inflation target. However, certain Council members were of opinion that price growth might be lower than indicated by the central projection path. In turn, other Council members assessed that price growth would be higher than indicated in the July projection, which could be caused by a weaker exchange rate of the zloty than that accounted for in the projection as well as a higher than assumed growth in food and energy prices.

Referring to the decision on interest rates, the majority of Council members acknowledged that in the coming years inflation was likely to gradually rise towards the target, but there was no risk of exceeding the target in the medium term. At the same time, the projection and external forecasts indicate that economic growth in the coming years would be around potential and should not lead to imbalances in the economy. Moreover, favourable conditions in the labour market continue, yet not entailing growth in wage pressure. In such a situation, and also taking into account that real interest rates will decline along with the forecasted increase in price growth, it is justified to stabilize nominal interest rates at the present level.

Certain Council members pointed out, however, that with nominal interest rates unchanged amidst gradually accelerating price growth, real interest rates might approach zero next year. Moreover, these Council members expressed the opinion that weak growth in food and energy prices was concealing wage pressure in the economy and increasing the current account balance. As a result, with shocks leading to low food and commodity prices waning, macroeconomic imbalances could build up in the economy. For these reasons, it may be justified – in their opinion – to consider in the coming quarters an increase in interest rates.

Yet, other Council members indicated that currently it was difficult to determine the direction of future interest rate decisions, particularly taking into account the uncertainty of the situation in Poland's external environment and its impact on the Polish economy.

The Council decided to keep the basic NBP interest rates unchanged: the reference rate at 1.50%, the lombard rate at 2.50%, the deposit rate at 0.50% and the rediscount rate at 1.75%.

Minutes of the Monetary Policy Council decision-making meeting held on 2 September 2015

Members of the Monetary Policy Council discussed monetary policy against the background of the current and expected macroeconomic developments in Poland and abroad.

Analysing economic conditions in Poland's environment, the Council pointed to the continued economic recovery of the euro area, which was supported by an improvement in the labour market situation and favourable business sentiment. At the same time, certain Council members emphasised that GDP growth in 2015 Q2 had slowed down somewhat and incoming data for 2015 Q3 did not clearly indicate an acceleration of economic activity. In turn, it was stressed that with the launch of the third assistance programme for Greece, the risk of a Greek default in the near term had receded and thereby the short-term risk of negative effects of the situation in Greece on the euro area economy had been reduced. Some of the Council members also drew attention to the favourable information on the economic situation in the United States, including data on GDP growth in 2015 Q2 and the good labour market situation.

An important issue regarding the situation abroad highlighted by Council members was the further weakening of the economic activity in the major emerging economies and related deterioration of global growth prospects. In this context, Council members pointed to the deepening recession in Russia and Brazil. However, it was noted that the main risk factor for global growth was the possibility of a stronger than expected slowdown in China. It was argued that a further weakening of economic activity in China could limit Chinese demand for products from other countries and reduce global economic growth. Some Council members were of the opinion that the impact of the slowdown in China on the global economy would be amplified by potentially accompanying deceleration in other Asian economies' growth. It was pointed out that slowdown in China could influence Polish economy mainly through possible fall in German exports and GDP growth, which would adversely affect Polish exports growth. However, certain Council members assessed that in view of China's limited share in German exports, the slowdown in China would have little impact on German GDP growth, and consequently, on the economic situation in Poland. Certain Council members also considered that in the longer term there could be – particularly amidst rising real wages – change in the structure of demand growth in China in favour of an increased share of consumer demand in GDP, which would support growth in exports from developed economies to China.

Council members emphasised that the deteriorating economic situation in China and other developing economies also caused a reduction in their demand for commodities. It was considered to be a significant factor driving a renewed decline in prices on global commodity markets in the recent period. It was noted that in the case of some commodities, the fall in price was also supported by rising supply. It was emphasized that even the negative supply shock related to the drought in certain countries had not stopped the fall in agricultural commodity prices. Certain Council members considered that commodity prices were most likely in a long-term downward trend, which might contribute towards an extended period of very low growth in global prices.

Regarding global price developments, it was pointed out that global inflation remains very low. Some Council members emphasised that the renewed fall in commodity prices and the weakening of the yuan and other currencies of emerging countries would be conducive to global inflation remaining low in the coming quarters.

While discussing monetary policy in Poland's external environment, it was pointed out that there was continued uncertainty regarding the timing of the beginning of interest rate increases by the Federal Reserve. In turn, the ECB continued its asset purchase programme and there were some signals indicating a possibility of the programme expansion or extension. It was also pointed out that the People's Bank of China had eased monetary policy, including a devaluation of the yuan. Certain Councilmembers highlighted the fact that in the recent period the Bank of Hungary and Riksbank had once again eased monetary policy.

While discussing the situation in the global financial markets, it was pointed out that many asset prices had fallen and that their volatility had increased in the recent period. Indications of a stronger economic slowdown in China and the sharp fall of share prices in that country were significant factors leading to deteriorating financial market sentiment. This deterioration together with devaluation of the yuan also resulted in a weakening of the currencies of many emerging economies. Certain Council members drew attention to the fact that the upcoming monetary policy tightening by the Fed could increase depreciation pressure on emerging countries' currencies, which, in economies with significant foreign currency denominated corporate debt, would increase the risk of currency crises. As a result, there could be a further deterioration in investors sentiment towards emerging markets. These members pointed out that an additional source of shocks in international financial markets could be the bursting of bubbles in other asset markets, whose formation had been driven – in their opinion – by the unconventional policies of central banks. In this context, they also underlined that due to the strong economic and financial ties, the occurrence of one shock in the external environment of Poland would increase the likelihood of other risk factors materialising. As a result, any possible shocks could have a major adverse impact on the situation in the global economy, including economic activity in the euro area.

While analysing the situation in Poland's real economy, the slight weakening of GDP growth in 2015 Q2 was pointed out. It was emphasised that while consumption growth was stable, investment had lost momentum and the contribution of net exports to GDP growth had fallen. However, certain Council members believed that GDP growth was still faster than the growth of potential output. Some Council members drew attention to the lower than expected growth in output and retail sales in July as well as the fall in the PMI in August, which could signal weakening growth in activity. It was also pointed out that economic situation in certain sectors in 2015 Q3 might be adversely affected by drought and the temporary restrictions on electricity supply.

Some Council members pointed out that the slight slowdown in GDP growth was accompanied by a somewhat slower growth in wages and the number of working persons in the economy. Despite this, Council members were of the opinion that the situation in the domestic labour market remained good, resulting in continued robust growth in real wages, a declining unemployment rate and the growing likelihood of finding a job.

While discussing the outlook for economic growth, the majority of Council members emphasised that in the coming quarters GDP growth would most likely continue at a rate close to that observed in the first half of 2015. Further stable GDP growth would be supported by domestic factors, including the good situation in the labour market and the enterprise sector, the high capacity utilization and wide availability and relatively low cost of credit. The increase in activity in most sectors may also have been supported by low commodity prices and a certain weakening of the zloty exchange rate in recent months. Economic recovery in the euro area should also contribute to further stable growth. In turn, the deterioration of the economic situation in China and other emerging countries could have an adverse impact on GDP growth.

At the same time, the majority of Council members highlighted that in view of the weaker outlook for growth in the emerging countries, and also taking into consideration the slightly worse than expected data from the Polish economy in the recent period, the risk of a weakening in domestic activity growth had increased. According to certain Council members, there was increased risk of a strong external shock which – by weakening the economic growth of Poland's trading partners and causing a deterioration in investors sentiment towards the assets of emerging markets – could lead to a slowdown in Polish GDP growth.

Council members drew attention to the fact that in light of such circumstances, it was important to maintain high resilience of the Polish economy to external shocks and support long-term economic growth. Certain Council members also highlighted the need to increase the innovation in the economy and remove barriers to development of small and medium-sized enterprises. In their opinion, this could lead to an increase in labour productivity and, as a result, accelerate wage growth and value added contained in Polish products. However, certain Council members emphasised that due to the upcoming parliamentary elections, proposals for changes in economic policy had been appearing which, if they were to be implemented, would adversely affect the state of public finances and thereby weaken the resilience of the Polish economy to external shocks.

While discussing the situation on the credit market, Council members considered that growth in credit for the private sector remained moderate. It was pointed out that the parliamentary work on the currency conversion of some loans denominated in foreign currencies was a factor of uncertainty for the banking sector, and therefore for credit growth. It was noted that the introduction of the regulatory solutions currently under consideration could contribute to a decline in credit growth and a reduction in tax revenue. Moreover, for some banks it could result in the need to increase their capital.

While discussing inflation developments in the economy, Council members pointed to the fact that despite continued deflation, its scale was gradually diminishing. However, the majority of Council members considered that in view of the output gap remaining negative, moderate growth of nominal wages and the fall in commodity prices on global markets, there was still no inflationary pressure. Some Council members drew attention to the persistence of producer price deflation, which could be prolonged due to the renewed fall of commodity prices. However, these members pointed out that the continued decline in producer prices had not yet had a clearly negative impact on the economic situation of enterprises.

While discussing the outlook for inflation, Council members assessed that in the coming quarters price growth would most likely continue to pick up gradually, as indicated by most forecasts. However, some Council members pointed out that the pace of price growth return to positive territory may be hampered in the coming quarters by the new fall in commodity prices in global markets. Another risk factor to the acceleration of price growth was the marked slowdown of the Chinese economy, which dragged on demand growth in other countries, and the effects of yuan devaluation, reducing the import prices of Chinese products. However, certain Council members stressed that price growth in the near term might be boosted by the growth in the prices of vegetables and fruit due to the drought, which had reduced the domestic output of these products.

With regard to the decision on interest rates, the majority of Council members acknowledged that in view of the expected stable economic growth, which will not result in imbalances in the economy, and at the same time the gradual increase in price growth towards the inflation target, a stabilisation of nominal interest rates at the current level is justified. Some Council members emphasised that the stabilisation of interest rates strengthens the resilience of the Polish economy to shocks, particularly in view of considerable uncertainty with regard to global economic outlook and increased volatility in international financial markets. Certain Council members pointed out, that the real interest rates ex ante, i.e. adjusted for forecasted inflation, were at low levels.

However, certain Council members were of the opinion that in the coming months it could be justified to consider raising interest rates. In their opinion, such a scenario was supported by the prospect of increased price growth amidst probable further improvement in economic conditions. In their opinion, an interest rate hike should also be considered due to the increased risk of strong external shocks, since this would increase room for monetary easing in the event of negative shocks.

The majority of Council members pointed out that due to the possibility of a stronger economic slowdown in China and renewed fall in commodity prices, uncertainty regarding economic activity and price developments in Poland had increased and the balance of risks for economic growth and inflation had shifted downwards. However, these members assessed that the most likely scenario was a stabilisation of interest rates.

The Council decided to keep the NBP interest rates unchanged: the reference rate at 1.50%, the lombard rate at 2.50%, the deposit rate at 0.50% and the rediscount rate at 1.75%.

Minutes of the Monetary Policy Council decision-making meeting held on 6 October 2015

Members of the Monetary Policy Council discussed monetary policy against the background of the current and expected macroeconomic developments in Poland and abroad.

When discussing economic activity abroad and its outlook, the Council members indicated that since the previous meeting, external forecasts for global and euro area economic growth had been revised downwards. They also noted that in China industrial production and investment demand growth had deteriorated further, but highlighted that consumer demand growth in this country remained relatively stable. At the same time, they pointed to a significant uncertainty about the economic growth outlook for China. Certain Council members argued that the decline in growth in China resulted mainly from economic growth rebalancing into a more consumer-based economy, which – in the longer term – might support conditions in exporters of consumer goods and services providers and firms providing them.

The Council members were of the opinion that the slowdown in China and other emerging market economies had so far had a limited impact on economic activity in Poland's main trading partners but highlighted that this impact might increase in the future. In the euro area, a moderate recovery continues, supported mainly by an improvement in labour market conditions and consumer demand growth, though economic conditions vary across euro area member states. In Germany, which is Poland's main trading partner, growth in economic activity is stable and the surveys indicate high export orders in this country. However, certain Council members pointed out that the slowdown in China – led by lower growth in investment and production of goods for investment purposes – might prove a substantial headwind to growth in Germany, since capital-intensive goods were important to German exports.

Moreover, certain Council members pointed out that even though data on economic activity in the United States had been recently somewhat worse than expected, GDP growth in this economy was still higher than in other major advanced economies, driven by a further improvement in labour market conditions. However, they highlighted that the labour force participation rate in the United States was the lowest since the 1970s, which could indicate limited resource utilization in this economy.

While discussing price developments abroad, Council members emphasized that the renewed fall in commodity prices in recent months had translated into lower inflation in many economies, also in the euro area, where price growth in September remained negative. They also indicated that inflation expectations in the euro area had declined and inflation forecasts had been revised downwards in many advanced economies.

The Council members also pointed to uncertainty about monetary policy abroad. They stressed that the Federal Reserve was expected to delay the interest rate increase. In turn, the European Central Bank did not rule out an extension of its asset purchase programme. In the opinion of certain Council members, such a decision might be beneficial for the Polish economy, as it could support economic activity in the euro area member states, including Germany. Certain Council members pointed also to still elevated volatility in the financial markets and a further depreciation of many emerging market currencies, including the zloty, albeit to a considerably lesser degree.

In this context, certain Council members judged that loose monetary conditions in major advanced economies had contributed to a strong rise in financial asset and real estate prices in previous years. As a result, a sharper market correction than recently observed, amplified by low liquidity in certain markets, should be expected in their opinion. They emphasized that the expected monetary policy tightening in the United States could be a trigger for a debt crisis in many emerging market economies, particularly where the issuance of debt securities denominated in the United States dollar had increased in previous years. According to these Council members, due to strong economic ties, such a crisis could spread to other economies, also to some euro area member states.

Discussing economic conditions in Poland, the Council members judged that, despite external risks, they remained favourable, supported by good labour market conditions, improved financial standing of enterprises, high capacity utilization, stable lending growth, as well as high price competitiveness of the Polish economy combined with ongoing economic recovery in Poland's main trading partners. Some Council members, however, pointed out that industrial production and retail sales had grown less than expected in summer months, and sentiment in industry had reached its one-year low in September, which might point to a weakening in economic growth in Poland. Some of these members were of an opinion that the slowdown in Polish industry was cyclical; however, others believed that it rather resulted from adjustment in industrial output to lower demand for durable and capital goods in the global economy.

While discussing the labour market conditions, the Council members pointed to further growth in employment and a gradual decline in the unemployment rate, as well as to moderate wage growth. Certain Council members expressed an opinion that ongoing employment growth coupled with only moderate wage growth indicated a rather positive assessment of Polish enterprises regarding future economic conditions. However, other Council members pointed to labour market tensions resulting from difficulties in finding suitably skilled workers. As a result, the pace of improvement in labour market conditions, measured by employment growth, had levelled off in recent months.

During a discussion on household sector conditions, it was highlighted that the voluntary household savings rate had recently risen. According to some Council members, the increase in the propensity to save could limit consumption growth in the coming quarters. Most of these members noted that the rise in the savings rate was a positive development in the Polish economy in longer term, but some of them were of the opinion that it might prove a drag for economic growth in Poland, both in shorter and longer run. Certain Council members also pointed to a some acceleration in lending to households in the recent months.

The Council members also pointed to an improvement in financial standing of enterprises, in particular to renewed growth in company profits. Moreover, certain Council members noted that corporate lending had accelerated of late, driven by faster growth in current loans and stable increase in investment loans.

The Council members judged that the financial system in Poland was functioning in a stable manner. However, they maintained their assessment that a possible currency conversion of some foreign currency loans posed a significant risk to banking sector stability in Poland.

Assessing the outlook for economic growth in the coming quarters, the Council members judged that it should be close to the NBP's July projection. At the same time, they underlined that since that projection the risks for economic growth had shifted to the downside, mainly due to recent developments abroad. The Council members pointed to a risk of more expansionary fiscal policy in the coming quarters that could result from the implementation of the draft budget law for 2016 as well as the election promises. If effected, fiscal expansion could support economic growth in the coming quarters, but – according to some Council members – might also undermine fiscal stability in the longer run.

Analysing the possible impact of weaker growth outlook in China on economic conditions in Poland, the majority of the Council members judged it should be limited given a small share of this country in Polish exports and the ongoing economic recovery in the euro area. However, certain Council members were of the opinion that already observed and possible further external shocks might have a strong negative impact on Polish economy. They argued that the capacity for anti-cyclical economic policy was limited due to substantial – in their assessment – fiscal imbalances and low interest rates.

While discussing price developments in Poland, it was noted that deflation had deepened slightly in September due to further decline in global commodity prices. Certain Council members also pointed to a sharper fall in producer prices. Along with slow growth in unit labour costs, this contains a risk of rising cost pressure. Yet, in the opinion of the Council members, in the coming months inflation should gradually increase. However, the majority of the Council members emphasized that inflation would probably rise at a somewhat slower pace than expected in the July projection. They stressed that starting from 2016 Q1, the rise in inflation might come to a halt, and following that, inflation could remain slightly below the lower band for deviations from the target. However, certain Council members pointed to upside risks to inflation in the coming quarters, resulting from growing tensions in the domestic labour market, relatively high wage increases planned by enterprises and a likely – in their opinion – rise in food prices caused by adverse weather conditions in some parts of the world.

Referring to interest rate decisions, the majority of the Council members were of the opinion that it was justified to keep nominal interest rates at the current levels, as the risks in the environment of the Polish economy were not having a clear impact on economic growth and inflation was expected to rise gradually towards the target. Some Council members emphasized that stable interest rates support the resilience of the Polish economy to shocks, particularly amidst considerable uncertainty about the global economic outlook. Certain Council members judged that a further reduction in interest rates would fail to translate into a significant lending growth, at the same time resulting in lower voluntary household savings.

However, certain Council members expressed an opinion that the Council should consider the possibility of a reduction in interest rates in the coming months. In their view, lower interest rates would support domestic demand and therefore contain the scale of a possible economic slowdown driven by worse economic conditions abroad. They also argued that monetary policy easing in Poland would reduce the interest rate differentials between Poland and abroad, including the euro area, where monetary conditions might be loosened over a longer period than previously expected.

In turn, according to certain Council members, the Council should consider interest rate increases in the coming months. These members argued that the interest rate increases are justified by a faster acceleration in price growth than assumed in the July projection expected by them and a high risk of severe external shocks. In their opinion, interest rate increases would provide more room for monetary policy easing in the event of adverse shocks.

The Council decided to keep the NBP interest rates unchanged: the reference rate at 1.50%,the lombard rate at 2.50%, the deposit rate at 0.50%, the rediscount rate at 1.75%.

Information from the meeting of the Monetary Policy Council held on 3-4 November 2015

The Council decided to keep the NBP interest rates unchanged: reference rate to 1.50% on an annual basis; lombard rate to 2.50% on an annual basis; deposit rate to 0.50% on an annual basis; rediscount rate to 1.75% on an annual basis.

Growth of global economic activity remains moderate. In the euro area, economic recovery continues, and incoming data point to stable GDP growth in this economy. In the United States, GDP growth in the third quarter slowed down, however, the recovery is expected to continue in the coming quarters. At the same time, in China economic growth decreased again, while Russia and Brazil remain in recession. Therefore, concerns about the economic growth outlook in the emerging economies persist, which increases uncertainty about economic conditions worldwide.

The fall in commodity prices in the recent months has contributed to lower inflation in many economies, including in the United States and the euro area. Against this background, the Federal Reserve and the ECB are keeping interest rates close to zero, although the Federal Reserve indicates the possibility of interest rate hike. On the other hand, the ECB continues its asset purchase programme and has signalled its extension, which has contributed to a decline in risk aversion in the financial markets in the recent period.

In Poland stable economic growth continues, driven mainly by domestic demand. The growth in demand is supported by robust labour market, strong consumer confidence, improvement in financial standing of enterprises as well as by stable lending growth. On the other hand, demand in the economy is adversely affected by uncertainty facing firms regarding the outlook for global growth.

As demand is growing at a moderate pace and the output gap is still negative, there is no inflationary pressure in the economy. Both the annual consumer price growth and producer price growth remain negative. The sharp drop of commodity prices in the global markets remains the main reason for continued deflation. Amidst moderate wage growth, the fall in commodity prices contains the risk of increasing cost pressure. Against this background, inflation expectations are still very low.

The Council became acquainted with the projection of inflation and GDP prepared by the Economic Institute, which is one of the inputs to the Council's decisions on NBP interest rates. In line with the November projection based on the NECMOD model – prepared under the assumption of unchanged NBP interest rates and taking into account data available until 19 October 2015 (projection cut-off date) – there is a 50-percent probability that the annual price growth will be in the range of -0.9 – -0.8% in 2015 (as compared to -1.1 – -0.4% in the July 2015 projection), 0.4 – 1.8% in 2016 (as compared to 0.7 – 2.5%) and 0.4 – 2.5% in 2017 (as compared to 0.5 – 2.6%). At the same time, the annual GDP growth rate – in line with this projection – will be with a 50-percent probability in the range of 2.9 – 3.9% in 2015 (as compared to 3.0 – 4.3% in the July 2015 projection), 2.3 – 4.3% in 2016 (as compared to 2.3 – 4.5%) and 2.4 – 4.6% in 2017 (as compared to 2.5 – 4.7%).

In the opinion of the Council, price growth will slowly increase in the nearest quarters, supported by the gradual closing of the output gap amid improving economic conditions in the euro area and favourable domestic labour market developments. At the same time, the risk of a sharper slowdown in the emerging economies and the impact this may have on global economic activity, as well as the possibility of commodity prices persisting at low levels, and as a result, low inflation in the environment of the Polish economy, remain the source of uncertainty about the pace of inflation returning to the target.

The Council decided to keep the NBP interest rates unchanged.

The Council adopted *Inflation Report – November 2015.*

4 Projection of inflation and GDP

This inflation and GDP projection was prepared by the Economic Institute of Narodowy Bank Polski and presents a forecast of economic developments under the assumption of the constant NBP interest rates. In terms of the contents, the work involved in the creation of this projection was supervised by Andrzej Sławiński, General Director of the Economic Institute. The process was coordinated by the Bureau of Macroeconomic Forecasts of the Economic Institute. Using the macroeconomic model NECMOD,[44] the projection was prepared as the outcome of an iterative process, in the course of which the paths of some variables were adjusted if they diverged from NBP experts' economic intuition based on their knowledge of economic processes. The Management Board of NBP approved the projection to be submitted to the Monetary Policy Council. The projection constitutes one of the inputs to the Monetary Policy Council's decision-making process concerning the NBP interest rates.

The November projection based on the NECMOD model covers the period from 2015 Q4 to 2017 Q4. The starting point for the projection is 2015 Q3.

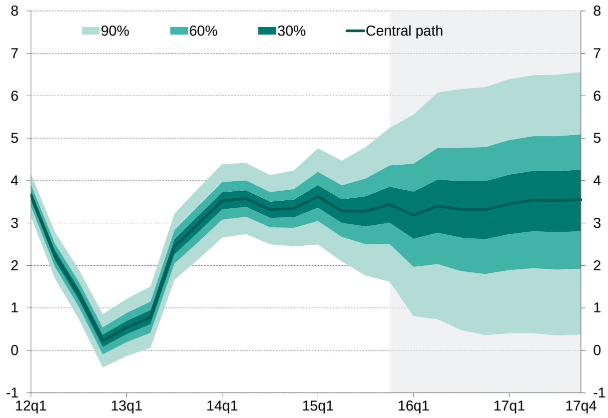
The projection was prepared under the assumption of the constant NBP interest rates taking into account the data available until 19 October 2015.

[44] Current version of the documentation of the model is available at the NBP website http://www.nbp.pl/homen.aspx?f=/en/publikacje/raport_inflacja/necmod.html

4.1 Summary

The current projection is affected by the moderate scale of recovery in the global economy and persistently low energy commodity prices, in particular of crude oil, curbing inflation on a global scale. Although the impact of low oil prices on economic growth varies across countries, in Poland, which is an oil importer, low oil prices will fuel economic activity over the projection horizon. Low prices of energy commodities reduce in particular corporate operating costs, allowing enterprises to maintain relatively high profitability of production despite downward pressure on producer prices, and helping to finance investment. Low energy prices also have a positive impact on households' real income, thus boosting consumption.

Figure 4.1 GDP (y/y %)



Source: GUS data, NBP calculations.

The persistence of a favourable supply shock, namely the decline in energy commodity prices, supports the recovery in the Polish economy, despite continued low demand from the euro area and deteriorating outlook for growth in the emerging economies. As a result, the Polish economy is currently in a recovery phase, although GDP growth has declined somewhat as compared to 2015 Q1. The national accounts data point to the persistently favourable and balanced structure of growth: a stable increase in private and public consumption, and steady growth in investment amidst neutral contribution of net exports.

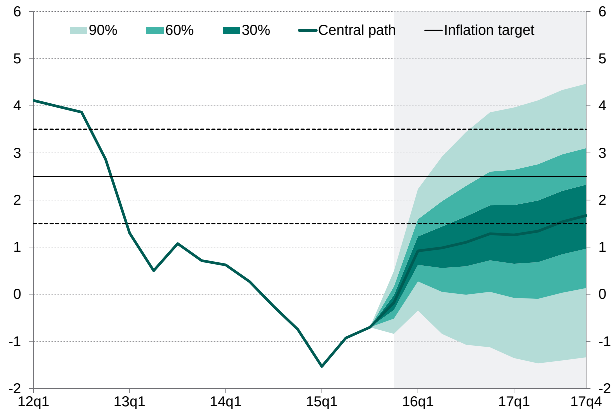
A merely moderate improvement in economic conditions in the euro area is expected over the projection horizon, which will support the domestic economic growth only to a limited extent. Under these conditions, GDP growth, in 2016-2017, will stabilize close to the current level of 3.3% y/y and will be driven primarily by rising consumer spending and growing investment expenditures in the domestic private sector.

Household spending will be fuelled by a steady improvement in households' financial condition, which will be driven by continuation of the currently observed favourable trends in the labour market: a further decline in the unemployment rate and accelerating nominal wage growth. Low inflation increasing households' purchasing power also contributes to improvement in consumer sentiment. A relatively high savings rate and low interest rates constitute a premise for possibly increased loan-financing of consumption, in the projection horizon.

Over the projection horizon, economic growth will also be driven by corporate investment spending. The expected continuation of the currently sound financial condition of enterprises will support investment, allowing firms to finance investments with their own resources. Investment, as in the case of consumption, will benefit from the interest rates remaining at their current low level (which results from the projection assumption of the constant NBP reference rate). The currently high, as for this phase of the business cycle, level of capacity utilization should encourage companies to increase gross fixed capital formation. Yet, the rising trend in gross fixed capital formation will be curbed by moderate external demand.

Taking into consideration the external conditions, which support domestic economic growth only to a moderate extent, the output gap will remain negative, albeit close to zero, until the end of the projection horizon. Such a level of the output gap, which is a synthetic measure of demand pressures in the economy, indicates that domestic economic conditions will support the decline in the inflation rate to a lesser extent than in the previous years.

Figure 4.2 CPI inflation (y/y, %)



Source: GUS data, NBP calculations.

Deflationary developments in the Polish economy in 2015 have been fuelled not only by demand factors, but also, and to a considerably greater extent, by supply factors: a sharp drop in oil prices and a high supply of agricultural products. These developments have led to persistently low cost pressure in the economy, translating into falling import prices, domestic producer prices (PPI), and only a moderate increase of unit labour cost.

In the projection horizon, the impact of factors reducing inflation will gradually fade away, contributing to a gradual growth in the prices of all major components of the basket of consumer goods and services (core inflation, food prices, energy prices). The CPI inflation will run below the NBP inflation target until the end of the projection horizon, which is suggested by the expected moderate scale of economic recovery in Poland and in the euro area and the forecasted low commodity prices in the global markets.

The external environment of the Polish economy developing differently than assumed in the central scenario constitutes the main source of uncertainty for the projection. Currently, the possibility of a deeper slowdown in the emerging market economies, in particular in China, is the main risk factor. If the emerging market economies indeed happen to grow slower than assumed and drag down German economy which addresses bulk of its exports to China, the domestic economy is expected to be affected heavily.

On the other hand, it cannot be ruled out that the ECB's public sector purchase programme or the implementation of the Investment Plan by the European Commission will have a stronger impact on the euro area economy than currently expected. Under such a scenario, investment demand could, to a greater extent than currently, fuel economic growth in the euro area, which would help the euro area economy to enter the recovery phase sooner.

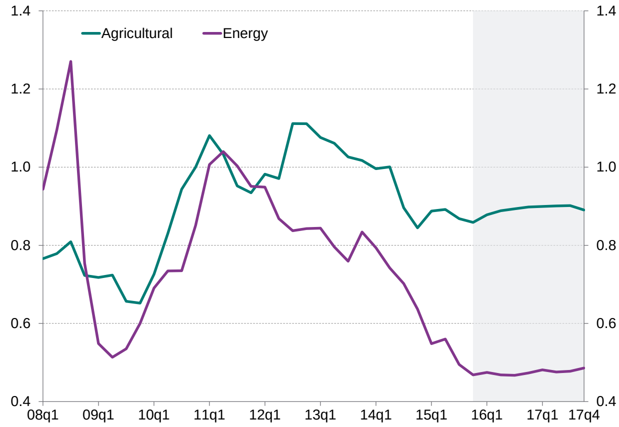
Yet, it is assessed that the risk factors resulting from the two scenarios postulating more optimistic and more pessimistic developments in the external environment of the Polish economy, for both GDP growth and CPI inflation, are balanced, which is reflected in the symmetry of the fan charts for both variables (Figure 4.1, Figure 4.2).

4.2 External environment

The main factor affecting the current projection is the slow recovery in the global economy and the accompanying low prices of commodities, especially of oil, curbing inflation pressure worldwide.

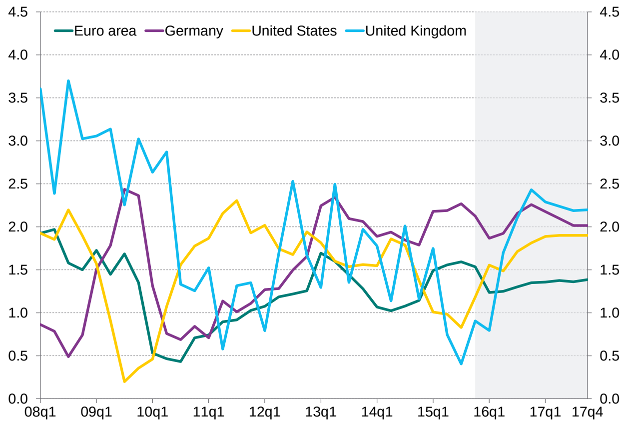
Slow growth in oil prices results from favourable supply conditions in the oil market, as well as weak demand from both advanced and emerging market economies. Demand-to-supply relation is largely influenced by the OPEC's policy aimed at maintaining a constant share in the global oil market, leading to an increased level of oil production in those countries. In non-OPEC countries, oil production has risen in the recent period due to the implementation of oil production projects launched in the previous years (although this process will probably be halted due to falling oil prices). As a result, the global oil reserves are at historically high levels and will continue to mount in the coming quarters. Another factor that may further increase the supply of crude oil, is the agreement concluded between the five permanent members of the UN Security Council, Germany and Iran, in July 2015. The agreement paves the way for the

Figure 4.3 Index of agricultural prices (EUR, 2011=1) and index of energy prices (USD, 2011=1) in the global markets



Source: Bloomberg data, NBP calculations.

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



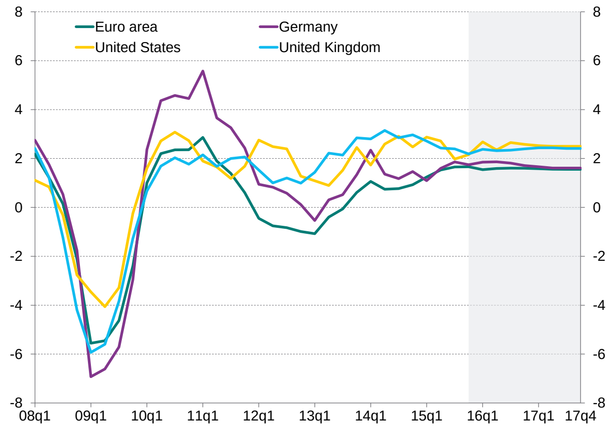
Source: Bloomberg, Eurostat data, NBP calculations.
*/ Inflation as measured by the value added deflator.

lifting of sanctions on Iranian oil exports. Low oil prices curb growth in prices of other energy commodities, which are largely substitutes in energy production. Consequently, in the coming years, global prices of energy commodities will remain low, lower than assumed in the previous forecasting round (Figure 4.3).

Amidst low demand in the emerging market economies, also prices of agricultural commodities in the global markets are relatively low, slightly lower than expected in the previous forecasting round (Figure 4.3). Low commodity prices may also be attributed to supply-side factors, in particular, high cereal crops, including those of wheat, which result from favorable weather conditions for agriculture in most regions of the world, and continued high supply of pork in the European market.

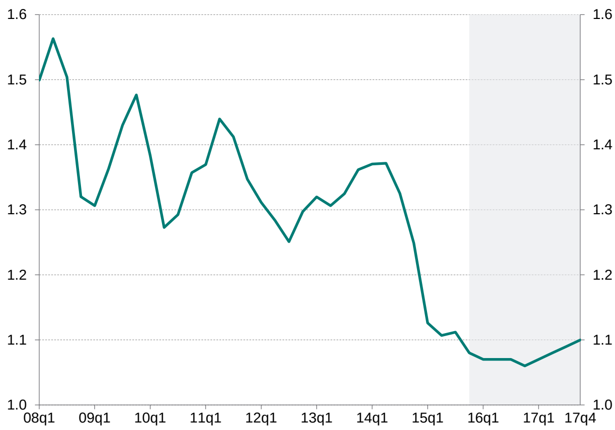
The key assumption of the current projection, apart from the stabilization of energy and agriculture commodity prices at a low level, is a moderate scale of recovery in the euro area (Figure 4.5). At the same time, whereas the outlook for private consumption growth in the euro area is encouraging, the conditions for investment remain less optimistic. Consumer demand should be further supported by improving labour market conditions boosting consumer sentiment. Low inflation, in particular the low and relatively stable energy price level, increasing the purchasing power of households, should boost consumption. Growth in consumer credit observed for several months may also simulate private consumption. The currently limited investment growth in the euro area is related to low capacity utilization, continued deleveraging and persisting difficulties in the access to market financing faced by a large number of companies, despite a certain improvement observed in this regard. Amidst an accommodative monetary policy, gradually rising

Figure 4.5 GDP abroad (y/y, %)



Source: Bloomberg, Eurostat data, NBP calculations.

Figure 4.6 EUR/USD exchange rate



Source: Bloomberg data, NBP calculations.

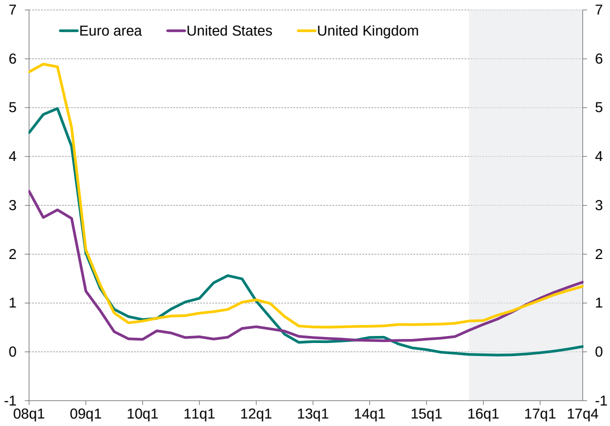
consumer demand and improving profitability of enterprises, investment will gradually rebound. Economic growth of the euro area countries is supported by the ECB's quantitative easing programme, which contributes to the depreciation of the euro, boosting price competitiveness of exports and lowering the cost of servicing the euro area public debt (Figure 4.6).

Although the revised data for the last few months point to a slightly larger scale of economic recovery in the euro area, the outlook for economic growth in the euro area in the mid- and long-term projection horizon has not improved as compared to the assumptions of the previous forecasting round. On the one hand, growth in European economies will be fuelled by lower oil prices, increasing households' real income, as well as lowering operating costs of companies and contributing to the improvement of the terms of trade. On the other hand, economic recovery in the euro area will be hampered by deteriorating growth prospects in the emerging market economies as compared with the expectations of the previous forecasting round.

Against the background of the expectations concerning growth in the euro area, growth prospects in the United States and the United Kingdom seem more optimistic (Figure 4.5). Private consumption, which will be supported by the currently observed favourable trends in the labour market, will remain the driver of growth in these economies. Despite a certain slowdown observed in the last two months, the United States saw a pick-up in employment growth, especially in the private sector, with the unemployment rate hitting a seven-year low.

Low prices of energy commodities curb inflation in Poland's major trading partners (Figure 4.4). The decline in inflation is primarily driven by the direct impact of low commodity prices on the

Figure 4.7 Interest rate abroad (%)



Source: Bloomberg data, NBP calculations.

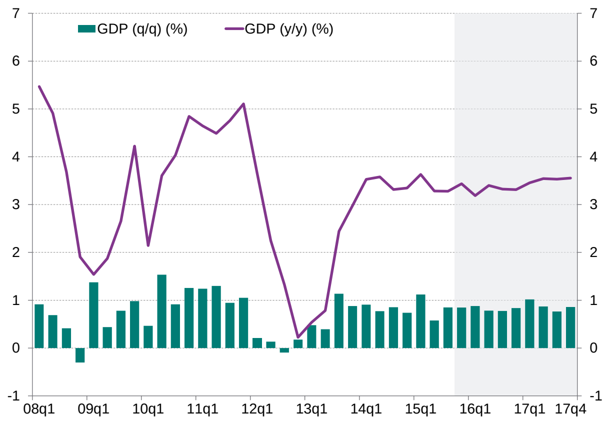
prices of energy for households. Lower energy prices also bring down production costs, which translates into lower prices of other components of the basket of consumer goods and services. However, better economic conditions in the American and British economies will push up the inflation path above the euro area level. In consequence, the monetary policy tightening cycle in these economies may begin faster than in the euro area (Figure 4.7).

4.3 Polish economy in 2015-2017

Stable GDP growth will be sustained in Poland over the projection horizon, averaging 3.4% in the years 2015-2017 (Figure 4.8). Domestic output growth will only partially derive from the moderate recovery in the euro area. Factors of a greater significance supporting the maintenance of GDP growth will include: the sustained positive trends in the labour market, the historically low interest rates and low energy commodity prices. These will fuel private sector consumption and investment spending, the two components which will determine economic growth in the projection horizon.

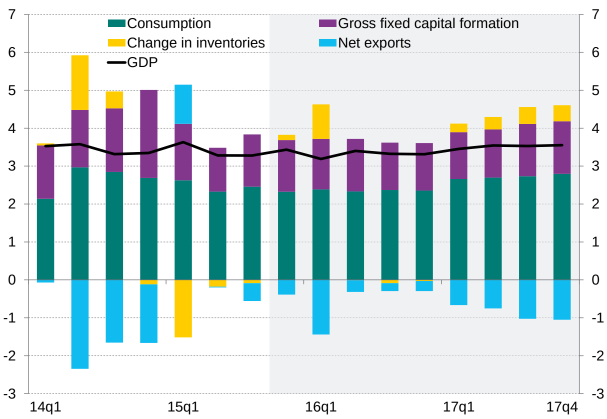
CPI inflation will remain negative early in the projection horizon (Figure 4.10). Decline in prices will be mainly due to supply-side factors, i.e. a sharp fall in oil prices and large supply of agricultural products. Low inflation is also supported by weak demand pressure (as reflected in the negative output gap) and low cost pressure, manifested in falling import prices, the long-lasting decrease in domestic producer prices and only moderate increase in unit labour costs. Over the projection horizon, the impact of these factors on inflation will gradually fade away, yet inflation will remain below the NBP inflation target until the end of 2017.

Figure 4.8 Economic growth



Source: GUS data, NBP calculations.

Figure 4.9 GDP growth (y/y,%) – breakdown



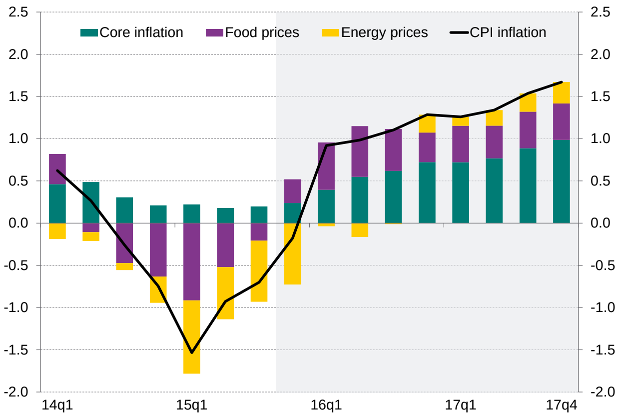
Source: GUS data, NBP calculations.

Domestic demand

Consumer demand has been rising at a fairly steady rate since the beginning of 2014, ranging from 3.0% y/y to 3.2% y/y. Households took the opportunity of this period's collapse in inflation rate to restore their voluntary savings rate (amidst simultaneous decline in the compulsory savings rate due to the changes in the pension system). Currently, this rate has returned to the levels observed in 2004-2006. Over the projection horizon, household consumption is expected to see further stable expansion (Figure 4.11), supported by positive trends in the labour market – the continued reduction in the unemployment rate and forecasted pick-up in wage growth. This should bring about further improvement in consumer confidence – GUS consumer surveys reveal diminishing concerns about rising unemployment, coupled with respondents' more upbeat expectations of their future financial situation.[45] Given the above, households may be able to finance more of their consumer expenditure with credit. This will be additionally facilitated by the low interest rates, which reduce the cost of both new and existing household debt.

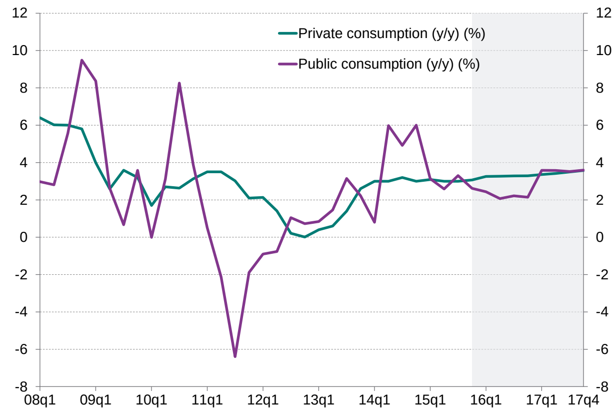
Fast expansion in gross fixed capital formation in 2014 and in the first half of 2015 was supported by low interest rates and high – given this stage of the business cycle – degree of capacity utilisation. In the projection horizon, investment growth will continue at a robust pace and will exceed GDP growth (posting an average 7.4% y/y level, Figure 4.12). This scenario is confirmed by the improving forecasts expressed by entrepreneurs, both concerning the number and the scale of future investment projects.[46] Funding will not pose a barrier to investment activity. On the one hand, strong financial performance of enterprises is

Figure 4.10 CPI inflation (y/y, %) – breakdown



Source: GUS data, NBP calculations.

Figure 4.11 Private and public consumption



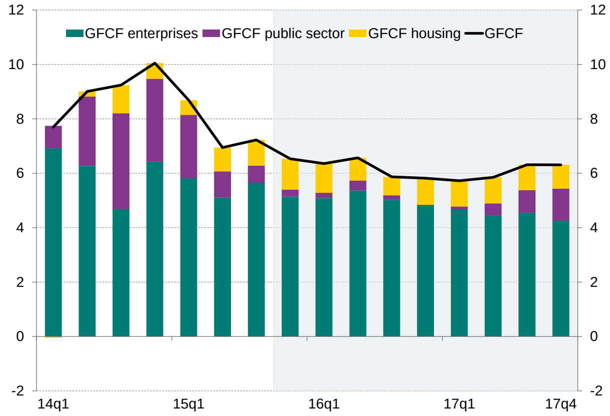
Source: GUS data, NBP calculations.

[45] *Consumer sentiment survey – September 2015*, GUS.

[46] *Economic climate in the enterprise sector in 2015 Q3 and forecasts for 2015 Q4*, NBP.

expected to continue, enabling projects to be self-financed.[47] Firms' financial situation will benefit from the consistently low energy commodity prices, reducing corporate operating costs and supporting sound level of production profitability. On the other hand, businesses will benefit from low interest rates, which reduce the cost of credit (in each forecasting round it is assumed that short-term interest rates will remain unchanged). In contrast, gross fixed capital formation may be hampered by merely moderate expectations of demand in the projection horizon. This is supported by the declarations of the entrepreneurs, who express relatively low expectations of demand.[48]

Figure 4.12 Gross fixed capital formation (y/y, %) – breakdown



Source: GUS data, NBP calculations.

After more than one year of declines, since the second half of 2014, residential investment has been on a relatively fast-paced rebound. Positive trends in this sector are expected to continue in the following quarters, supported by further improvement in the labour market. The improvement will have a boosting effect on consumer confidence, and, consequently, on consumers' propensity to incur long-term debt. Housing investment will additionally be driven by low interest rates over the entire projection horizon. Low interest rates translate into a higher credit standing of households as well as lower debt service cost to rent ratio. Housing investment is also benefiting from the government-subsidised housing scheme "Flat for the Young", as confirmed by the high level of drawing on the funds under this year's budget allocation for this purpose. In contrast, the tightening of mortgage lending criteria, together with last year's amendment to Recommendation S will work in the opposite direction.

Real public consumption growth is anticipated to

[47] *Financial situation of the enterprises in 2015 Q2*, NBP.

[48] *Economic climate in the enterprise sector in 2015 Q3 and forecasts for 2015 Q4*, NBP.

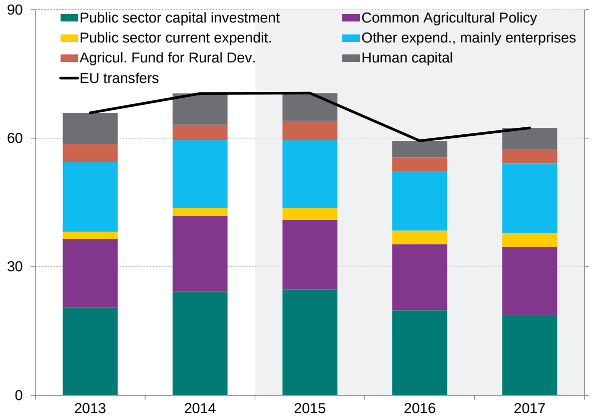
weaken in 2016. This view is supported by the Draft 2016 Budget Act, which provides for a merely slow growth in local government's current expenditure, and does not envisage pay rises for school and academic teachers. Since no information has been released to date about a likely continuation, beyond 2016, of measures aimed at reducing public sector expenditure, public consumption growth is expected to pick up slightly later in the projection horizon.

The level of public sector spending on investment is, in turn, linked to the absorption of EU capital funds. In 2016, the absorption of EU funds under the 2007-2013 financial framework will come to an end; the previous experience suggests that utilisation of the funds allotted under the 2014-2020 financial framework will be utilised gradually (Figure 4.13). This concerns, in particular, regional programmes to be implemented by local government units as well as railway investment. The decline in those two in 2016 will, however, be set off by higher growth of investment of the State Budget and the National Road Fund.

External imbalance

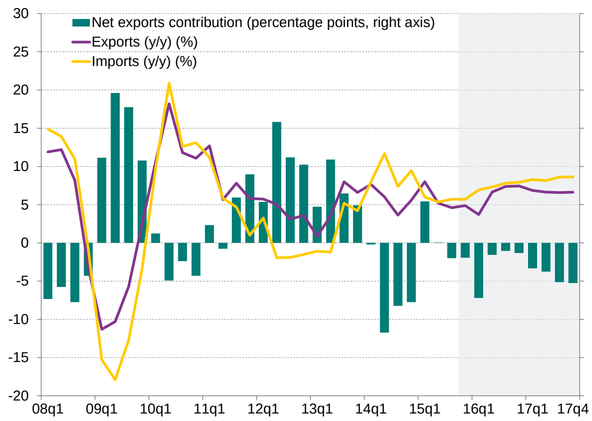
Since the beginning of 2014 – except for the first quarter of 2015 – contribution of net exports to growth has been negative. This resulted from, on the one hand, a relatively steep rise in domestic demand, generating fast import growth. Another factor was the dampening effect of the Russian-Ukrainian crisis and the euro area slowdown on Polish exports (Figure 4.14). Supported by further demand from the recovering European economies, export growth is expected to continue at a rate close to that observed in 2014 in the projection horizon despite the slowdown in the emerging economies (including China, Russia and Brazil), whose share in Poland's external trade – both direct and indirect – is still relatively

Figure 4.13 Expenditure financed with EU funds (in PLN billion) – breakdown



Source: NBP calculations.

Figure 4.14 Foreign trade



Source: GUS data, NBP calculations.

low. Moderate export growth is also indicated by the declarations of entrepreneurs, who, despite high price competitiveness and sound profitability of exports, voice conservative forecasts concerning new export contracts.[49] On the other hand, given the expected rise in those components of domestic demand that are characterised by high import intensity, imports may be expected to expand fairly robustly over the projection horizon. As a result, the contribution of net exports to growth will continue to curb GDP growth.

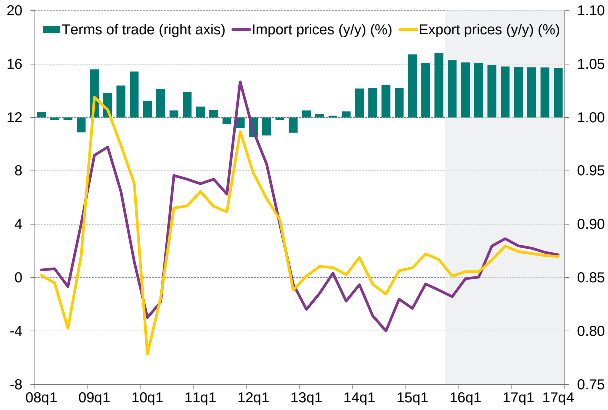
Despite the negative contribution of net exports to growth, the balance of the current and capital account stood at a record high level of +1.9% of GDP between 2014 Q3 and 2015 Q2. This was driven by an improvement in the terms of trade (Figure 4.15), resulting, to a great extent, from the decline in energy commodity prices. In the projection horizon, the balance of the current and capital account will widen to -0.6% of GDP in 2017. The decline will be the effect of the negative contribution of net exports to growth and the shrinking balances of secondary income and of the capital account, related to the completion of payment settlement of under the 2007-2013 EU financial framework.[50]

Potential output

Over the projection horizon, potential output growth will gradually gather pace. Yet, until the end of 2017 it will run at a slower rate than its long-term average, below which it had dropped in the wake of the global financial crisis.

A factor having a boosting effect on potential output growth in the projection horizon will be the accelerated expansion of enterprises'

Figure 4.15 Export and import prices



Source: GUS data, NBP calculations.

[49] *Economic climate in the enterprise sector in 2015 Q3 and forecasts for 2015 Q4*, NBP.

[50] Payments for the completed EU-financed projects are lagged in relation to the time when the financing was granted, presented in Figure 4.13. Due to the final settlement of the EU 2007-2013 financial framework, the transfer of funds from the EU is expected to decline in 2016 (Figure 4.13), while the decrease in payments, which has a bearing on the balance of payments, will occur in 2017.

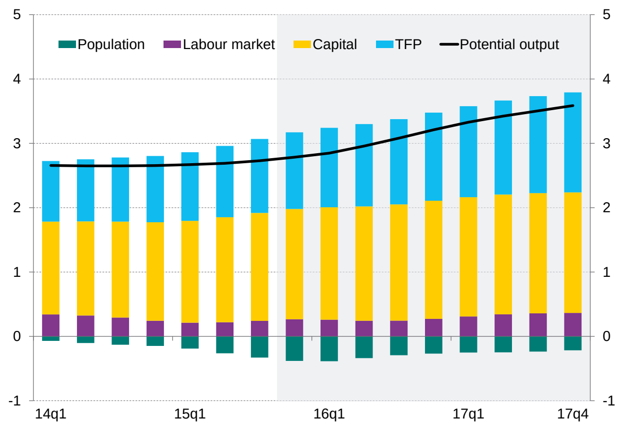
production capacity, related to the lagged effect of robust investment spending of the private sector in the years 2014-15 (Figure 4.16).

Potential output growth will also be supported by the sustained moderate upward trend, observed since the second half of 2013, in the total factor productivity (TFP), which is currently running low (the real convergence process). Yet, TFP growth will not rebound to its pre-crisis level within the projection horizon.

Potential output growth will benefit from the favourable trends in the labour market observed since 2013, reflected in a decrease in equilibrium unemployment rate (NAWRU, Figure 4.19). Long-term levels of labour supply are supported by the waning impact of hysteresis and a decline in unemployment rate. Further, the relatively high flexibility of the domestic labour market will be conducive to a decline in the equilibrium unemployment rate in the projection horizon. Compared with other European Union countries, the forms of employment in Poland tend to include more fixed-term contracts as well as civil-law agreements – especially in the services sector.[51] In addition, wages are indexed less frequently, which facilitates wage adjustment to the market conditions.[52]

The labour force participation rate, having declined in 2014 Q4 and in the first half of 2015, rises only slightly in the course of the following quarters. Its impact on potential output growth is largely neutral. The decline in activity at the turn of 2014 concerned mainly persons of pre-retirement age[53] and is deemed to be temporary. In the projection horizon, the activity of this age group is observed to pick up. This largely results from the pension system reform stipulating a

Figure 4.16 Potential product (y/y, %) – breakdown



Source: NBP calculations.

[51] *Labour market survey. Report 2013*, NBP and *Labour market survey. Report 2014*, NBP.

[52] *Labour market survey. Report 2012*, NBP.

[53] According to LFS methodology, women aged 45-59 and men aged 45-64.

steady increase in the retirement age as of 2013. Despite these favourable trends, the labour force participation rate for the entire population rises only slightly, undermined by the adverse impact of the changing age structure of the population, involving a rising proportion of persons of post-production age.

In the projection horizon, the pace of potential output growth will be affected by adverse demographic trends persistently observed in Poland (including those related to emigration) and reflected in the decline in the general population (Figure 4.16).

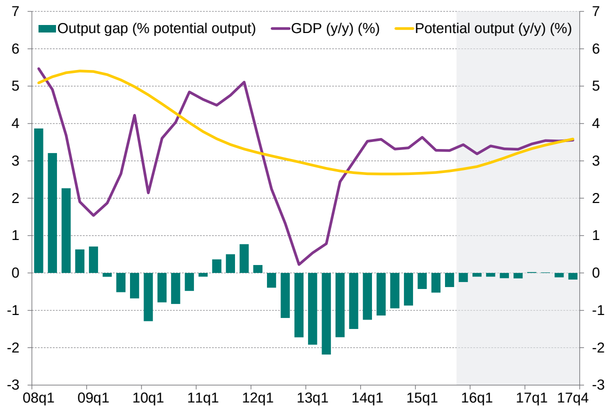
Output gap

Since the second half of 2013, the negative output gap has been narrowing, owing to the fact that the Polish economy had embarked on a recovery phase, amidst a relatively slow potential output growth (Figure 4.17). In the subsequent years, the output gap will run slightly below zero. This will be due, on the one hand, to a stabilisation of GDP growth in the projection horizon, and accelerated potential output growth – gradually approximating the pace of GDP growth – on the other. Such a level of the output gap, which is a comprehensive measure of demand pressure in the economy, suggests that the economic conditions will exert less downward pressure on inflation in the projection horizon than in the previous years. Yet, due to price stickiness, the response of CPI inflation to the size of the output gap is lagged. Hence, weak demand pressure will continue to keep consumer price growth below the inflation target in the entire projection horizon.

Labour market

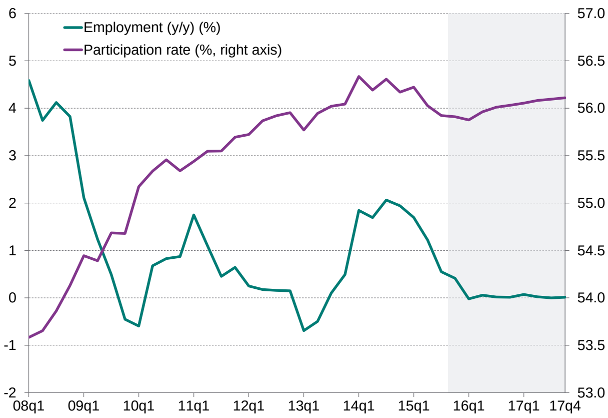
Almost throughout the projection horizon, total employment growth will be close to zero (Figure 4.18). The slow growth in the number of working

Figure 4.17 Output gap



Source: GUS data, NBP calculations.

Figure 4.18 Employment and labour force participation



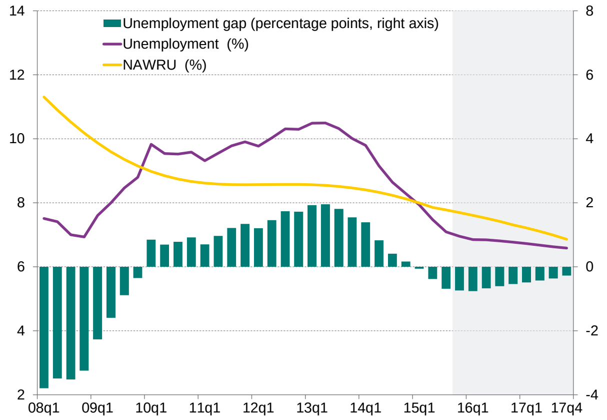
Source: GUS data, NBP calculations.

persons is related to the anticipated TFP acceleration – which is conducive to higher labour productivity – and to expansion in corporate capital resources. Other factors dragging on growth in the number of working persons include growing difficulties in matching employees' qualifications with employers' requirements, a situation arising from the historically low unemployment rate. As a result, it takes firms longer to fill a vacancy and the jobless to find employment.[54] As a result of the increasing difficulties in finding new employees, labour utilisation will rise, as indicated by the increase in the number of hours worked by the already employed employees.[55] LFS data suggest there is a room for greater labour utilisation, as the actual hours worked by employees are falling short of their preferences.[56]

Despite a significant deceleration in total employment in the second half of 2015, followed by a stabilisation of its levels in 2016-17, the LFS unemployment rate will decline over the projection horizon (Figure 4.19). The fall will be driven by a decrease in the labour force participation rate, related to the continuation of the recently observed demographic trends. These involve an increasingly smaller size of new cohorts entering the labour market and migration.

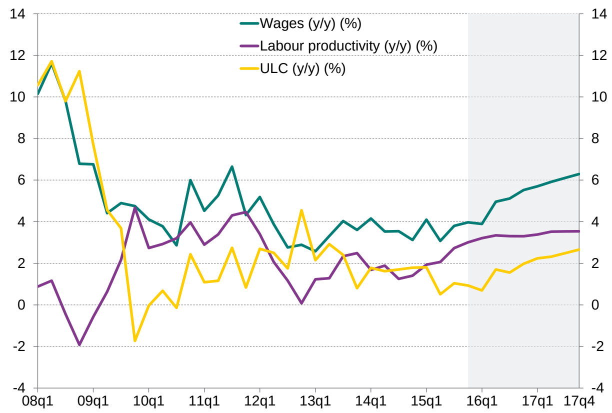
The declining unemployment rate will boost nominal wage growth. Wage growth, however, will remain relatively low in the projection horizon, below the levels observed prior to the onset of the global financial crisis (Figure 4.20). Wage pressure will be mitigated by the decline in the equilibrium unemployment rate (Figure 4.19), and by low CPI inflation, reducing the scale of employees' wage demands. This moderate wage

Figure 4.19 Unemployment



Source: GUS data, NBP calculations.

Figure 4.20 Unit labour costs



Source: GUS data, NBP calculations.

[54] *Quarterly Labour Market Report 2015 Q2*, NBP.

[55] *Quarterly Labour Market Report 2015 Q2*, NBP.

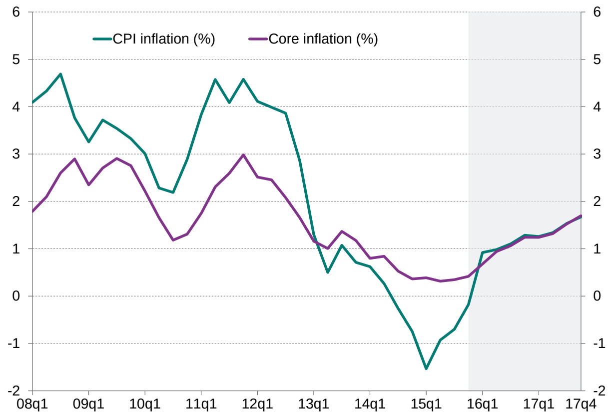
[56] *Quarterly Labour Market Report 2015 Q2*, NBP.

growth scenario is indicated by the consistently low percentage of firms declaring intensifying wage pressure in NBP surveys.[57] As a result, growth in unit labour cost will gradually pick up in 2015-2017. Yet, it will not exceed 2.5% y/y until late in the projection horizon.

Exchange rate

During 2015 Q3, with increasing risk aversion in the emerging markets, the zloty depreciated, and still remains below the level determined by fundamental factors. This is reflected, in particular, in the current and capital account balance running at a record high level. Despite its gradual decrease in the subsequent quarters, throughout the projection horizon current and capital account balance will stay above the long-term average for this category, which will contribute to a gradual appreciation of the domestic currency. The continuing process of real convergence of the Polish economy, reflected in higher growth of domestic potential output, as compared with the Poland's trading partners potential product growth, will work in the same direction. In the projection horizon, the exchange rate of the zloty will also be affected by the inflow – initially increased, then probably fading away – of portfolio investment to Poland, associated by the public sector purchase programme conducted by the ECB since March 2015.

Figure 4.21 CPI and core inflation



Source: GUS data, NBP calculations.

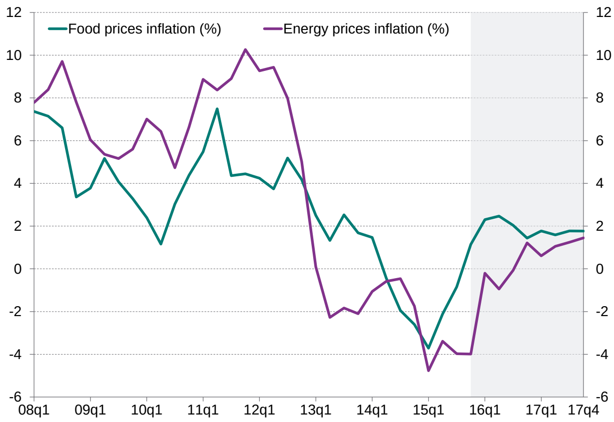
Components of CPI inflation

Over the projection horizon, core inflation rises gradually, reaching 1.7% y/y at the end of 2017 (Figure 4.21). On the one hand, price growth in the economy will be hampered by continuing weak demand pressure, as indicated by the slightly negative output gap over the projection

[57] *Economic climate in the enterprise sector in 2015 Q3 and forecasts for 2015 Q4*, NBP.

horizon. On the other hand, low core inflation will be supported by the absence of cost pressure. After the declines recorded in 2013-2014, and probably in 2015 – as suggested by the data for the first half of 2015 – only a slight increase in import prices is expected over the projection horizon. This is indicated by the projected low inflation in the euro area and moderately appreciating exchange rate of the zloty assumed in the projection. Low cost pressure is also reflected in the negative growth of the PPI, continuing for more than two years, and slowly rising unit labour costs (Figure 4.20). In 2017, lower VAT rates will also curb growth in core inflation.

Figure 4.22 Food and energy price inflation



Source: GUS data, NBP calculations.

Energy prices, and, in particular, prices of fuels for privately-owned motor vehicles, will be the key factor behind the below-zero CPI inflation in 2015 (Figure 4.22). The current level of fuel prices results from the sharp fall in oil prices in late 2014 and early 2015, followed by their relative stabilization. Furthermore, energy prices are affected by the lowering, in September 2015, in domestic prices of natural gas delivered to households in response to oil price declines in the global markets.[58] In the years 2016-2017, energy price inflation will pick up while still running low, significantly below the long-term average. It will be hampered by global commodity prices persisting at low levels. The increase in the prices of energy in 2017 will be additionally curbed by the announced cuts in the VAT rates.

The negative rate of CPI inflation in 2015 is also underpinned by falling food prices (Figure 4.22). The decline in food prices results from high supply of agricultural commodities on the account of the exceptionally good weather conditions in Poland and across the world in the

[58] Prices of gas imported from Russia respond with a several quarters' lag to changes of oil prices in the global markets (gas prices in Gazprom contracts are related to crude oil prices).

economic season 2014/2015. The supply in the food market is also increased by the Russian embargo on food imports, including those from the European Union, imposed in the second half of 2014. These effects are partly offset by the drought which affected Europe in the summer season of 2015, reducing vegetable and fruit crops. Given the return to more regular weather conditions in the next season, assumed in the projection, the impact of drought on vegetable and fruit prices will fade away in the second half of 2016. With a moderate demand pressure in the domestic market and a slight increase in the index of agricultural commodity prices in the global markets (Figure 4.3), also food price inflation in Poland is on the rise over the projection horizon, albeit, to a limited extent. Similarly to other CPI components – though to a lesser extent – the scale of the increase in food prices will be additionally suppressed by the reduction in the VAT rates in the last year of the projection horizon.

4.4 Current versus previous projection

As compared to the July projection, in the current forecasting round, GDP growth path has been slightly revised downward, whereas the CPI inflation forecast was slightly reduced for 2016 (Table 4.1).

Table 4.1 November projection against the July projection

	2015	2016	2017
GDP (y/y, %)			
November 2015	3.4	3.3	3.5
July 2015	3.6	3.4	3.6
CPI inflation (y/y, %)			
November 2015	-0.8	1.1	1.5
July 2015	-0.8	1.5	1.6

Source: NBP calculations.

Lower GDP growth was driven by weaker than expected data on the Polish economy and the revision of the assumptions about the path of public consumption. The downward revision of consumer price inflation in 2016 is related to lower domestic energy prices.

GDP

Information released after the July projection was completed has contributed to a downward revision of GDP growth for the entire projection horizon, although the scale of revisions in this forecasting round has been relatively small.

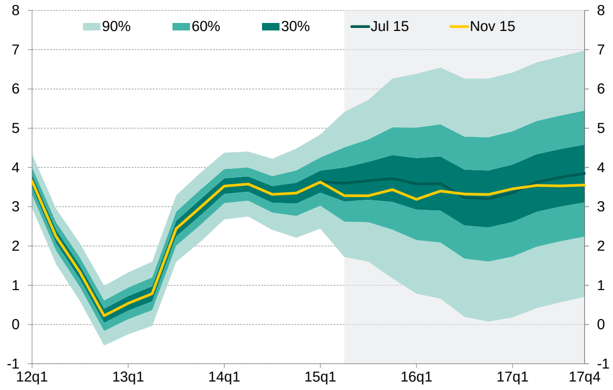
Lower GDP growth early in the projection horizon results primarily from factoring in weaker than expected readings of this category for 2015 Q2 and those macroeconomic data for 2015 Q3, which are parallel indicators for domestic economic conditions. Among the latter ones, particularly the data on industrial production, retail sales and PMI came as a negative surprise.

The GUS estimates as of 28 August 2015 pointed not only to the 0.3 percentage points weaker GDP growth in 2015 Q2 as compared to the expectations of the July projection, but also to a slightly different structure of growth: lower private consumption and investment with higher inventories and net exports. Thus, GUS reading constituted a premise for a similar adjustment of the growth structure also in the subsequent quarters of the projection.

Another factor of lower economic growth in Poland, as compared to the July forecasting round, is a relatively low growth of current expenditure of budgetary entities assumed in the 2016 Budget Act draft. This adjustment, reducing public consumption dynamics, is the major factor behind the decline in GDP growth in 2016.

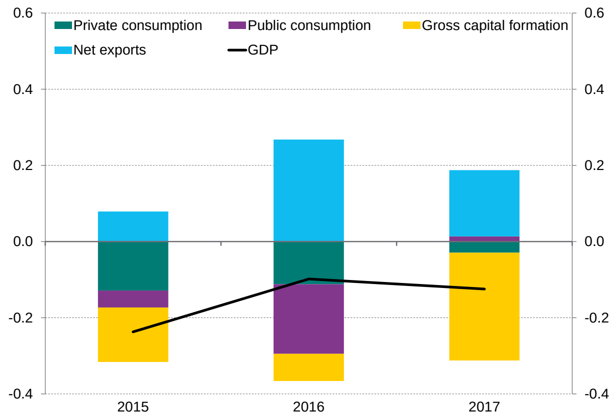
Lower domestic demand dynamics in the projection horizon, will diminish import growth. Weaker zloty exchange rate, improving the price competitiveness of domestic production will constitute another factor curbing imports. As a result, GDP growth will be hampered by the negative contribution of net exports to a lesser extent than in the July forecasting round, thus mitigating the negative impact of other adjustments revising domestic demand

Figure 4.23 November projection versus July projection: GDP growth (y/y, %)



Source: NBP calculations.

Figure 4.24 Decomposition of deviations between November and July projection: GDP growth (percentage points)[59]



Source: NBP calculations.

[59] Data presented in the chart may vary slightly from Table 4.1, due to rounding of numbers to one decimal place.

downward.

The forecasts of economic developments in Poland's main trading partners, despite a slight revision of historical data, is similar to the forecasts taken into account in the previous forecasting round. Consequently, the assumptions about the impact of economic conditions abroad on the domestic economic growth outlook have not changed significantly.

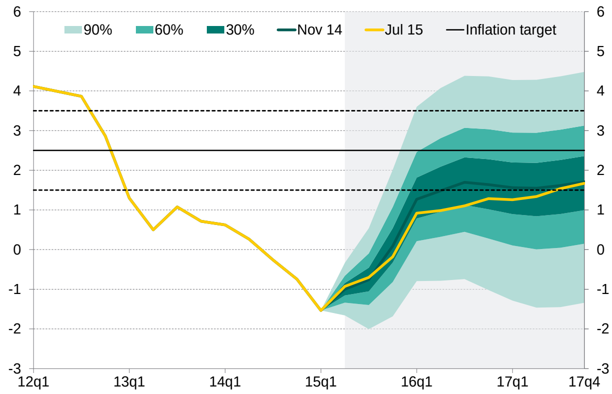
Inflation

The information released after the cut-off date of the July projection indicates a similar assessment of consumer price growth in the years 2015 and 2017. In 2016, on the other hand, the CPI inflation path will run below the expectations of the July forecasting round. The main reason for changes in inflation developments in 2016 is a decline in the global energy commodity prices, affecting the level of domestic energy prices.

The decline in energy commodity prices will lower domestic energy prices also in 2015, affecting mainly fuel prices, which are the quickest to respond to changes in global commodity prices. The deeper-than-expected decrease in energy prices in 2015, will, however, be largely offset by a weaker decline in food prices, which is due to the drought which hit Poland and parts of Europe in the summer months. The worse weather conditions adversely affected vegetable and fruit crops, significantly boosting their prices.

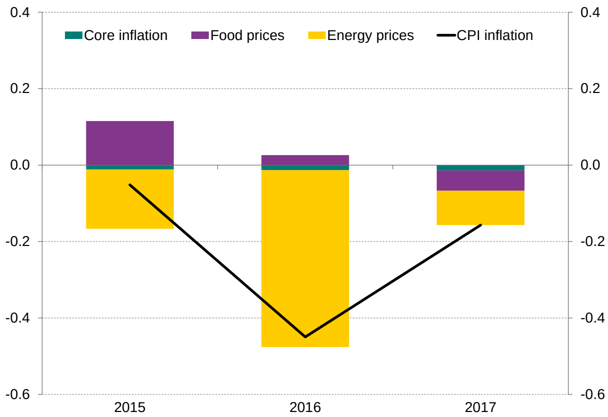
In 2016, lower prices of energy commodities in the global markets will not only result in a downward revision of the projected path of fuel prices, but will also influence other components of domestic energy prices. The fall in the prices of natural gas and coal in the global markets will

Figure 4.25 November projection versus July projection: CPI inflation (y/y, %)



Source: GUS data, NBP calculations.

Figure 4.26 Decomposition of deviations between November and July projection: CPI inflation (percentage points)[60]



Source: NBP calculations.

[60] Data presented in the chart may vary slightly from Table 4.1, due to rounding of numbers to one decimal place.

affect, albeit with a certain time lag, domestic electricity and natural gas prices. The impact of lower commodity prices will be only slightly offset by the weaker zloty exchange rate than forecasted in the July projection. Apart from the trends in the global commodity markets, the exemption from excise duty charged on electricity implemented in some branches constitute another factor behind weaker increase in domestic energy prices in 2016. This exemption will apply, in particular, to hard coal and coke producers, thus reducing the cost of electricity production.

At the same time, along with the assumed return to average weather conditions in 2016, the effect of drought on fruit and vegetable prices, and thus on food price inflation will fade away.

Over the projection horizon, core inflation will run at a similar level to that expected in the July projection. Indeed, the assessment of demand pressure, of which output gap is a synthetic measure, have not changed significantly between the forecasting rounds. Along with the downward revision of the GDP forecast, the expectations concerning potential output growth have declined also. Lower path of the potential output growth is driven by the decreased labour force participation rate over the projection horizon, due to the lower participation rate reading for 2015Q2. Additionally, a decline in investment outlays in 2015 which, with a certain time lag, lead to weaker growth of productive capital result in decreased potential output growth. Cost factors determining core inflation will also be largely balanced. On the one hand, the upward revision of core inflation is suggested by higher import price growth than expected in the July forecasting round, which is due to a higher starting point and a weaker exchange rate. On the other hand, unit labour costs growth is expected to be slower than assumed in the July projection, which is suggested by the current data pointing to the lower wage growth in the national economy.

4.5 Forecast uncertainty sources

The balance of risks for the November projection – related to the macroeconomic situation both in Poland and its external environment – points to a near-symmetrical distribution of risks to CPI inflation and GDP growth (Table 4.2). Under the assumption of an unchanged NBP reference rate, the probability of CPI inflation running in the range of acceptable deviations from the NBP inflation target (1.5%-3.5%), now close to zero, rises early in the projection horizon to subsequently stabilise at close to 40% (Table 4.2). The key sources of uncertainty to the November projection are presented below.

Deterioration in the prospects of growth in the external environment of the Polish economy

A significant source of risk to the November projection is the uncertain growth prospects of the Chinese economy. The risks are attached particularly to the stability of the financial system of the country. Should the effects of excessive investment in the housing and manufacturing sectors prove larger than currently assessed, firms' problems in servicing their debt might trigger a surge in uncertainty as to the stability of the Chinese banking and shadow banking sector. Another risk factor to financial stability in China is the considerable debt of local government units due to heavy spending on infrastructural projects. The problems in the banking system and the excessive local government debt may further dampen investment spending growth.

Lower-than-expected economic activity in China might spur a turmoil in the financial markets worldwide and a slowdown in the global

Table 4.2 Probability of inflation running:

	below 1.50%	below 2.50%	below 3.50%	below the central projection	in the range (1.5-3.5%)
15q4	1.00	1.00	1.00	0.50	0.00
16q1	0.76	0.98	1.00	0.49	0.24
16q2	0.66	0.90	0.98	0.49	0.32
16q3	0.60	0.83	0.95	0.48	0.36
16q4	0.54	0.77	0.92	0.48	0.38
17q1	0.55	0.77	0.91	0.49	0.36
17q2	0.54	0.76	0.90	0.50	0.36
17q3	0.50	0.72	0.88	0.51	0.37
17q4	0.48	0.70	0.86	0.52	0.38

Source: NBP calculations.

economy, mediated both through the trade channel and through a decline in consumers' and corporate sentiment. The potential weakening in the growth of the German economy, due to its considerable trade linkages with China, is of particular significance in terms of domestic business conditions. The extent of the slowdown in the euro area would, however, be mitigated by the ECB's asset purchase programme and other measures launched to stabilise the financial markets. Higher risk premiums combined with a more expansionary ECB monetary policy would probably cause the euro to depreciate against the dollar, which would additionally cushion off the adverse effects of the global slowdown on economic activity in the euro area.

Slower growth in emerging market economies and in the euro area would affect the Polish economy adversely. Heightened uncertainty and the advent of turmoil on the financial markets would cause domestic business and consumer confidence to deteriorate. Slower investment and consumption growth, than envisaged in the baseline scenario, would translate into weaker GDP growth and less inflationary pressure. However, this effect would be somewhat curbed – particularly in the short-term projection horizon – by the depreciation of the zloty due to higher risk premium, which would boost net exports – and hence GDP – and lead to higher expected import prices, which would additionally drive inflation up.

Rising domestic demand on the back of stronger economic activity in the euro area

Considerable uncertainty surrounding the November projection, this time with a potential positive impact of GDP growth in Poland, stems from the possibility that economic growth in the euro area might be faster than envisaged in the baseline scenario. This might happen, on the one hand, if the uncertainty about the outlook for growth in emerging economies were to subside. On the other hand, early in the projection horizon growth in the euro zone might be higher than assumed in the baseline scenario due to a stronger, in comparison with current expectations, impact of the ECB's public sector purchase programme and its possible extension. Should the euro depreciate against the dollar more than expected, the euro area countries would expand their exports accordingly, which might result in a faster restoration of fixed assets in the economy, in particular amidst the currently easier access to credit. Under such circumstances, low borrowing cost, coupled with improving labour market conditions, would give a boost to households' purchasing power.

Should the euro area economy perform better than the current projection assumes, GDP growth in Poland would be supported by higher export growth. The improving situation of Polish exporters could help sustain, over a longer time, the current robust investment activity of Polish businesses. Faster improvement in the domestic labour market, coupled with low NBP interest rates, might encourage households to use their increased real wages to expand consumption at the expense of restoring the savings rate more slowly than assumed in the baseline scenario. Higher than envisaged in the projection domestic demand growth would translate into a materially higher (than assumed by the baseline scenario) GDP and consumer price growth.

Later in the projection horizon, economic growth could benefit from the effect of the implementation of the European Commission's Investment Plan for the years 2015-2017. According to the European Commission, the plan may, with time, boost European Union GDP by EUR 330-410 bn, resulting in the creation of 1-1.3 million new job posts. Should the presented risk factors materialise, GDP and CPI inflation would run above the path assumed in the baseline scenario of the projection.

Oil prices in the global markets

The behaviour of global prices of oil and other energy commodities over the projection horizon poses another source of uncertainty for the baseline scenario. The risk of significant fluctuations in oil prices is primarily related to factors with a potential to change the global supply of this commodity. These include, among others, the lifting of the sanctions imposed on Iran's oil sector. This would result, in the first place, in Iran exporting out its oil reserves, and, subsequently, gradually expanding production. Uncertainty about oil supply falling short of the level assumed in the baseline scenario results from the extent of disruptions to deliveries, mainly from the Middle East and North African countries, due to the ongoing conflict in Syria. The significance of this factor may be compounded by the recently observed prices' heightened sensitivity to disruptions in oil production (as a result of the cutbacks to shale oil extraction in the United States). Demand factors related to prospects of growth in the global economy, in particular in emerging economies, also add to the risks associated with the path of oil prices assumed in the baseline scenario.

Table 4.3 Central path of inflation and GDP projection

	2013	2014	2015	2016	2017
Consumer Price Index CPI (% y/y)	0.9	0.0	-0.8	1.1	1.5
Food prices (% y/y)	2.0	-0.9	-1.4	2.1	1.7
Energy prices (% y/y)	-1.5	-1.0	-4.0	0.0	1.1
Core inflation net of food and energy prices (% y/y)	1.2	0.6	0.4	1.0	1.4
GDP (% y/y)	1.7	3.4	3.4	3.3	3.5
Domestic demand (% y/y)	0.4	4.9	3.4	3.9	4.4
Private consumption (% y/y)	1.2	3.1	3.0	3.3	3.5
Public consumption (% y/y)	1.9	4.5	3.3	2.2	3.6
Gross fixed capital formation (% y/y)	1.1	9.2	7.3	6.1	6.1
Contribution of net exports (percentage points y/y)	1.3	-1.4	0.0	-0.6	-0.9
Exports (% y/y)	4.8	5.7	5.6	6.3	6.7
Imports (% y/y)	1.8	9.1	5.7	7.5	8.4
Gross wages (% y/y)	3.4	3.6	3.7	4.9	6.0
Total employment (% y/y)	-0.1	1.9	0.9	0.0	0.0
Unemployment rate (%)	10.3	9.0	7.4	6.8	6.7
NAWRU (%)	8.5	8.3	7.8	7.5	7.0
Labour force participation rate (% y/y)	55.9	56.3	56.0	56.0	56.1
Labour productivity (% y/y)	1.9	1.6	2.5	3.3	3.5
Unit labour cost (% y/y)	2.1	1.7	1.1	1.5	2.4
Potential output (% y/y)	2.8	2.7	2.7	3.0	3.5
Output gap (% potential GDP)	-1.8	-1.1	-0.4	-0.1	-0.1
Index of agricultural commodity prices (EUR; 2011=1.0)	1.04	0.93	0.88	0.89	0.90
Index of energy commodity prices (EUR; 2011=1.0)	0.81	0.72	0.52	0.47	0.48
Price level abroad (EUR; 2011=1.0)	1.5	1.1	1.5	1.3	1.5
GDP (% y/y)	0.2	1.3	1.7	1.8	1.7
Current and capital account balance (% GDP)	1.0	0.4	1.9	0.8	-0.6
WIBOR 3M (%)	3.03	2.52	1.75	1.72	1.72

Source: Bloomberg, Eurostat, GUS, NBP calculations. LFS data on total employment, labour force participation rate and unemployment rate. Index of agricultural prices is based on futures quoted mainly on European stock exchanges. Index includes prices of wheat, oilseed, pork, potatoes, sugar, cocoa, coffee, skimmed milk powder, butter and frozen concentrated orange juice 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.

5 The voting of the Monetary Policy Council members in June – September 2015

■ Date: 7 July 2015

Subject matter of motion or resolution:
Resolution No. 1/DRF/2015 of 7 July 2015 on the appointment of a registered auditor for the Annual Financial Statements of Narodowy Bank Polski for years 2015 and 2016.

Voting of the MPC members:

For: M. Belka
A. Bratkowski
E. Chojna-Duch
A. Glapiński
J. Hausner
A. Kaźmierczak
E.J. Osiatyński
A. Rzońca
J. Winiecki

Against:

A. Zielińska-Głębocka was absent.

■ Date: 15 September 2015

Subject matter of motion or resolution:
Resolution No. 6/2015 of 15 September 2015 on adopting Monetary Policy Guidelines for 2016.

Voting of the MPC members:

For: M. Belka
A. Bratkowski
E. Chojna-Duch
J. Hausner
A. Kaźmierczak
A. Rzońca
J. Winiecki

Against:

A. Glapiński, E.J. Osiatyński and A. Zielińska-Głębocka were absent.

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