NBP Narodowy Bank Polski

Monetary Policy Council

November 2016

Inflation Report

The Inflation Report presents the Monetary Policy Council's assessment of the 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 27 October 2016.

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 growth remains moderate, with global trade and industrial output increasing slower than in previous years. At the same time, uncertainty about the global economic outlook continues, yet it has eased somewhat of late. More positive assessment of the world economic prospects is attributable to signs of stabilisation in economic conditions in the emerging market economies as well as the insignificant, to date, economic impact from the Brexit vote.

Inflation in the environment of the Polish economy remains very low, although it has risen slightly in recent months. Low inflation is driven by weaker economic growth than before the global financial crisis and the fall in commodity prices in recent years. The deflationary impact of commodity prices is, however, diminishing.

Against this background, main central banks continue to conduct accommodative monetary policy. The European Central Bank (ECB) is keeping interest rates close to zero, with a slightly negative deposit rate. Moreover, the ECB continues its asset purchase programme, which includes the purchases of corporate bonds since June 2016. The Federal Reserve (Fed), in turn, is keeping its policy interest rates unchanged, i.e. within a range of 0.25-0.50%. Furthermore, Fed is reinvesting the principal payments from its holdings of securities purchased under quantitative easing. In 2016, an interest rate increase is expected in the United States. According to market assessments, it will most likely take place in December.

The situation in the international financial markets has improved markedly following a temporary deterioration in sentiment caused by the outcome of the Brexit referendum. This was largely a result of more positive assessment of the world economic outlook and expectations that the major central banks would maintain accommodative monetary policy stance.

In Poland, annual CPI inflation is still negative, yet the scale of decline in prices is diminishing. Deflation continues to be driven mainly by external factors, above all a considerable fall in global energy commodity prices in the past few years. Yet, the impact of this factor is gradually unwinding. In the past few months, price growth at home – apart from slightly higher oil prices – has also been supported by a rise in food prices. Domestic demand pressure is still too weak to offset the deflationary impact of external factors.

The Polish economy continues to grow at a relatively stable pace. A steadily rising consumer demand remains the primary driver of economic activity. The slight increase in GDP growth in 2016 Q2 was due to an acceleration in exports. At the same time, GDP growth was contained by a decrease in investment related to both temporarily lower absorption of EU funds following the completion of the previous EU financial framework, and the continuing uncertainty about the regulatory environment of the enterprise sector.

Despite deflation, economic growth is accompanied by improving labour market conditions and stronger than in previous years financial performance of the corporate sector. Both factors support increasing lending activity.

Against this background, the Monetary Policy Council has been keeping NBP interest rates unchanged since March 2015, including the reference interest rate at 1.5%. Markets are expecting NBP interest rates to remain stable in the coming quarters. At the same time, gradually improving sentiment in the international financial markets over the past few months has had a positive impact on Polish share prices. The increase in the banking sector share prices since the previous *Report* has additionally been driven by the expected changes in the provisions of the bill on foreign currency loans. Under these conditions, the exchange rate of the zloty against the major currencies has remained relatively stable. The yields on Polish government bonds have also stayed relatively stable since mid-2015.

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 the domestic factors that might affect them have been described in Chapter 2. *Minutes of the Monetary Policy Council decision-making meetings* held in July – October 2016, together with the *Information from the meeting of the Monetary Policy Council* in November 2016 are presented in Chapter 3. *Minutes* of the MPC meeting held in November will be published on 24 November 2016 and so will be included in the next *Report*. The MPC voting records in meetings held in June – September 2016 can be found in Chapter 5. This *Report* also includes box: *Reasons behind a decline in labour productivity growth in advanced economies*.

Chapter 4 of the Report presents the projection for 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 21 October 2016 – there is a 50-per cent probability that the annual price growth will be in the range of -0.7 ÷ -0.6% in 2016 (compared to -0.9÷ -0.3% in the July 2016 projection), 0.5 ÷ 2.0% in 2017 (as against 0.3 ÷ 2.2%) and 0.3 ÷ 2.6% in 2018 (versus 0.3 ÷ 2.6%). The annual GDP growth – under this projection – will be, with a 50-per cent probability, in the range of 2.5 ÷ 3.4% in 2016 (as compared to 2.6 ÷ 3.8% in the July 2016 projection), 2.6 ÷ 4.5% in 2017 (as against 2.4 ÷ 4.5%) and 2.2 ÷ 4.4% in 2018 (versus 2.1 ÷ 4.3%).

1 External developments

1.1 Economic activity abroad

Global economic growth remains moderate, with global trade and industrial output increasing slower than in previous years (Figure 1.1). At the same time, uncertainty about the global economic outlook continues, yet it has eased somewhat of late. More positive assessment of the world economic prospects is attributable to signs of stabilisation in economic conditions in the emerging market economies as well as the insignificant, to date, economic impact from the Brexit vote.

In Poland's major trading partners, GDP growth is stable (Figure 1.2). In the euro area, economic growth in 2016 Q2 and Q3 was 1.6 per cent (Figure 1.3). Economic growth in the euro area is driven by relatively robust consumer demand growth and steady improvement in labour market conditions, which translates into faster increase in households' disposable income. Additional factor supporting economic growth in the euro area is accelerating consumption of the general government. It is fuelled by low credit cost and reduction in public debt service costs stemming from very low, even negative, government bond yields, which are both partly attributable to the ECB's quantitative easing programme.

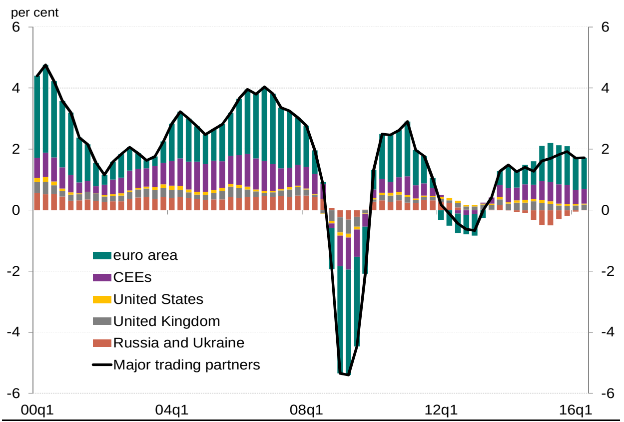
At the same time, uncertainty, i.a. about situation in the banking sector in several member states, is adversely affecting economic growth in the euro area. Moreover, the euro area's export growth is lower than in previous years, which reflects still weak economic conditions in emerging market economies and sluggish global trade growth.

In the United Kingdom (UK), GDP growth picked up somewhat in 2016 Q2 and Q3, although current economic activity indicators point to a possible

Figure 1.1 Global trade growth and the PMI Global Manufacturing index

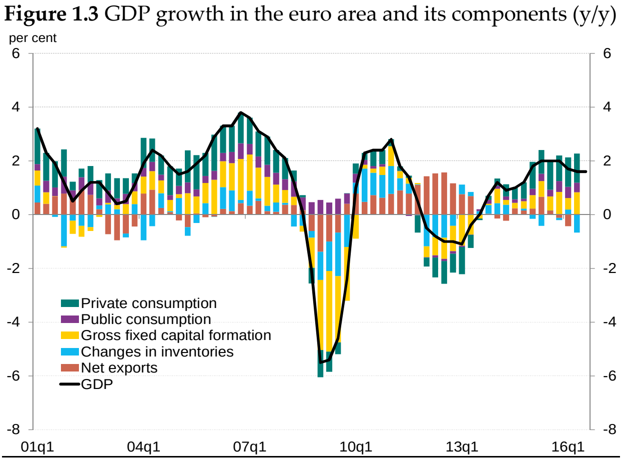
Source: Bloomberg, Thomson Reuters and IMF data.
Global trade growth – 3-month annualised average of global exports and imports, as quoted in the IMF World Economic Outlook, October 2016.

Figure 1.2 Economic growth in Poland's major trading partners by individual economies (y/y)



Source: IMF, Bloomberg and Eurostat data, NBP calculations.
Average annual GDP growth in Poland's major trading partners, which comprise 80 per cent of Polish exports, weighed by share in Polish exports in 2015. CEEs – Central and Eastern European major trading partners of Poland, i.e. Czech Republic, Hungary and Romania.

Figure 1.3 GDP growth in the euro area and its components (y/y)



Source: Eurostat data.

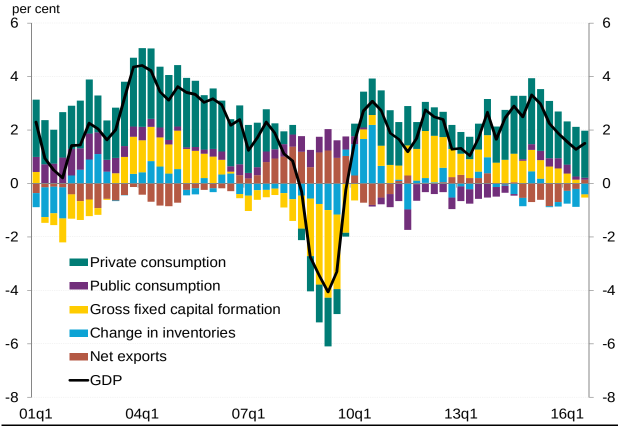
slowdown in the coming quarters. The main driver of growth in this country is expanding consumer demand. Economic growth in the UK is supported by depreciation of the British pound and expansionary monetary policy of the Bank of England (see Chapter 1.4 Monetary policy abroad).

In the United States, GDP growth accelerated somewhat in 2016 Q3, yet it remained lower than in previous years. Higher economic growth resulted mainly from an acceleration in exports. Labour market conditions are improving further, driving stable increase in private consumption, the main contributor to GDP growth (Figure 1.4). Economic growth was still contained by falling investment, including in the oil extraction sector. Expanding employment coupled with weaker economic growth results in a deceleration in labour productivity growth (see Box *Reasons behind a decline in labour productivity growth in advanced economies*).

In Central and Eastern Europe (CEE), economic growth is stable, yet diversified across the region. In the Czech Republic and Hungary, the annual GDP growth rate declined in the first half of 2016, while in Romania it picked up (Figure 1.5). Rising consumption is the primary driver of growth in the region. At the same time, GDP growth in all CEE economies, including Poland, is being contained by falling investment outlays, especially those financed from the EU funds.

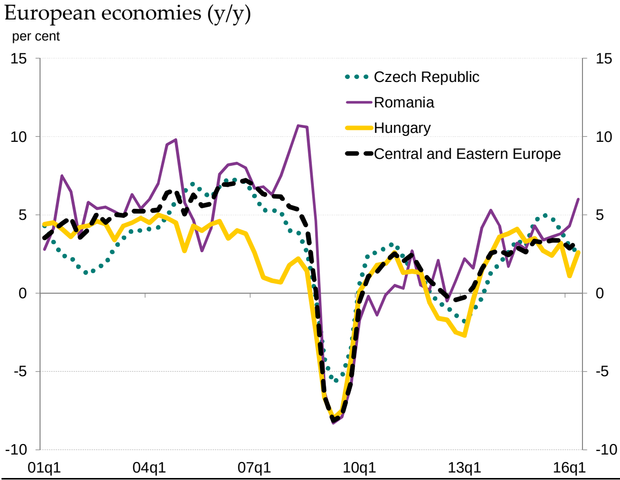
In the largest emerging market economies, economic conditions remain weak, albeit with signs of stabilisation (Figure 1.6). In China, economic growth in 2016 Q2 and Q3 stabilised, following a gradual slowdown in the past few years. The stabilisation of economic growth in China resulted mainly from an acceleration in investment activity and public sector expenditure, with consumer expenditure growth remaining relatively stable. In 2016 Q3, housing investment and gross fixed capital formation of state-owned enterprises have both accelerated markedly,

Figure 1.4 GDP growth in the United States and its components (y/y)



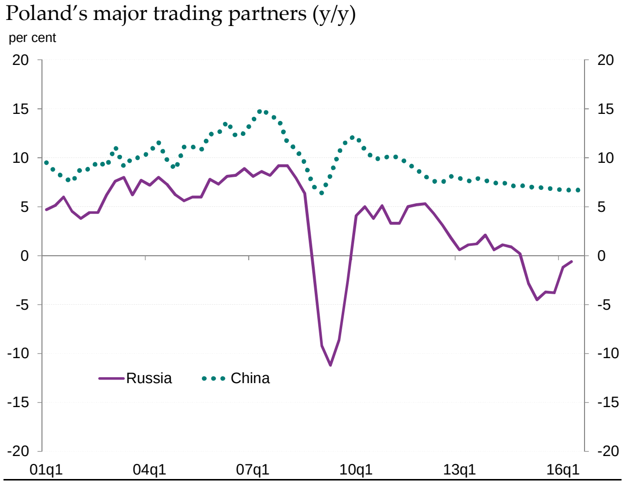
Source: Bureau of Economic Analysis data.

Figure 1.5 Economic growth in the Central and Eastern European economies (y/y)



Source: Eurostat data.
GDP-weighted average annual GDP growth in Bulgaria, Croatia, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Romania, Slovakia and Slovenia.

Figure 1.6 GDP growth in the emerging market economies being Poland's major trading partners (y/y)



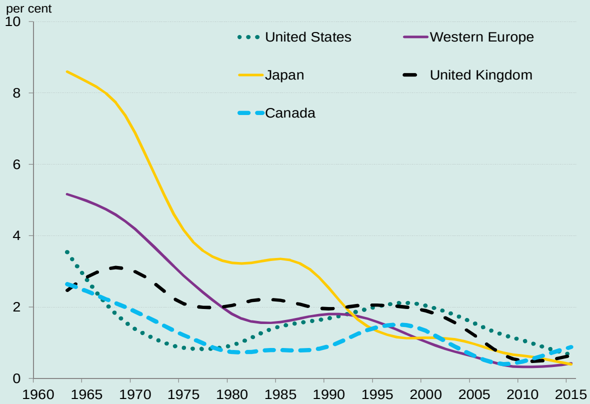
Source: Bloomberg data.

supported by expansionary economic policy and some improvement in the financial standing of the Chinese companies. However, infrastructure investment slowed down in 2016 Q3, while public deficit widened and lending growth decelerated. In turn, in Russia, the annual GDP growth rate is still negative, though the scale of recession is gradually diminishing, as crude oil prices are higher than a year ago (see Chapter 1.3 *Global commodity markets*).

Box: Reasons behind a decline in labour productivity growth in advanced economies

Labour productivity in advanced economies has declined markedly over past few decades. The pace of the decline has even accelerated in recent years (Figure B.1). This Box presents possible reasons behind this phenomenon as stipulated in selected studies[1]. To assess the factors causing a decline in labour productivity growth, it is worth decomposing it into:

Figure B.1 Labour productivity growth trend in major advanced economies



Source: European Commission data, NBP calculations.
Labour productivity is defined as the output per hour worked. The trend estimated with the Hodrick-Prescott filter. Western Europe - weighted GDP average for France, Germany (until 1991, West Germany) and Italy.

- capital deepening, i.e. growth in fixed assets (eg. machinery, equipment, software or land) per employee or one working hour; it depends both on past growth in capital expenditures and on labour input;
- rise in human capital, or labour quality, which depends on changes in education, skills and the demographic structure of the labour force;
- total factor productivity (TFP) growth, representing shifts in the efficiency with which capital and labour are combined; it depends on innovations, management improvements and changes in the institutional and regulatory environment.

Decomposing labour productivity growth in advanced economies, one can conclude that its notable decline in recent decade was largely due to markedly lower capital deepening, resulting most likely from the global financial crisis and low output growth (Figure B.2, Figure B.3). More specifically, it might have been associated among others with heightened uncertainty causing a deceleration in investment spending[2], most notable in the case of knowledge-based capital expenditures, which slowed down in the United States and Western Europe

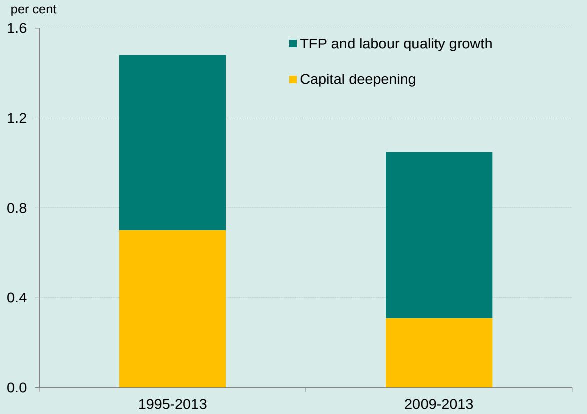
[1] For more discussion on possible reasons for declining labour productivity growth (mainly in the United States), see: OECD (2016): *Promoting Productivity and Equality: A Twin Challenge*, [w:] *OECD Economic Outlook Volume 2016 Issue 1*, OECD (2015): *The Future of Productivity*, Paris, OECD; Gordon, R. (2016): *The Rise and Fall of American Growth: The U.S. Standard of Living Since the Civil War*, Princeton, NJ, Princeton University Press; Maestas, N., Mullen, K.J., Powell, D. (2016): *The Effect of Population Aging on Economic Growth, the Labor Force and Productivity*, NBER Working Paper 22452, ECB (2016): *The slowdown in US labour productivity growth – stylised facts and economic implications*, [in:] ECB Economic Bulletin Issue 2/2016 and Fernald J. (2012): *Productivity and Potential Output before, during, and after the Great Recession*, Federal Reserve Bank of San Francisco Working Paper 2012-18, September 2012. The issue of low investment growth in advanced economies, which is one of the reasons behind low labour productivity growth in these countries, is touched upon in: Summers L.H. (2014): *U.S. Economic Prospects: Secular Stagnation, Hysteresis, and the Zero Lower Bound*, Business Economics, vol. 49, no. 2, National Association for Business Economics.

[2] Other factors adversely affecting invstment growth in recent years include i.a. preference of leveraged buyout of shares over investment outlays in Anglosaxon countries (see eg. Lazonick, W. (2013): *The Financialization of the U.S. Corporation*, Seattle University Law Review, vol. 36:857) and falling share of enterprises in basic research outlays (see eg. Mazzucato M. (2015), *The enterpreneurial state – debunking public versus private sector myths*, Public Affairs).

from 6.1% in 1995-2000 to 2.1% in 2007-2010. Low investment growth has translated into an increase in the average age of industrial equipment, which in 2014 in the United States rose to the highest levels since the Great Depression, thus additionally slowing down capital deepening.

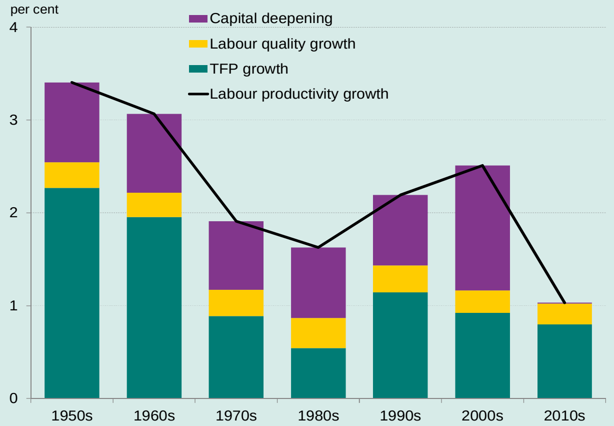
Moreover, during the boom preceding the global financial crisis labour resources shifted to sectors with lower productivity growth (eg. construction or financial sector, which accounted for approx. 12% of employment in the United States in 2006, compared with 6-10% in previous decades). Uncertain economic outlook for advanced economies weighed on business dynamism, most notably the number of start-ups. Consequently, between 2006 and 2009 the average age of firms in the industrial sector in the United States rose from approx. 25 years to approx. 27 years. Studies conducted on microdata from eight European countries show that new firms are characterised by higher productivity. Hence, falling participation of these companies negatively affects the aggregate productivity growth rates.

Figure B.2 Labour productivity growth in selected advanced economies and its components



Source: OECD data, NBP calculations.
The figure shows labour productivity growth in selected advanced economies (Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Ireland, Italy, Japan, Netherlands, New Zealand, Portugal, Spain, Sweden, Switzerland, the United Kingdom and the United States) and its components (weighted average of GDP).

Figure B.3 Labour productivity growth in the United States and its components in subsequent decades



Source: Federal Reserve Bank of San Francisco data, NBP calculations.

The above notwithstanding, the literature offers a number of hypotheses on the reasons behind the deceleration in labour productivity growth in the past few decades:[3]

- structural changes in advanced economies, as gross value added is created to an increasingly great extent by services, where the space for productivity improvements is more limited than in industry due to little scope for automatisation or changes in organisational management. In 1980 the share of services in gross value added was 57% on average in advanced economies compared with 70% in 2015. The aggregate productivity in industry in the United States grew by around 20% on average in the past 20 years against approx. 6% in industry and services combined;[4]
- stabilisation of high school enrollment ratios at their peaks in advanced economies, after their sharp rise in previous decades. For instance, the share of Americans aged 25 or over who have completed high

[3] The declining labour productivity growth may also be caused by methodological problems, in particular with measurement of the value of production of information and communication technology (ICT) sector, and with the estimation of the size of investment in intangible capital (outlays on restructuring or marketing).
[4] In addition, in recent years, particularly in the United States, slower productivity growth was compounded by weaker activity – following earlier sharp growth – in the relatively productive mining sector. This issue is discussed in Van Zandweghe W. (2016): *The Drag of Energy and Manufacturing on Productivity Growth*, The Macro Bulletin. Macroeconomic research from the Federal Reserve Bank of Kansas City, April 18, see also Chapter 1.1 *Economic activity abroad*.

school or college was 24.5% in 1940 versus 81.5% in the 1990s and 85.5-88.0% in 2000-2015, on average. This led to slower TFP and labour quality growth resulting from improving education;

- ageing population, which brings about shifts in the composition of consumer expenditure of households and, in consequence, changes the resource allocation in the economy and increases the relative significance of less productive sectors, eg. health care. Depending on employees' experience, health and level of education, it may also lead to an increase in the share of less productive cohorts in the labour market. According to the available research, ageing population has taken approx. 1 percentage point from TFP growth in Japan in the 1990s and 0.5 percentage points in the United States after 2000;
- diminishing returns to innovation stemming from a lack of innovations of potentially major significance to the economy. According to Gordon (2016), information and communication technology (ICT) products and services are translating into improvements in production to an increasingly lesser extent, resulting in slower TFP growth;
- smaller knowledge diffusion reflected in widening productivity gap between the frontier and other companies. Since 2001 productivity of the global frontier firms has been rising by 3.5% in industry and 5.0% in services per annum. However, this has not translated into productivity growth in the majority of global corporations, which has fallen to nearly zero or even – in the case of services – to negative levels, as reflected in slowdown in aggregate productivity. Knowledge diffusion is explained by:
    - lower labour mobility, which translates into less intensive knowledge flows between firms. For example, in 2006-2011 share of Americans changing a place of residence in search of work declined from 2.7% to 2.2%. According to Eurobarometer, in 2011-2013 only, German employees' willingness to move to another EU country dropped by 11 percentage points;
    - slowdown in international trade growth (from 7.6% y/y in 2002-2007 to 3.7% y/y in 2011-2016)[5] and acceleration in global patent applications (from 3.5% y/y on average in 2001-08 to 8.1% y/y in 2009-14), which can entail lower access to new technologies.
- increase in income inequality, which might result in deceleration in labour productivity growth stemming from slower increase in labour quality, as low-income families have greater constraints to education financing.

To conclude, slowdown in labour productivity growth in advanced economies in recent decades resulted from a combination of several long-term processes, and, more recently, was exacerbated by the global financial crisis. The persistence of these processes will determine the future labour productivity growth in advanced economies. As uncertainty recedes and stability of the banking sector increases, investment growth should reaccelerate. In addition, one cannot rule out that – as in the case of the previous technological revolutions – the advantages from the currently implemented technologies on productivity growth will manifest themselves with a significant lag, supported i.a. by recent acceleration in automatisation in services. The remaining processes affecting productivity growth, primarily ageing population, will be hard to reverse. However, their impact can be alleviated by changes in legislation or management that would allow employees in all age groups to requalify and older employees to remain economically active for longer.

[5] See also Ahn J.B., Dabla-Norris E., Duval R., Hu B., Njie (2016): *Reassessing the Productivity Gains from Trade Liberalization*, IMF Working Paper WP/16/77. According to OECD (2015), geographical distance may be an important hurdle in knowledge diffusion. Analysing the World Bank data (between 1987 and 2012), one cannot conclude that an acceleration in nominal world exports is causing higher global GDP growth in the longer run (see Podkaminer L. (2014): *Does trade drive global output growth?*, Bank i Kredyt 45(4), 2014, pp. 311-330).

1.2 Inflation developments abroad

Inflation in the environment of the Polish economy remains very low, although it has recently increased slightly. Low inflation is driven by weaker economic growth than before the global financial crisis and the fall in commodity prices in recent years (see Chapter 1.1 *Economic activity abroad*, Chapter 1.3 *Global commodity markets*; Figure 1.7). The deflationary impact of commodity prices is, however, diminishing. Nevertheless, price growth remains significantly below inflation targets in many countries.

In the euro area, HICP inflation has been close to zero since the second half of 2014, although it slightly increased in 2016 Q3 supported by the waning effect of past falls in energy commodity prices. Core inflation is at historical lows. Very low inflation in the euro area negatively affects price growth in other European countries, including in Central and Eastern Europe. In the majority of these economies, price growth – despite some increase – is still close to zero (Figure 1.8).

In Russia, inflation remains relatively high, but is gradually declining as a result of the lessening effect of the previous strong depreciation of the rouble. Also in China, inflation has slightly weakened and is running substantially below its long-term average.

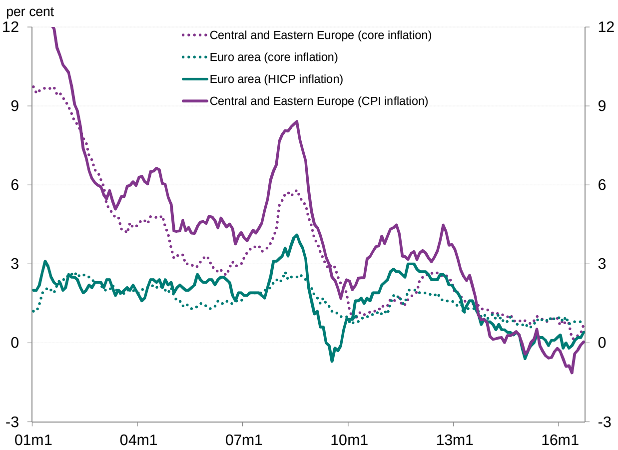
1.3 Global commodity markets

The prices of agricultural and energy commodities have risen in recent months, although they are still markedly lower than in previous years (Figure 1.9).

Figure 1.7 CPI inflation in the environment of the Polish economy (y/y)

Source: Bloomberg data, NBP calculations.
The chart presents the average CPI inflation in Poland's major trading partners that comprise 80 per cent of Polish imports (euro area, China, Russia, Czech Republic, United Kingdom and Sweden) weighted by share of these economies in Polish imports in 2015, along with the GDP-weighted average inflation in economies constituting 80 per cent of global GDP.

Figure 1.8 CPI inflation indices in the euro area and Central and Eastern Europe (y/y)



Source: Bloomberg data, NBP calculations.
For Central and Eastern Europe, GDP-weighted average inflation in Bulgaria, Croatia, Czech Republic, Estonia, Lithuania, Latvia, Romania, Slovakia, Slovenia and Hungary.

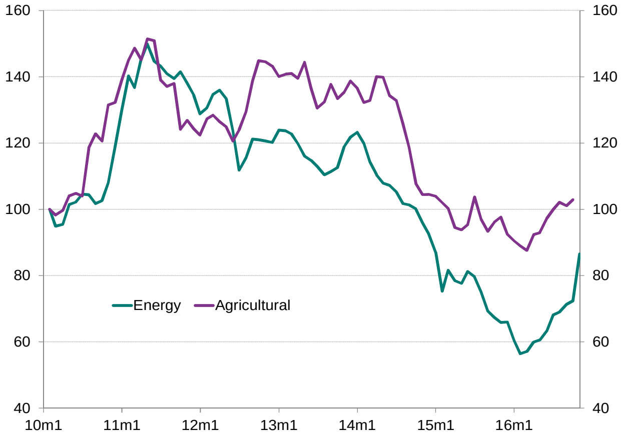
In particular, global coal prices have increased substantially, mainly due to a fall in coal production in China.[6] In turn, oil prices have stabilised following a rise in the first half of 2016 (Figure 1.10). On the one hand, oil prices were negatively affected by an increase in oil production (in OPEC member states and Canada) and still weak demand for oil in the emerging market economies, including China. On the other hand, the OPEC members' preliminary agreement to cut their oil production later in the year pushed up the prices of the commodity. With oil prices higher than at the beginning of 2016 and the zloty exchange rate weaker than a year ago, the annual growth rate of zloty denominated oil prices has turned positive for the first time in over two years (Figure 1.10). Should the oil price growth continue, it would support a rise of fuel prices in Poland in the coming months (see Chapter 2.1 *Consumer prices*).

The prices of agricultural commodities in global markets have also been growing for a couple of months, which is translating into higher food prices in the Polish economy and its external environment (Figure 1.9). The rise of prices is related to a surge in the demand for meat and dairy products in China and ongoing shortages in the sugar, coffee and cocoa markets. At the same time, continuously high supply of cereals and low production costs in agricultural sector are containing price growth.

1.4 Monetary policy abroad

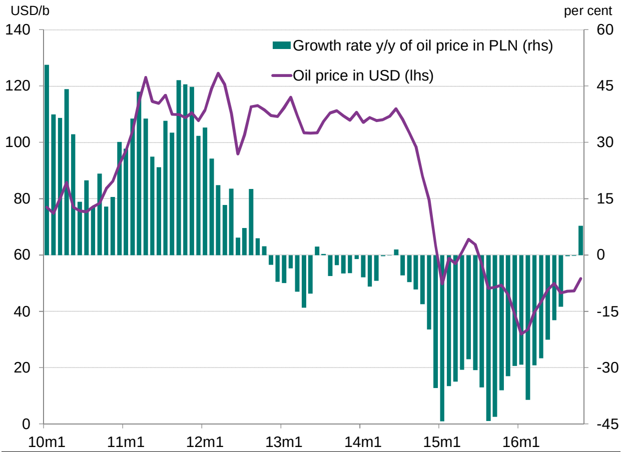
Since the December 2015 increase, the Federal Reserve (Fed) has kept its policy interest rates unchanged, i.e. within a range of 0.25-0.50%. At the same time, the Fed is reinvesting the principal

Figure 1.9 Indices of energy and agricultural commodity prices in global markets in USD (January 2010=100)



Source: Bloomberg data, NBP calculations.
The agricultural commodity index comprises prices for wheat, rape, pork, potatoes, sugar, cocoa, coffee, skimmed milk powder, butter, frozen orange juice concentrate. Weights reflect the consumption structure of Polish households.
The energy commodity index comprises prices for coal, oil and gas. Weights reflect the consumption of primary energy sources in Polish economy.

Figure 1.10 Brent oil prices in USD and annual growth rate of Brent oil prices in PLN



Source: Bloomberg data, NBP calculations.

[6] Following a stabilisation earlier in the year, since the beginning of June the prices of coal in Richards Bay (South Africa) have increased by over 50% to 83.2 USD/t. However, it has to be pointed out that global coal prices feed through to the prices of coal in Poland with a time lag due to the specific nature of contracts between domestic producers and their main customers. Data on coal prices in Poland available from the Polish Industrial Development Agency, indicate that domestic prices did not increase markedly at least until September 2016.

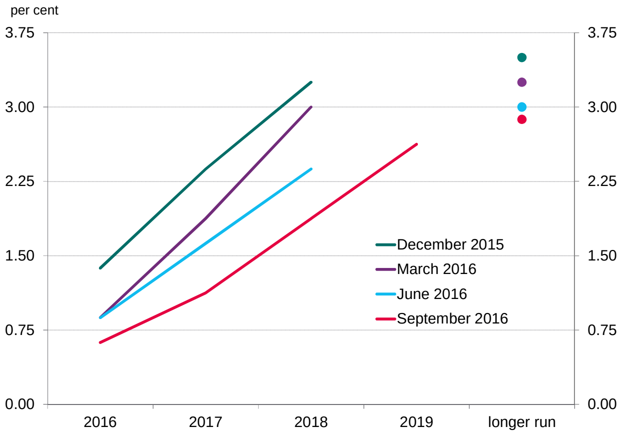
payments from its holdings of securities purchased under quantitative easing. In 2016, an interest rate hike is expected. According to market assessments it will most likely take place in December. It is expected that in the coming quarters there will be further interest rate increases in the United States; however, their scale is currently markedly smaller than indicated earlier by the US central bank (Figure 1.11).

The European Central Bank (ECB) is keeping interest rates close to zero, with a slightly negative deposit rate. The ECB continues its asset purchase programme, which includes the purchases of corporate bonds since June 2016 (Figure 1.12)[7]. In June, the ECB launched a new series of targeted longer-term refinancing operations (TLTRO II) to support lending[8]. The markets expect that the ECB's highly expansionary policy will continue over a longer period of time (Figure 1.13). Such expectations are primarily related to very low inflation in the euro area, which remains markedly below the level considered by the ECB as compatible with the definition of price stability (below, but close to, 2%; see Chapter 1.2 *Inflation developments abroad*).

Most other central banks in the advanced economies are keeping interest rates at historically low levels, and some of them are additionally applying unconventional monetary policy measures.

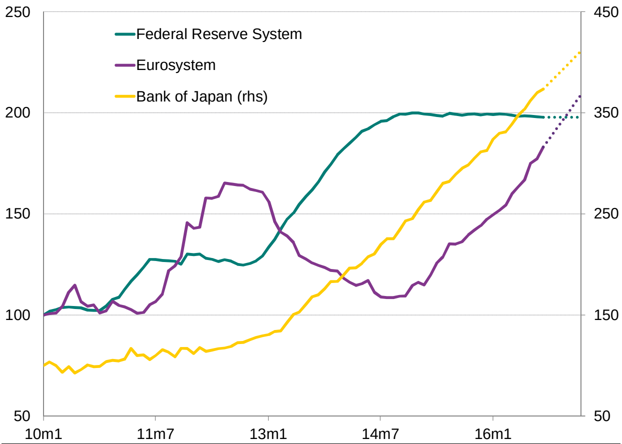
The Bank of England, aiming to prevent potential impacts from the Brexit vote, has reduced Bank Rate from 0.50% to 0.25%, re-launched bond

Figure 1.11 Median FOMC projections of fed funds rate



Source: Fed.

Figure 1.12 Assets of the major central banks (index, January 2010=100)



Source: Bloomberg data, NBP calculations.
Forecasts prepared under an assumption of constant Fed's assets, the Eurosystem's assets growing by 80 billion euro a month and the Bank of Japan's assets growing by 91.5 trillion yen a year.

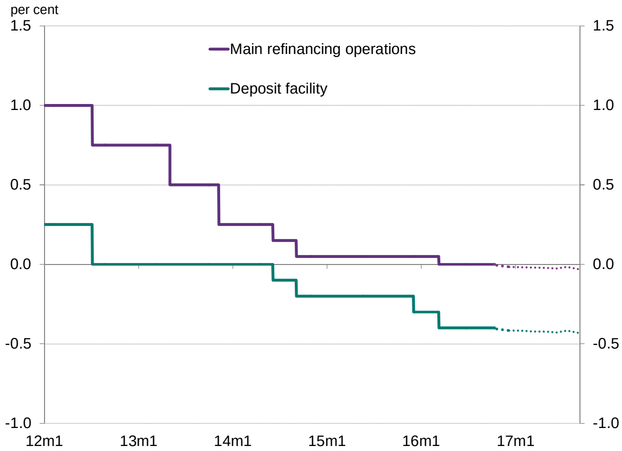
[7] The ECB purchases financial assets for 80 billion euro a month. The asset purchase programme is planned to continue at least until March 2017.
[8] In June 2016, the first TLTRO II auction took place. The borrowing under this operation totalled 399.3 billion euro. The second TLTRO II operation took place in September 2016 and totalled 45.3 billion euro.

purchases and introduced a new loan support programme.[9]

The Bank of Japan is keeping its deposit rate negative, and has increased the scale of its loan support and asset purchase programmes in recent months.[10] At the same time, the Bank of Japan has announced that it would strive to stabilise the yield curve at a low level (including the stabilisation of 10-year government bond yields around zero) and continue expanding the monetary base until inflation stabilise above the 2% target.

The Riksbank is also continuing its asset purchase programme, and the central banks of Switzerland and the Czech Republic still communicate their readiness to intervene in the foreign exchange market in order to prevent excessive appreciation of their currencies.[11]

Figure 1.13 ECB's interest rates, current and expected

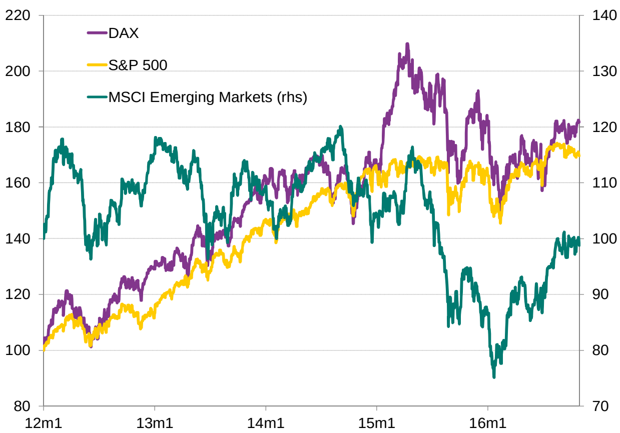


Source: Bloomberg data.
Future interest rates calculated from the overnight index swaps for the deposit and refinancing rates.

1.5 International financial markets

Following a temporary deterioration in sentiment caused by the outcome of the Brexit referendum, the situation in the international financial markets has markedly improved. This was largely the result of more positive assessment of the world economic outlook and expectations that the major central banks would maintain accommodative monetary policy stance (see Chapter 1.4 *Monetary policy abroad* and Chapter 1.1 *Economic activity abroad*).

Figure 1.14 Stock indices (January 2012=100)

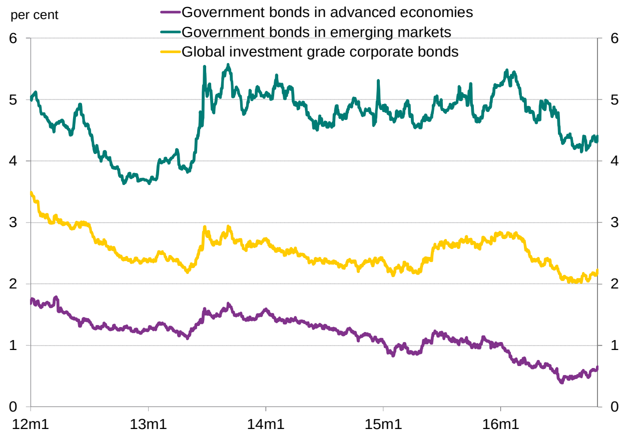


Source: Bloomberg data.

[9] The Bank of England announced it would buy 60 billion pounds worth of government bonds and 10 billion pounds of corporate bonds. In addition, a new Term Funding Scheme (TFS) has been launched under which the Bank of England will grant four-year loans to banks in order to boost lending. The interest on these loans will be close to the Bank Rate (currently at 0.25%).
[10] The Bank of Japan is purchasing government bonds at a scale allowing for the stabilisation of yields on 10-year bonds at a level close to zero i.e. approximately 80 billion yen annually, and is also purchasing other financial assets, including Exchange Traded Funds and corporate bonds, for approximately 11.5 billion yen annually.
[11] The Czech National Bank is maintaining its commitment to intervene in the foreign exchange market in order to prevent an appreciation of the Czech koruna to less than 27 EUR/CZK and indicates that it will most likely discontinue this commitment in mid-2017. In turn, the Swiss National Bank withdrew a similar commitment in January 2015; however, it has declared that it will intervene in order to prevent excessive appreciation of the Swiss franc, without specifying the threshold level of the exchange rate of its currency.

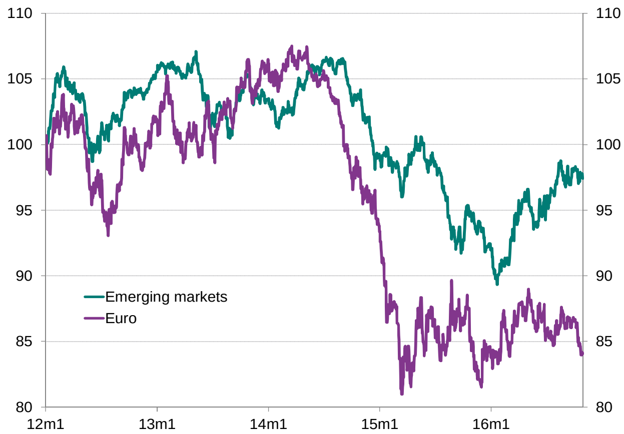
Against this background, stock indices has boosted (Figure 1.14). In particular, in the United States stock indices have recently hit their record highs. Bond yields in the advanced economies have stopped falling and stabilised at very low – and in some countries even negative – levels (Figure 1.15). However, recent developments in bond markets differed somewhat across advanced economies. In particular, bond yields have remained low in the euro area, while in the United States they have risen slightly, which was related to the expectations of a continuation of both accommodative monetary policy by the ECB and monetary tightening by the Fed. These expectations were also reflected in the depreciation of the exchange rate of the euro against the US dollar (Figure 1.16). At the same time, in emerging market economies, local currencies have appreciated and bond yields have fallen. This was due to some stabilisation of economic conditions in these economies following their previous deterioration.

Figure 1.15 Bond yields in the world



Source: Bloomberg data.
Yields from Bloomberg bond indices: Developed Sovereign, Emerging Market Sovereign and Global Investment Grade Corporate.

Figure 1.16 Exchange rates of emerging markets currencies and euro against the US dollar (increase indicates appreciation of a given currency; index January 2012=100)



Source: Bloomberg data.
Emerging markets – MSCI Emerging Markets Currency Index.

2 Domestic economy

2.1 Consumer prices

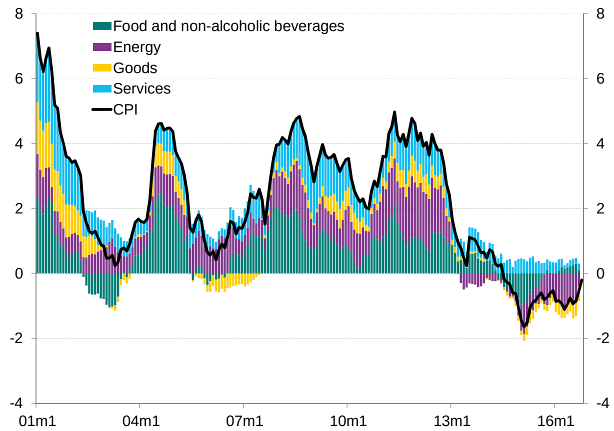
Annual CPI inflation in Poland is still negative, yet the scale of decline in prices is diminishing (Figure 2.1). Deflation continues to be driven mainly by external factors, above all a considerable fall in global energy commodity prices in the past few years (see Chapter 1.3 *Global commodity markets*). Yet, the impact of this factor is gradually unwinding. This refers in particular to oil prices, which are still low, though somewhat higher than a year ago. However, energy prices lower than in the previous years are weighing down on core inflation indices, keeping them negative (Figure 2.2). CPI growth in Poland is additionally contained by low inflation abroad and the resultant close-to-zero growth in import prices.

In the past few months, price growth at home – apart from slightly higher oil prices – is also supported by a rise in food prices. The rise is related to an increase in demand of emerging market economies for selected food products in the global markets, and to lower livestock at home and abroad resulting from a significant fall in the profitability of its production. Food prices were also exposed to temporary upward pressure from the reduced supply of certain agricultural products (including sugar, coffee, cocoa, citrus fruits) caused by less favourable weather conditions in the areas where their production is concentrated.

Domestic demand pressure is still too weak to offset the deflationary impact of external factors (Figure 2.3). Cost pressure is also absent as indicated by low growth in PPI prices (Figure 2.4).

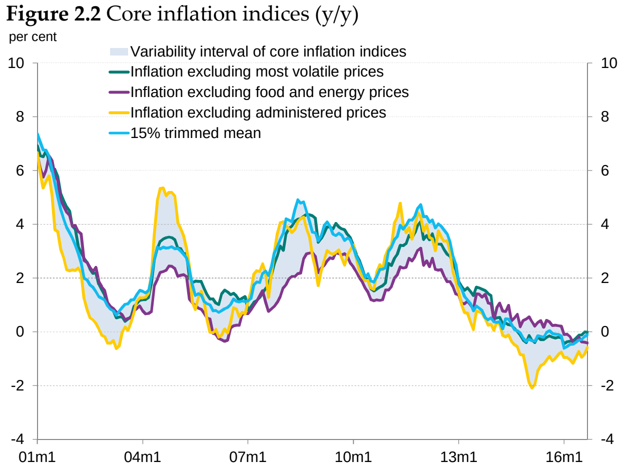
In the nearest months, the scale of deflation should gradually diminish, which will be supported by the waning effect of the prior fall in the prices of

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



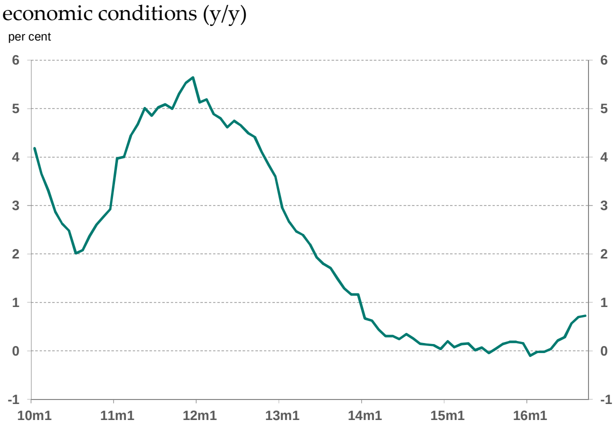
Source: GUS data, NBP calculations.

Figure 2.2 Core inflation indices (y/y)



Source: GUS data, NBP calculations.

Figure 2.3 Inflation index of goods sensitive to domestic economic conditions (y/y)



Source: GUS data, NBP calculations.

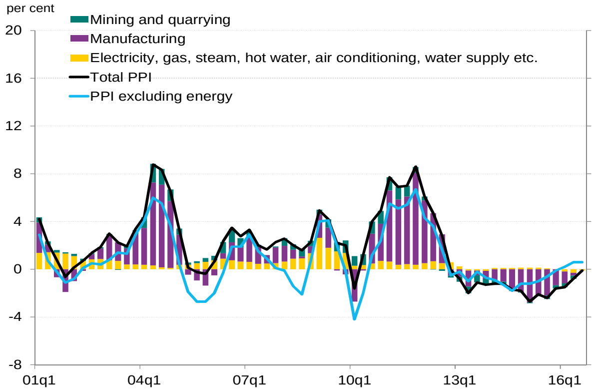
The aggregate of the CPI components sensitive to changes in domestic economic conditions. For more on the index calculation methodology, see: A. Hałka, J. Kotłowski (2014) *Does the domestic Output Gap Matter for Inflation in a Small Open Economy*, Eastern European Economics, vol. 52.

energy commodities. Steady economic growth, together with improving labour market conditions, will also boost price growth in the coming quarters. Furthermore, price growth in the economy may be driven up by an increase in household income due to the launch of the "Family 500 plus" programme and the minimum wage hike in January 2017. The annual CPI growth will additionally be supported by gradually rising non-wage cost pressure, as indicated by a steady increase in the PPI, especially excluding goods related to energy (Figure 2.4). A possible higher price growth in the coming quarters is suggested by the forecasts of financial sector analysts and economists. In line with these forecasts, inflation will approach the lower bound for deviations from the inflation target in a 4-quarter horizon (Table 2.1). Inflation expectations of both consumers and enterprises remain low[12] (Figure 2.5).

2.2 Demand and output

The Polish economy continues to grow at a relatively stable pace amounting to 3.1% y/y in 2016 Q2 (as compared to 3.0% y/y in 2016 Q1 – Figure 2.6). A steadily rising consumer demand remains the primary driver of economic activity. The slight increase in GDP growth in 2016 Q2 was due to an acceleration in exports. At the same time, GDP growth was contained by a decrease in investment related to both the temporary lower absorption of EU funds following the completion of the previous EU financial framework, and the continuing uncertainty about the economic outlook.

Figure 2.4 Composition of total PPI growth by sections of industry, growth in domestic PPI and PPI for exports (y/y)



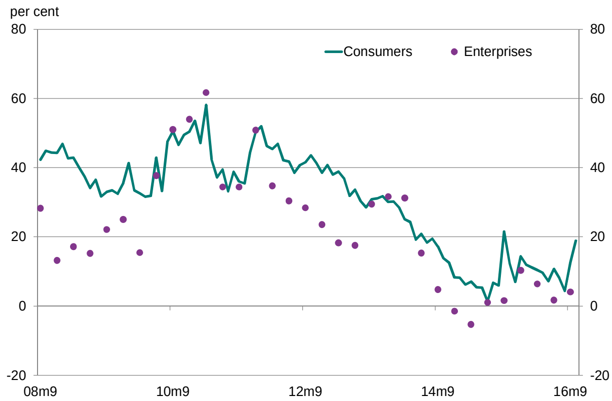
Source: GUS, Eurostat data.

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

	Survey conducted in:				
	15q3	15q4	16q1	16q2	16q3
Thomson Reuters Survey, inflation expected in 4 quarters	1.5	1.6	1.3	1.6	1.4
NBP Survey, inflation expected in 4 quarters	1.2	1.2	1.3	1.3	1.2
NBP Survey, inflation expected in 8 quarters	1.7	1.9	1.7	1.8	1.8

Source: NBP, Thomson Reuters data.
Inflation expectations of the financial sector analysts are proxied by the median forecast of the analysts surveyed by Reuters in the last month of a given quarter.
Inflation expectations of the participants to the NBP Survey of Professional Forecasters reflect the median probability distribution obtained from the aggregation of probability forecasts of the experts surveyed by NBP.

Figure 2.5 Balance statistics of consumer and enterprise inflation expectations



Source: GUS, NBP data, NBP calculations.
Balance statistic is defined as a difference between a fraction of respondents expecting rise in prices and the fractions of respondents expecting no change or fall in prices. A rise in balance statistic should be interpreted as a shift in opinions towards higher rise in prices. For more on the balance statistic calculation, see: http://www.nbp.pl/homen.aspx?f=/en/statystyka/expectations.html

[12] The percentage of consumers expecting prices to rise is approx. 60 pp. higher than that anticipating them to decline. In the case of enterprises, this difference is approx. 30 pp. Respondents expecting prices to stabilise constitute a large group (30% of consumers and 18% of enterprises). At the same time, a high proportion (30%) of enterprises have no opinion on the future level of prices.

2.2.1 Consumption

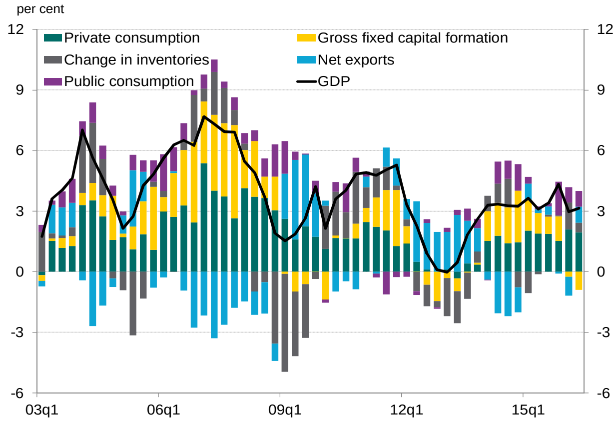
Consumer demand has been rising steadily; in 2016 Q2 its growth accelerated slightly and reached 3.3% y/y (versus 3.2% in 2016 Q1; Figure 2.7). The rise in consumer demand has been supported by stable employment growth and accelerating wage growth, with purchasing power additionally enhanced by the continuing fall in consumer prices (see Chapter 2.4 *Labour market*). Faster consumption growth is also driven by the launch of child benefit payments under the "Family 500 plus" programme and a further improvement in consumer confidence (Figure 2.8). Moreover, the postponement in the disbursement of some of the direct subsidies for farmers from 2016 Q1 to 2016 Q2 probably has also added to a rise in consumer demand.

Retail sales data indicate a further acceleration in consumption growth in 2016 Q3[13], which has likely been driven by increased spending of the funds received under the "Family 500 plus" programme (due to the gradual launch of the disbursement of these funds[14]). Consumption growth has also been fuelled by the continuing favourable labour market conditions and good consumer sentiment.

2.2.2 Investment

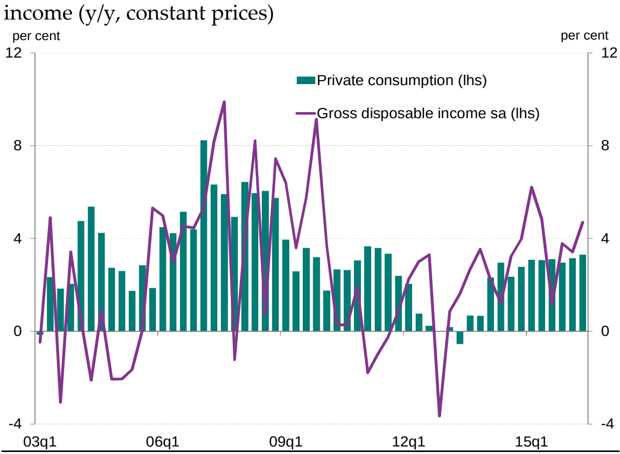
In the first half of 2016, gross fixed capital formation in the Polish economy eased (Figure 2.9) due to a decrease in public and corporate investment. This was mainly an effect of the expiration of the previous EU financial framework, resulting in less investments financed with EU funds (Figure 2.10). In 2016 Q1 and Q2, the inflow of EU transfers was about 60% lower than in the corresponding period of the previous year.

Figure 2.6 GDP growth and its components (y/y)



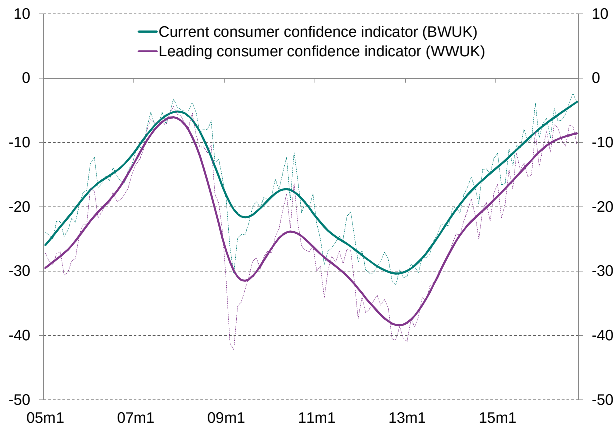
Source: GUS data.

Figure 2.7 Growth of private consumption and gross disposable income (y/y, constant prices)



Source: GUS data, NBP calculations.

Figure 2.8 Consumer confidence indicators



Source: GUS data.
A solid line denotes a trend, while a dotted – raw data.

[13] The average real retail sales growth in 2016 Q3 stood at 6.2% as compared to 5.4% in 2016 Q2.
[14] Over half of the PLN 4.9 billion that households received in 2016 Q2 under the "Family 500 plus" programme was only disbursed in June 2016, which means that the impact of this factor on consumption was probably stronger in 2016 Q3.

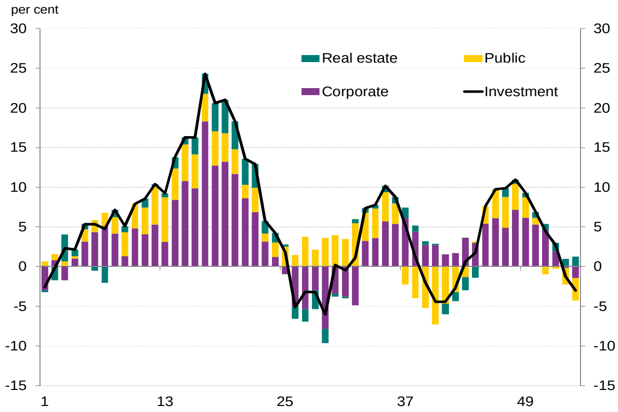
Additional factor constraining corporate investment activity was uncertainty about the economic outlook and the legal environment of business in Poland (Figure 2.11)[15]. At the same time, investment activity was supported by very good financial standing of enterprises, their high capacity utilization, relatively large loan availability and lower interest on loans than in the previous years (Figure 2.12).

The decline in public and corporate investment was accompanied by an increase in housing investment. It was associated with favourable outlook for housing construction, driven by relatively high profitability of construction companies, an improvement in labour market conditions and growing household income (see Chapter 2.5.2 *Residential real estate market*).

2.2.3 Public finance

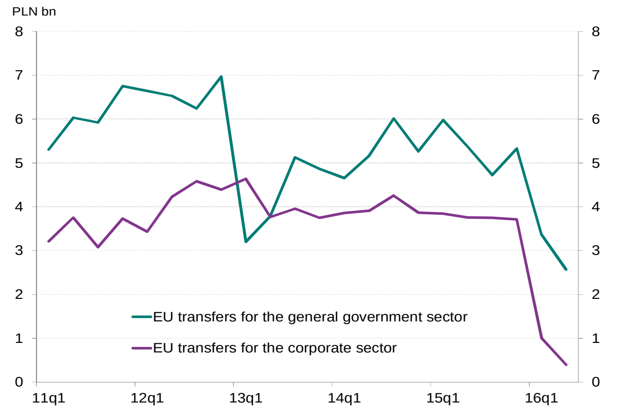
Fiscal policy in 2016 is supporting aggregate demand by an increase in expenditure on social[16] and child benefits. An impact of these expenditure components has been particularly noticeable since 2016 Q2, after the launch of the "Family 500 plus" child benefit programme[17]. The positive contribution of fiscal policy to economic growth is, however, limited by a fall in public investment related to expiration of the 2007-2013 EU financial framework. Reduced public expenditure affected, in particular, local government units, as indicated

Figure 2.9 Investment in the economy and its major components (y/y)



Source: GUS data, NBP calculations.
NBP estimates for the NECMOD model (seasonally adjusted).

Figure 2.10 EU transfers for the general government and corporate sector



Source: NBP calculations based on Polish EU funds budget.
General government sector – central and local governments, the Road Fund and PKP PLK.

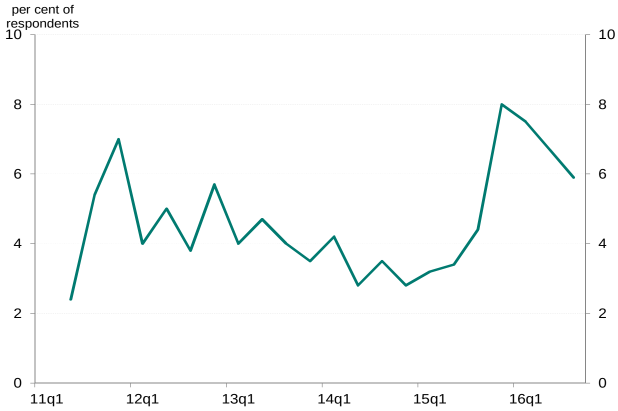
[15] *NBP Quick Monitoring Survey. Economic climate in the enterprise sector in 2016 Q3 and forecasts for 2016 Q4*, NBP, October 2016.
[16] The result of, among others, the introduction of parental benefits for persons who had previously not been eligible to receive maternity benefit, changes in family benefits payments (after exceeding the income threshold, these benefits will be gradually lowered as income rises) and one-off payment of allowances granted to some pensioners.
[17] According to information from the Ministry of Family, Labour and Social Policy, as of the end of September 2016, the beneficiaries of the "Family 500 plus" programme were paid a total of approx. PLN 11.3 billion (approx. 0.6% of GDP).

by a very sharp fall in their capital expenditure (by 51.3% y/y in 2016 H1)[18].

Despite the easing of fiscal policy, the general government deficit will remain below 3% of GDP in 2016. The deficit will be contained by stable economic growth, favourable labour market conditions and one-off factors[19].

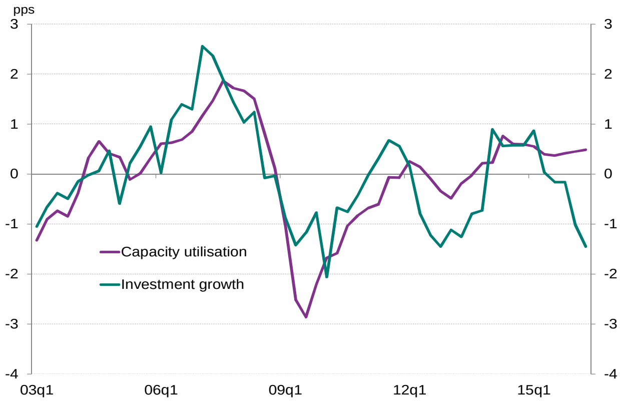
At the end of September 2016, the government passed the draft *Budget Act for 2017* to the Parliament. According to the NBP estimates, the impact of fiscal policy on GDP growth in 2017 will be slightly positive [20], mostly due to an increase in public investment (mainly in the local government sector) following the expected acceleration in the absorption of the UE funds. Domestic economic activity will also be supported by measures aimed at increasing households' disposable income. These will include i.a. the full-year expenditure on "Family 500 plus" programme, modified pension indexation rules and the upward adjustment of minimum pension benefit. On the revenue side, the current fiscal policy restrictiveness is expected to remain unchanged. The revenue forecast in the draft *Budget Act* assumes the maintenance of the current VAT rates (8% and 23%, instead of the 1 percentage point reduction planned earlier) and the absence of other significant changes weighing on the tax burden level.

Figure 2.11 Uncertainty perception of companies



Source: *NBP Quick Monitoring Survey*.
Per cent of respondents pointing at uncertainty as a barrier to growth in their description of problems that might be important for economic conditions of their companies within the following two quarters, most notably factors that may affect i.a. the level of output, scale of operation, liquidity, borrowing or profitability of exports.

Figure 2.12 Investment outlays and capacity utilisation (standardised data)



Source: GUS and NBP data, NBP calculations.
Deviations of annual investment and capacity utilisation growth from long-term averages (divided by standard deviations).

[18] In the first half of 2016, total capital expenditure of local government units was lower by PLN 5.9 billion (i.e. approx. 0.3% of GDP), which includes 3.6 billion on projects co-financed with EU funds (i.e. a fall by 91.2% y/y, thus 0.2% of GDP). The decline was due to the completion of projects under the 2007-2013 EU financial framework amidst low, as so far, use of financing under the following framework.
[19] One-off factors limiting the general government deficit (in ESA2010 terms) in 2016 include revenue from the sale of telecommunication frequencies (LTE auction) and the topping up of the level of funds held by banks under the Fund for Protection of Guaranteed Assets (approx. PLN 2 billion as a consequence of the collapse of SK Bank) – in total, approx. 0.6% of GDP. In turn, the higher payment from the NBP profit for 2015 than was planned in the *Budget Act for 2016* (approx. PLN 7.9 billion compared to PLN 3.2 billion) does not, in principle, improve the general government balance in ESA 2010 terms.
[20] See: *Opinion of the MPC on the 2017 Draft Budget Act*.

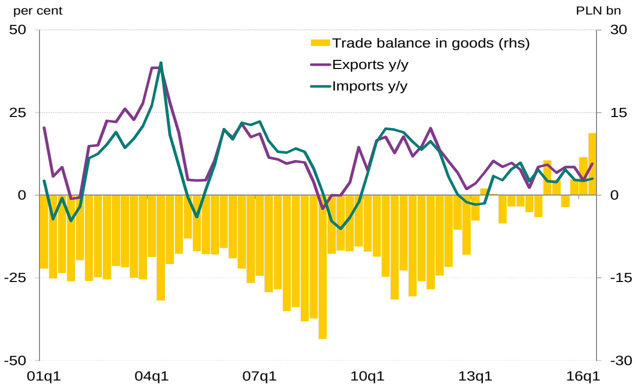
The government forecasts a widening in the general government deficit (ESA 2010) from 2.6% of GDP in 2016 to 2.9% in 2017, which will mainly be due to the waning impact of favourable one-off factors (amounting to a total of approx. 0.6% of GDP against approx. 0.1% of GDP in 2017). The forecast considers the expected results of measures aimed at improving tax collection efficiency[21] in 2017 (approx. 0.5% of GDP).

2.2.4 External trade

External trade turnover is expanding at a moderate pace, albeit faster than the global trade.[22,23] In 2016 Q2, export growth accelerated to 9.2% y/y, following a temporary slowdown in 2016 Q1 (Figure 2.13). At the same time, import growth picked up, though only slightly, to 5.0% y/y. As exports grew faster than imports, the trade surplus increased, leading to a further improvement in the total balance of goods and services and the current account balance (see Chapter 2.7 *Balance of payments*).

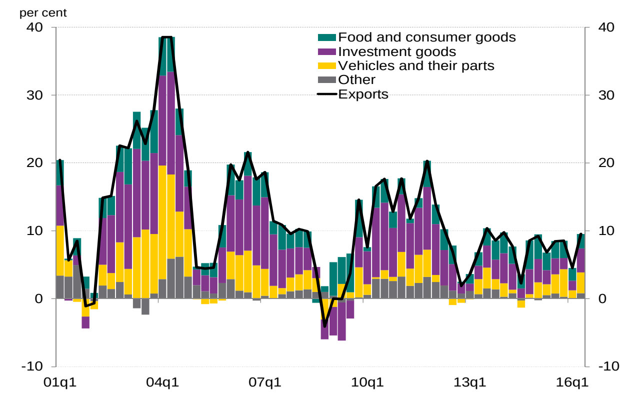
Exports in 2016 Q2 accelerated primarily on the back of a rise in foreign demand for vehicle parts, intermediate and investment goods manufactured in Poland (Figure 2.14), with the euro area and Central and Eastern Europe – Poland's main trading partners with stable growth in economic activity – being the major destinations (Figure 2.15; see Chapter 1.1 *Economic activity abroad*). An increase in price competitiveness, resulting from weaker than in previous years real exchange rate of the zloty, might also have added to export growth (Figure 2.16).

Figure 2.13 Polish exports and imports growth (y/y) and trade balance



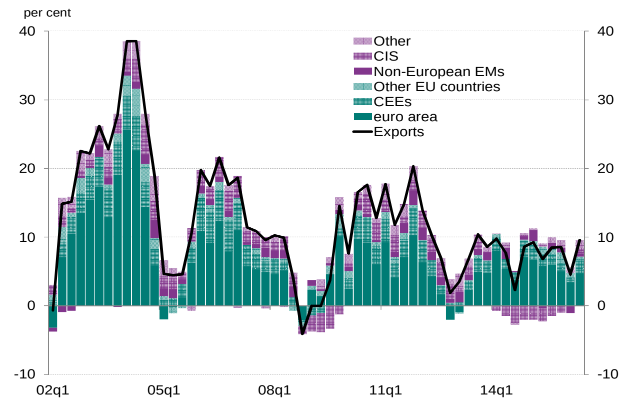
Source: GUS data, NBP calculations.

Figure 2.14 Polish export growth by commodity (y/y)



Source: GUS data, NBP calculations.

Figure 2.15 Polish export growth by destination (y/y)



Source: GUS data, NBP calculations.

[21] These measures include, among others, an introduction in the middle of 2016 of regulations on the Standard Audit File, the General Anti-Avoidance Rule and implementation of the so-called fuel package as well as the planned launch of the register of VAT invoices in 2017 and further changes aimed at improving the VAT collection (related to, among others, the rules for the registration of taxpayers, the possibility of limiting the submission of declarations in quarter terms and the restoration of the so-called VAT sanctions tax).

[22] The content of this Chapter bases on the Central Statistical Office (GUS) data on the value of exports and imports of goods in the Polish zloty. Trade of services is not widely discussed due to a lack of a detailed breakdown by destination or type of services. According to NBP data, the value of the export of services grew by 6.2% y/y in 2016 Q2, while imports rose by 6.1% y/y.

[23] According to the International Monetary Fund's estimates, in 2016 Q2 the value of global trade was falling by 3.0% on average (average annualised monthly growth, see Chapter 1.1 *Economic activity abroad*).

The slight increase in import growth in 2016 Q2 was, in turn, caused by the acceleration in consumer expenditures, reflected in higher demand for foreign consumer goods and vehicles (Figure 2.17). The growth in the value of imports was contained by lower than a year before prices of imported goods (mainly of fuel, see Chapter 2.1 *Consumer prices*). The fall in the import of investment goods amid a decline in investment outlays in Poland also contributed to a lower pace of acceleration in overall imports in 2016 Q2 (see Chapter 2.2.2 *Investment*).

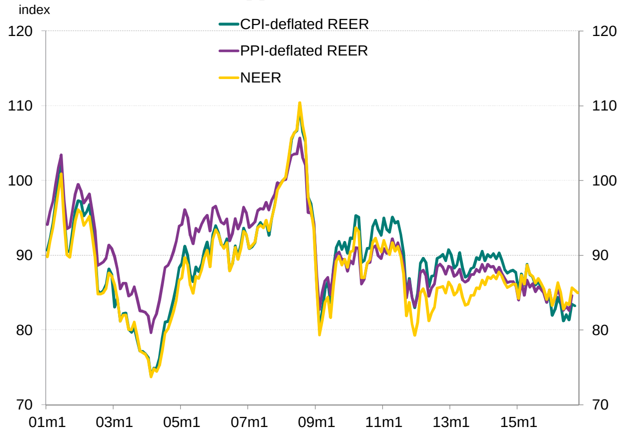
2.2.5 Output

Decomposition of the GDP growth by sectors of the economy indicates that the main driver of economic growth is rising activity in services and industry, while the contribution from construction sector remains negative (Figure 2.18).

The rise in value added in services continues to be relatively high (3.9% y/y in 2016 Q2).[24] In Q2, business conditions in nearly all branches of the sector were favourable. In Q3, a relatively high growth of sales in transport, communications and business services[25] as well as the acceleration in retail sales growth (Figure 2.19) indicate that the growth rate of value added in the whole sector probably remained elevated. It is supported by an increase in household disposable income, resulting from further improvement in labour market conditions and the payment of child benefits under the "Family 500 plus" programme.

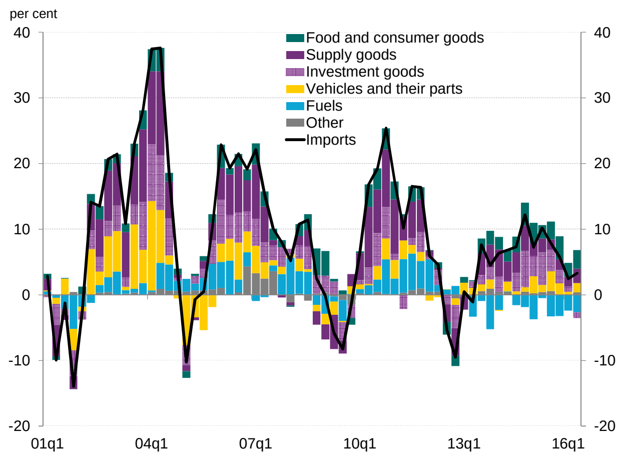
Data for 2016 Q2 indicate some improvement in the business climate in industry as well, mainly on account of a rise in foreign demand in this period. However, data on industrial output and exports in 2016 Q3 point to some deterioration in business conditions in the sector. Falling demand for

Figure 2.16 Zloty real and nominal effective exchange rate (index, increase denotes appreciation, January 2008=100)



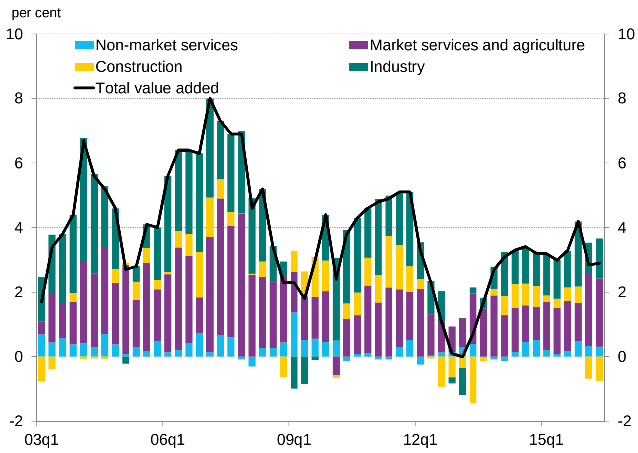
Source: Thomson Reuters data, NBP calculations.

Figure 2.17 Polish import growth by commodity (y/y)



Source: GUS data, NBP calculations.

Figure 2.18 Sector contribution to gross value added growth (y/y)



Source: GUS data, NBP calculations.

[24] It is higher than the average growth of gross value added in services for 2003-2016 (3.2%) and higher than the total growth of gross value added in 2016 Q2 (2.9%).
[25] *Informacja o sytuacji społeczno-gospodarczej kraju I-III kwartał 2016 r, CSO, October 2016* (not available in English).

German goods in the emerging market economies has a particularly negative impact on the activity in Polish industry. Through trade links it reduces the output of Polish producers and leads to a fall in demand for investment goods. At the same time, business conditions in industry are supported by growth in domestic demand for consumer goods.

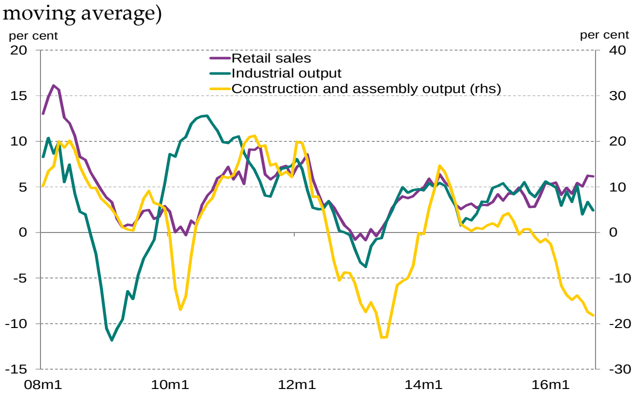
In construction, in turn, the fall in value added (Figure 2.19) is mainly driven by declining investment in infrastructure related to the completion of the 2007-2013 EU financial framework. This is confirmed, in particular, by a sharp fall in the construction of civil engineering projects (by 18.9% y/y in the first three quarters of 2016). Activity weakened also in commercial construction (mainly as regards office buildings, industrial buildings and warehouses, and in Q3 retail and wholesale buildings as well). In turn, favourable business climate continues in housing construction, though in 2016 Q3 the growth in the value of sold construction and assembly works slowed down slightly in the sector as well.

2.3 Financial situation in the enterprise sector

Despite deflation, stable economic growth is accompanied by stronger than in previous years financial performance of the corporate sector. Yet, the situation continues to vary across industries.

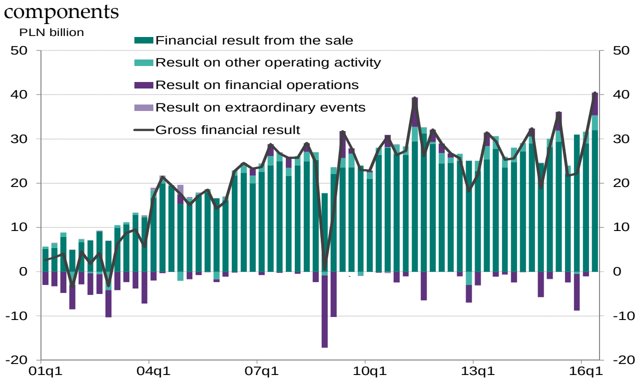
In 2016 Q2, the gross financial result of the corporate sector was higher than a year before, mainly due to increased profits from sales (Figure 2.20). This was driven by slower growth in costs than in sales, as the growth of energy and intermediate goods prices was lower than that of the consumer and capital goods sold. The financial result of exporters was additionally underpinned by weaker than in previous years zloty exchange rate.

Figure 2.19 Indicators of economic conditions (y/y, 3-month moving average)



Source: Bloomberg and GUS data.

Figure 2.20 Gross financial result of enterprises and its components



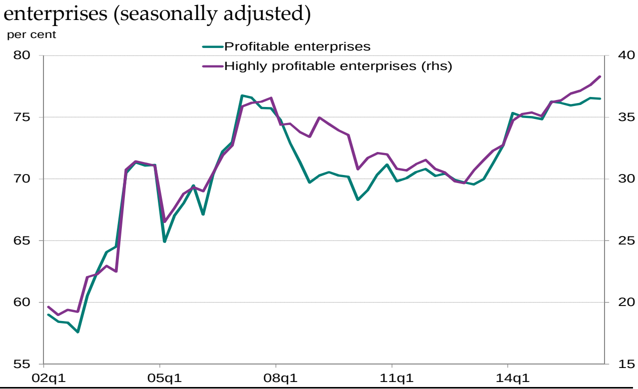
Source: GUS data based on F-01/I-01 forms, NBP calculations.

Table 2.2 Selected financial efficiency ratios in the enterprise sector

per cent	2012	2013	2014	2015 q1	2015 q2	2015 q3	2015 q4	2016 q1	2016 q2
Period average data									
Sales profitability ratio	4.3	4.3	4.5	4.9	4.9	3.6	4.8	4.9	5.1
Net turnover profitability	3.4	3.8	3.7	3.9	5.0	2.9	2.8	4.2	5.5
End of period data									
1st degree liquidity ratio	34.1	35.0	38.9	37.8	36.2	37.5	38.3	37.4	37.2

Source: GUS data.

Figure 2.21 Percentage of profitable and highly profitable enterprises (seasonally adjusted)



Source: GUS data based on F-01/I-01 forms, NBP calculations.
Highly profitable enterprises – companies whose net turnover profitability ratio exceeds 5%.

Stronger financial performance of firms, in comparison with previous years' figures, is reflected in an increase in their profitability ratios (Table 2.2). Moreover, the percentage of highly profitable firms reached its historical maximum in 2016 Q2, with the overall share of profitable firms remaining close to the 2007 peak (Figure 2.21).

At the same time, in some industries profitability is not rising, or is even negative. In particular, in 2016 Q2, mining again saw losses related mainly to prices of energy commodities being markedly lower than in previous years.

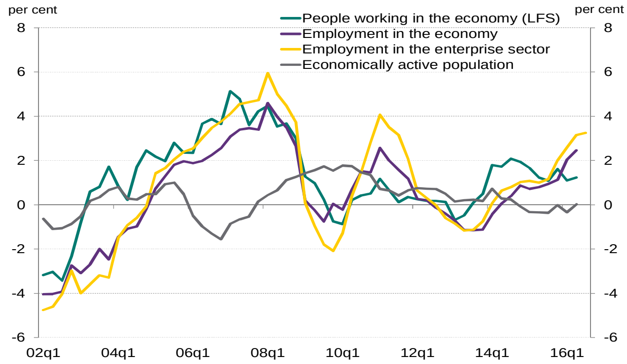
2.4 Labour market

Labour market conditions continue to improve. Employment in the economy is on a steady rise, while the number of the economically active remains stable (Figure 2.22), which results in further falls in unemployment rate. The dwindling unemployment, in turn, supports wage growth.

Good labour market conditions are corroborated by a very high number of job offers and favourable forecasts of employment growth formulated by enterprises.[26] Rising demand for labour is fuelled by stable economic growth. Moreover, the imposition of social insurance contributions on civil law contracts at the beginning of 2016 has resulted in an increase in the number of employment contracts, adding to the growth in employment.[27]

Economically active population has remained stable for a year. This is due to two mutually counterbalancing factors: on the one hand, economic activity is rising due to a gradual increase in legal retirement age and a growing demand for labour, while on the other hand,

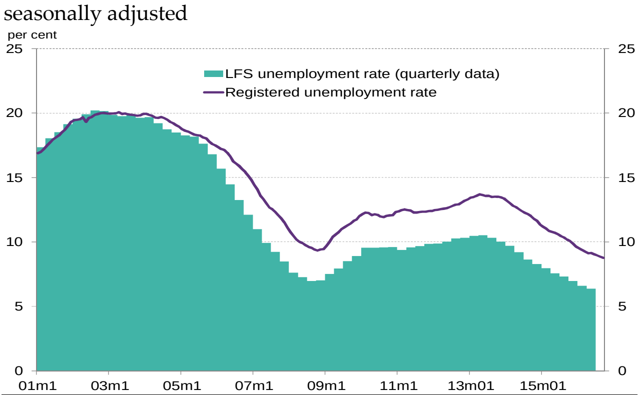
Figure 2.22 Annual growth in people working in the economy (according to the LFS), economically active population and employment in either the economy or the enterprise sector



Source: GUS data, NBP calculations.

The employed in the economy (LFS) is the (averaged for a given reference period) number of persons, who, in the week preceding the Labour Force Survey, did at least one hour of work for pay, had a job but did not work (due to, for example, holiday or illness) or contributed to a family business without payment. Employment in the economy denotes the average number of persons performing work against pay in the reference period, in all sectors of the economy excluding agriculture, national defence and public safety, as well as persons contributing to a family business without pay, converted to the number of full-time jobs. It does not cover entities employing up to 9 persons. Employment in the enterprise sector is defined as the average number of working persons in the reference period in enterprises employing more than 9 persons, also converted to full-time positions.

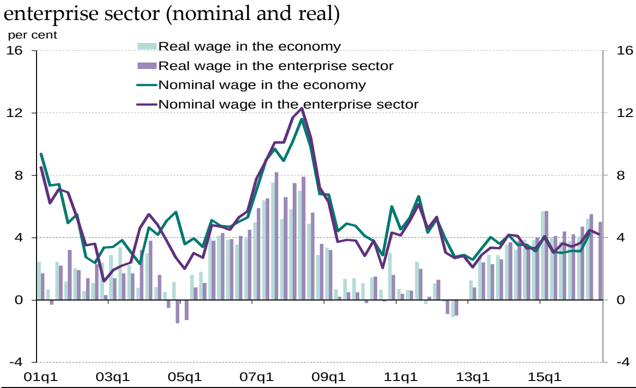
Figure 2.23 Registered and LFS unemployment rates, data seasonally adjusted



Source: GUS data, NBP calculations.

Data seasonally adjusted by NBP. 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.

Figure 2.24 Annual wage growth in the economy and the enterprise sector (nominal and real)



Source: GUS data.

[26] *NBP Quick Monitoring Survey. Economic climate in the enterprise sector in 2016 Q3 and forecasts for 2016 Q4*, NBP, October 2016.

[27] However, the imposition of social insurance contributions on civil law contracts has not affected the number of working persons according to the LFS (Labour Force Survey) data.

working-age population is decreasing on the back of the retirement of the baby boom generation.

The increase in the number of working persons in the economy, accompanied by stable economically active population, translates into further falls in unemployment (Figure 2.23). Decreasing unemployment and high demand for labour improve the bargaining power of employees and job seekers in wage negotiations with employers. As a result, wage growth was higher in 2016 Q2 and Q3 than in the previous quarters (Figure 2.24). Real wage growth is driven upwards by persistent deflation. However, at the same time, deflation reduces upward pressure on nominal wages, which may curb the scale of wage increases planned by corporates.[28]

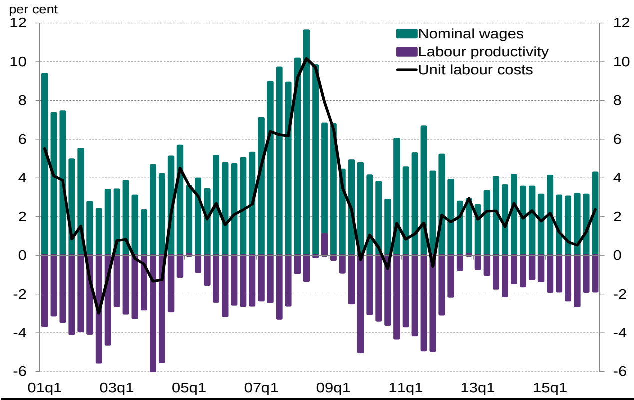
Under continued stable economic growth, the coming quarters are expected to see a further gradual acceleration in wage growth. A rise in a minimum wage and its introduction for persons working under civil law contracts and for the self-employed will support this process.[29]

Over the past quarters, the growth in unit labour costs has picked up, which could be attributed to higher wage growth amid labour productivity rising slightly slower than in the previous year (Figure 2.25). The growth of labour costs remains, however, relatively weak, which results in persistently subdued cost pressure generated by the labour market. At the same time, enterprises point to the slowly mounting upward pressure on wages.[30]

2.5 Asset markets

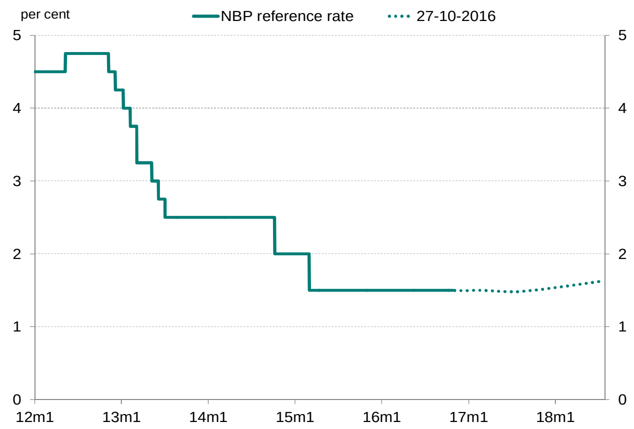
The Monetary Policy Council has been keeping NBP interest rates unchanged since March 2015, including the reference interest rate at 1.5%.

Figure 2.25 Decomposition of unit labour costs growth between growth in labour productivity and wages



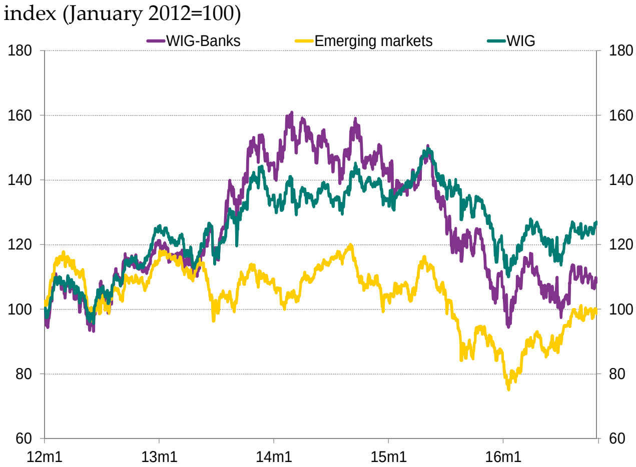
Source: GUS data, NBP calculations.

Figure 2.26 NBP reference rate and FRA-implied 3M interest rate



Source: NBP, Bloomberg data, NBP calculations.

Figure 2.27 Stock indices in Poland and MSCI emerging market index (January 2012=100)



Source: Bloomberg data.

[28] *NBP Quick Monitoring Survey. Economic climate in the enterprise sector in 2016 Q3 and forecasts for 2016 Q4*, NBP, October 2016.
[29] The monthly minimum wage will increase from PLN 1850 to PLN 2000, i.e. by 8.1% - *Regulation of the Council of Ministers of 9 September 2016 on the minimum wage in 2017*.
[30] *NBP Quick Monitoring Survey. Economic climate in the enterprise sector in 2016 Q3 and forecasts for 2016 Q4*, NBP, October 2016.

Markets are expecting NBP interest rates to remain stable in the coming quarters (Figure 2.26).

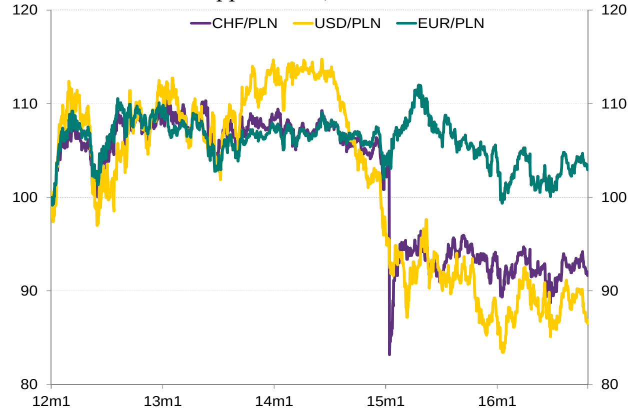
2.5.1 Financial market

The gradually improving sentiment in the international financial markets over the past few months (see Chapter 1.5 *Global financial markets*) has had a positive impact on Polish share prices (Figure 2.27). The increase in the banking sector share prices since the previous *Report* has additionally been driven by the expected changes in the provisions of the bill on foreign currency loans.[31]

Under these conditions, the exchange rate of the zloty against the major currencies has remained relatively stable, and since the previous *Report* it has slightly strengthened (Figure 2.28). The recent appreciation of the zloty – as well as the currencies of other emerging economies – has been driven by better sentiment in the international financial markets (see Chapter 1.5 *Global financial markets*).

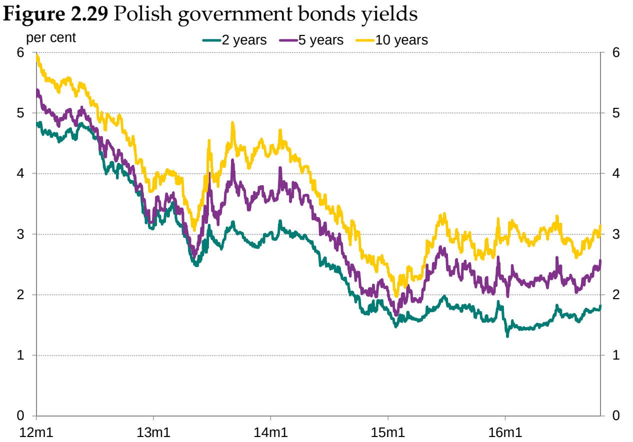
The yields on Polish government bonds have also stayed relatively stable since mid-2015 (Figure 2.29). An improvement in the market measures of Poland's credit standing, which returned to the levels prevailing before one of the rating agencies lowered its assessment in January 2016, led to a temporary fall in yields, especially with respect to bonds with long maturities.[32]

Figure 2.28 Exchange rate of the Polish zloty (index, January 2012 = 100, increase denotes appreciation)



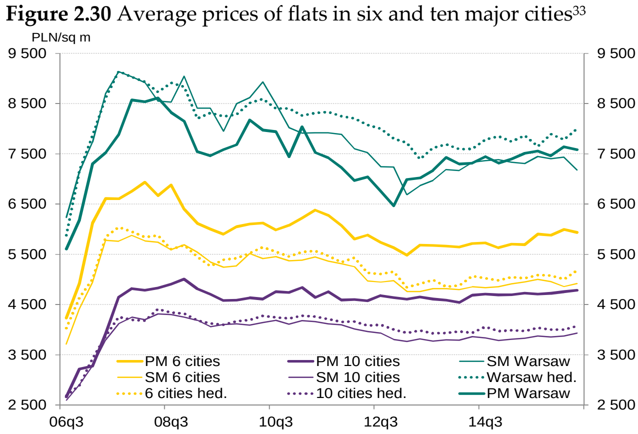
Source: Bloomberg data.

Figure 2.29 Polish government bonds yields



Source: Bloomberg data.

Figure 2.30 Average prices of flats in six and ten major cities[33]



Source: NBP calculations based on the NBP survey.

[31] In August a draft bill was introduced on the return of certain liabilities ensuing from loan and credit agreements, concerning mortgage loans in foreign currencies.
[32] Also another rating agency upheld its credit standing assessment for Poland in September 2016, which added to this effect.
[33] PM – primary market, SM – secondary market, hed. – hedonic price index. Transaction prices in the primary and secondary market – the average weighted with the share of the housing stock in a given city in the total housing stock of all cities. 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.

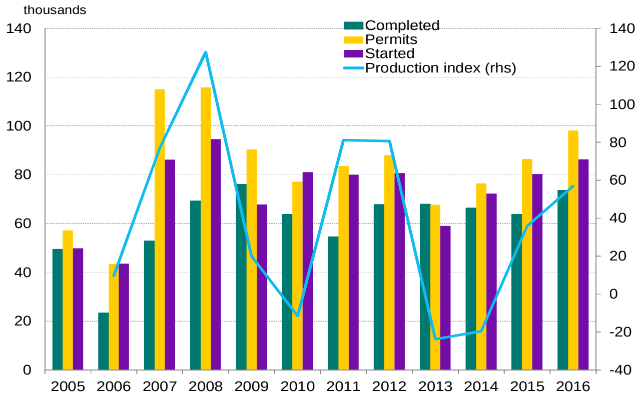
2.5.2 Residential real estate market[34]

The housing market recovery continues, as reflected in a further rise in the number of dwellings sold. However, it is not accompanied by a marked increase in residential real estate prices (Figure 2.30), which is related to high supply of housing.

Growing housing demand is fuelled by gradually improving labour market conditions (see Chapter 2.4 *Labour market*), lower interest rates on mortgage loans than in previous years and a relatively high profitability of rental housing as compared to other forms of investment[35]. These factors should have a stabilizing effect on demand for housing in the coming quarters. However, the termination of funds for 2016 and the suspension of subsidy applications for 2017 under the "Flat for the Young" government programme (see Chapter 2.6 *Lending and money supply)* might be conducive to lower demand.

High sales of housing in the primary market, together with persistently relatively low house construction costs, encourage real estate developers to embark on new investment, as reflected in the growing number of building permits issued and homes under construction (Figure 2.31). As a result, rising housing demand is accompanied by growing current and future supply of housing, which is curbing house price growth.

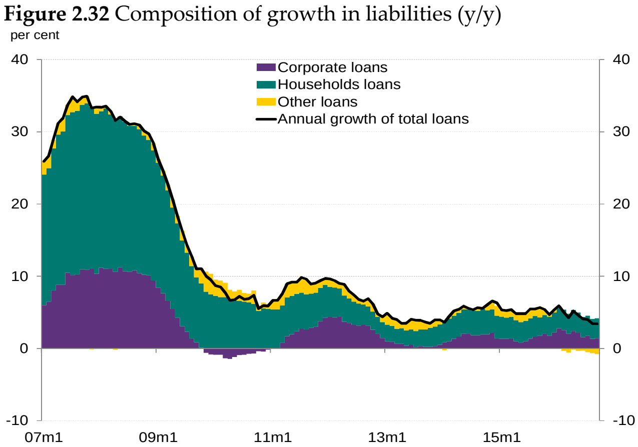
Figure 2.31 Housing construction in Poland in second quarters



Source: GUS data, NBP calculations.

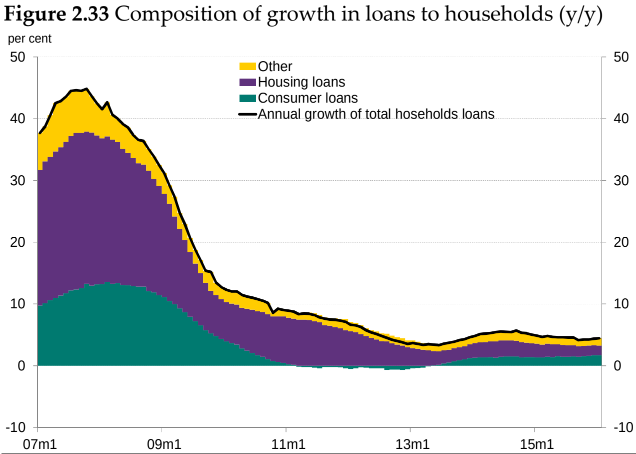
Production index is a number of development projects started in the real estate market less introduced into the market (12-month moving value).

Figure 2.32 Composition of growth in liabilities (y/y)



Source: NBP data.

Figure 2.33 Composition of growth in loans to households (y/y)



Source: NBP data.

Other loans to households denote operation and investment loans to small entrepreneurs.

[34] 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).

[35] The estimated profitability of home rental, transaction costs disregarded, exceeds almost threefold the average yield on 10-year government bonds and almost twofold the average interest rate on housing loans. See: *Information on home prices and the situation in the housing and commercial real estate market in Poland in 2016 Q2.*

2.6 Lending and money supply

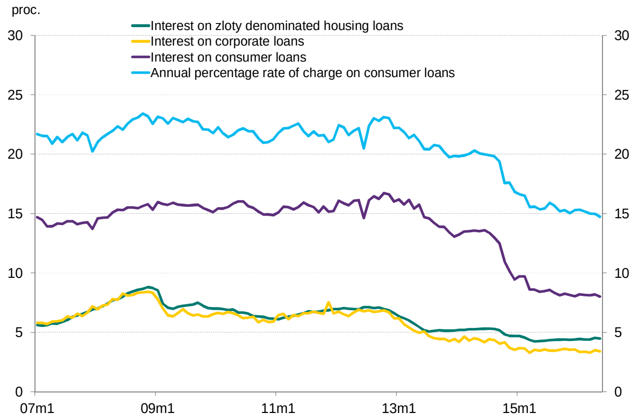
The annual growth in total lending to the non-financial sector has remained stable, although it slowed somewhat in 2016 Q3 (to 3.6% y/y from 4.6% in 2016 Q2; Figure 2.32).[36] Lending activity is supported by sustained stable economic growth and improving labour market conditions.

A steady rise in loans to households (4.5% y/y in 2016 Q3 compared to 4.6% in 2016 Q2; Figure 2.33) continue to be the main driver of total lending growth. The growth of this credit category is underpinned by favourable labour market conditions, consumer optimism and lower interest rates than in previous years (Figure 2.34). Against this background, consumer loan growth accelerated again in 2016 Q3 (to 8.4% y/y from 8.3% in 2016 Q2 and 7.6% in 2016 Q1).

Following a period of a gradual slowdown, housing loan growth stabilised in 2016 Q3 (at 2.8% y/y against 2.9% in 2016 Q2).[37] While the stock of PLN-denominated housing loans is growing rapidly (10.3% y/y in 2016 Q3), that denominated in foreign currency is on a steady decline (at the rate of 6.4% y/y in 2016 Q3), which reduces the risk related to this credit category (Figure 2.35). A factor containing growth of housing loans is a consistent tightening of lending policy in this credit segment by banks.[38] In the second half of 2016, another factor acting in this direction is the fact that the annual limit of loan subsidies under the "Flat for the Young" programme, has already been reached, for both 2016 and 2017.[39]

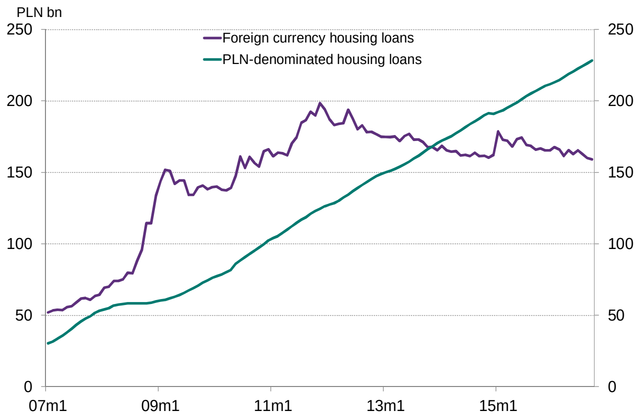
A material contribution to lending to the non-financial sector is also made by corporate loans (rising at the rate of 5.2% y/y in 2016 Q3

Figure 2.34 Interest rates on main loan categories



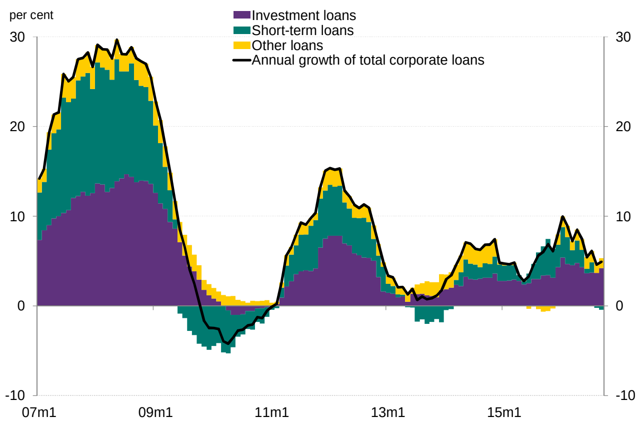
Source: NBP data.

Figure 2.35 Value of foreign currency and zloty denominated housing loans



Source: NBP data.

Figure 2.36 Composition of growth in loans to companies (y/y)



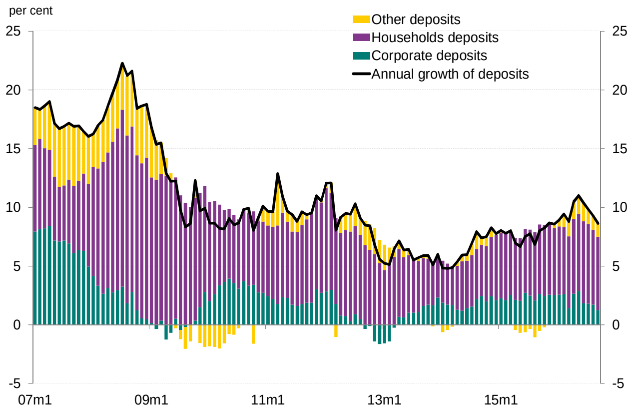
Source: NBP data.
Other loans to companies denote i.a. loans granted for securities purchases and export credits.

[36] In this chapter, growth in lending to a given sector of the economy is defined as growth in receivables of monetary financial institutions from the sector.
[37] Starting from the release of MFIs balance sheet data for August 2016, data on housing loans also include the category of purchased receivables.
[38] *Senior loan officer opinion survey on bank lending practices and credit conditions. 3rd quarter 2016*, NBP.
[39] As all funds scheduled for 2016 had been used up, in March BGK started to accept applications for 2017. However, this was terminated in July after the 50% limit on funds scheduled for 2017 was used up.

against 7.1% in 2016 Q2). Corporate loan growth is supported by sound financial performance of enterprises (see Chapter 2.3 *Financial situation in the enterprise sector*) and lower interest on loans than in previous years. Lending to the corporate sector is mainly fuelled by rising investment loans (at the pace of 7.1% y/y in 2016 Q3), despite a recent decline in corporates' investment activity (see Chapter 2.2.2 *Investment*). At the same time – according to the banks' survey responses – the financing needs of enterprises for fixed investment decreased[40], which contributed to a slight slowdown in investment loans. Also the growth of short-term corporate loans has decelerated recently (Figure 2.36). The tightening of some lending terms by banks, mainly raising credit spreads in 2016 Q2[41], may have curbed the growth in lending to enterprises. However, the availability of credit for companies remains high, which should contribute to an acceleration of lending to enterprises in the coming quarters.[42]

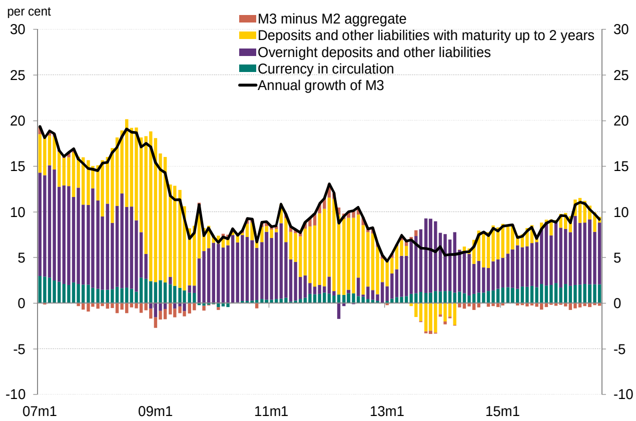
Growing lending is accompanied by a rapid increase in deposits (at the rate of 9.9% y/y in 2016 Q3) and monetary aggregates (Figure 2.37; Figure 2.38). The growth in deposits is mainly driven by a stable – albeit recently somewhat slower – increase in household deposits. This slowdown may be related to a rise in cash in circulation and an increased – amid lower uncertainty in financial markets (see Chapter 2.5.1 *Financial market*) – share of riskier forms of investments (equities and participation units of investment funds) in households' financial assets.

Figure 2.37 Composition of growth in bank deposits included in M3 monetary aggregate



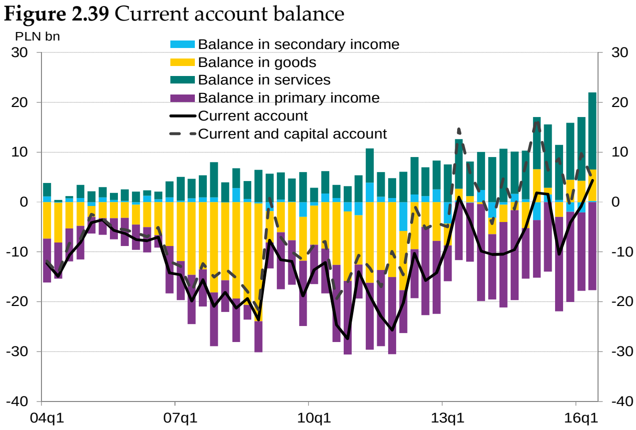
Source: NBP data.

Figure 2.38 Composition of growth in M3 monetary aggregate (y/y)



Source: NBP data.

Figure 2.39 Current account balance



Source: NBP data.

[40] *Senior loan officer opinion survey on bank lending practices and credit conditions. 3rd quarter 2016*, NBP.

[41] In 2016 Q2, in the enterprise sector credit spread over the interbank market rate (WIBOR3M) rose by 0.3 percentage points to 1.9%.

[42] The high availability of credit to the enterprise sector is evidenced by the fact that merely 12% of loan applications have been denied recently. See *NBP Quick Monitoring Survey. Economic climate in the enterprise sector in 2016 Q2 and forecasts for 2016 Q3*, NBP, July 2016.

2.7 Balance of payments

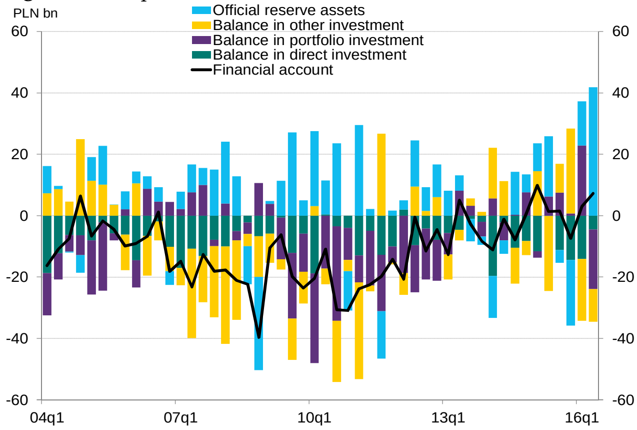
In 2016 Q2, the trade surplus continued to widen, and foreign portfolio investors' holdings of domestic debt securities increased following a decline in 2016 Q1. The inflow of EU funds to Poland in 2016 Q2 temporarily decreased as a result of the completion of the previous EU financial framework.

The current account balance in 2016 Q2 was positive and higher than in the same period of the previous year, due to the rise in the trade surplus (Figure 2.39; see Chapter 2.2.4 *External trade*).[43]

In 2016 Q2, the inflow of EU investment funds came to a halt. As a result, the capital account balance was close to zero.[44] The decrease in inflow of EU funds was related to the completion of the 2007-2013 financial framework[45], accompanied by only a slight inflow of funds under the 2014-2020 financial framework.

The above developments led to a surplus in the combined current and capital account balance in 2016 Q2 and a net capital outflow from Poland (Figure 2.40).[46] Foreign exchange reserves increased, which was largely attributable to both NBP's own transactions[47] and transactions conducted for the Ministry of Finance. Foreign net assets of Polish monetary financial institutions[48,49] and portfolio investments rose. Yet the scale of capital outflow was contained by an increase in

Figure 2.40 Capital account balance



Source: NBP data.

Positive values indicate an increase in Polish net assets (net capital outflows).

Table 2.3 Selected external stability indicators

	2013	2014	2015 q1	2015 q2	2015 q3	2015 q4	2016 q1	2016 q2
Current account balance (CAB)/GDP	-1.3	-2.0	-1.3	-0.5	-0.4	-0.3	-0.4	-0.3
Current and capital account balance/ GDP	1.0	0.4	1.7	1.9	2.5	2.1	1.7	1.5
Trade balance/GDP	-0.1	-0.8	-0.2	0.1	-0.1	0.5	0.4	0.7
Official reserve assets in monthly imports of goods and services	5.2	5.3	5.5	5.8	5.6	5.3	5.4	5.5
Foreign debt/GDP	70	72	73	74	74	72	71	75
Net international investment position/GDP	-69	-68	-67	-66	-65	-63	-63	-61
Official reserve assets/foreign debt (up to 1Y) (per cent)	94	110	107	104	105	108	107	117

Source: NBP, Ministry of Finance data.

The last indicator includes foreign debt and the level of official reserves at the end of the period.

[43] Preliminary balance of payments data indicate that in July and August current account was negative, though narrower than in the same months of the previous year.
[44] In July and August 2016, financial account remained close to zero.
[45] Even though the disbursement of EU funds under the previous EU financial framework (2007-2013) was completed at the end of 2015, part of these funds are still being settled and the beneficiaries will be able to apply for the reimbursement of the funds also in 2017. As a result, the inflow of EU funds under the 2007-2013 financial framework will continue to raise the capital account balance this year and in the following year, albeit to a much smaller extent than in the previous quarters.
[46] In July and August 2016, there was a net capital inflow to Poland.
[47] The significant increase in NBP's foreign exchange reserves was accompanied by an increase in NBP's other investment liabilities. These changes resulted largely from the repo transactions conducted by NBP as a part of foreign exchange reserve management.
[48] Monetary financial institutions discussed in this section comprise banks, credit unions (SKOKs) and money market funds.
[49] The increase in net assets of Polish monetary financial institutions was driven by both an increase in these entities' foreign assets and a decrease in their liabilities.

foreign portfolio investors’ holdings in Poland, particularly in the debt securities market, and by the inflow of foreign direct investment.

The indicators of Poland’s external imbalance remain favourable (Table 2.3). In particular, the ratio of the current account balance to GDP has risen again and is the highest since 1995 (in four-quarter moving terms).

3 Monetary policy in July – November 2016

At the meetings between July and November 2016 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 2016 as well as the *Information from the meeting of the Monetary Policy Council* in November 2016. *Minutes of the Monetary Policy Council decision-making meeting* in November 2016 will be published on 24 November, and thus included in the next *Report*.

Minutes of the Monetary Policy Council decision-making meeting held on 6 July 2016

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

During the discussion on external economic conditions, it was observed that global economic growth remained moderate and uncertainty about its outlook remained. It was highlighted that a significant part of this uncertainty came from the voting results of the United Kingdom's (UK's) European Union (EU) referendum. It was noted that in the euro area economic recovery continued and data releases on employment and consumer sentiment were supportive of the outlook for consumption. At the same time, it was stressed that the UK's decision to withdraw from the EU had led to an increase in downside risks to economic outlook in the euro area. Yet, certain Council members argued that the uncertainty arising from the UK's future exit from the EU might be concentrated in the British economy and its immediate environment. It was stated that an in-depth assessment of the impact of the UK's departure from the EU on global economic conditions would be possible only after its conditions and timing had been determined.

Referring to developments in the United States, it was noted that moderate GDP growth in this country continued, but the economic outlook was difficult to assess. In this context, it was underlined that consumer expenditure and retail sales continued to rise, but, at the same time, labour market data were weaker than expected and industrial output continued to decline.

The Council members emphasised that energy commodity prices – despite a recent uptick – remained considerably lower than in previous years. Certain Council members judged that there were no signs of renewed decline in energy commodity prices in the near future. However, they stressed that a falling trend in oil and financial asset prices could not be completely ruled out, which could point to a deterioration in the global economic outlook. It was pointed out that low commodity prices, coupled with moderate global economic activity, were the main factors of extremely weak consumer price growth in many economies, including the euro area.

It was observed that under such circumstances the European Central Bank (ECB) maintained its policy interest rates near zero and had launched a corporate bond purchase programme in June. Some Council members took the view that given an intensification of downside risks to the economic outlook for the euro area, the period in which ECB interest rates are kept very low might be extended. In the United States, in turn, the interest rates had been left unchanged, but mixed signals about economic activity in this economy were adding to the uncertainty about the future decisions of the Federal Reserve.

When analysing the developments in global financial markets, the Council members drew attention to an increase in risk aversion following the announcement of the UK's EU referendum results. The rise in risk aversion was demonstrated in depreciation of exchange rates and a decline in asset prices in many economies, including Poland. The Council members pointed out that the market reaction to this event, while relatively strong, was short-lived. Certain Council members underlined that the zloty exchange rate fluctuations in response to external shocks – such as the outcome of the UK vote – might cushion the impact of those shocks on economic conditions in Poland.

While discussing the developments in Poland's real economy, the Council members assessed that GDP growth – having decelerated in 2016 Q1 – had probably picked up slightly in the following quarter. It was assessed that the increase in GDP growth had probably been driven by accelerating consumption, supported by the relatively robust growth of the wage bill, the launch of payments under the "Family 500 plus" programme, as well as higher – compared to the previous quarter – EU's Common Agricultural Policy direct payments. It was observed that while higher disposable income of households had not yet translated into more robust retail sales growth, it might have stimulated consumer expenditure not included in the present data, such as spending on services. Some Council members believed that following a decline in investment in the previous quarter, investment growth in 2016 Q2 was probably slow or even negative, as the uncertainty about future conditions for business activity remained and absorption of EU funds under the new EU financial framework was slow. Referring to longer-term investment trends, certain Council members emphasised the low share of investment in GDP, which – given the prospect of declining labour supply due to the population ageing – might adversely affect economic growth in the future.

The Council members underlined the sound labour market conditions reflected in high employment and a low unemployment rate. Yet, certain Council members noted that despite these favourable developments, the wage share in GDP in Poland was smaller than in most EU member states. With reference to the long-term outlook for the labour market, other Council members judged that this market was being distorted by low labour force participation rate. However, these members observed that the problem might be mitigated by a gradual increase in labour force participation among the oldest cohorts.

When discussing the economic outlook for Poland, the Council members assessed that after a temporary weakening in 2016 Q1, GDP growth would remain stable in the coming quarters, as suggested also in the July projection. At the same time, it was pointed out that GDP growth in the July projection was substantially lower compared to the previous forecasting round. A majority of the Council members expected GDP growth to turn out slightly higher than in the July projection. Certain Council members highlighted the fact that the downward shift in the GDP growth path in the July projection resulted partly from the inclusion of weaker real economy data from 2016 Q1, which – considering their temporary nature – should have little impact on activity growth in the quarters to come. In the opinion of the Council members, economic growth will continue to be primarily supported by a rise in consumption, which is likely to accelerate. Increasing consumer demand will be supported by higher disposable income of households resulting from the expanding wage bill and the disbursement of child benefits. The announced rise in the minimum wage might prove another factor supportive of consumption growth in the following years, as – in the opinion of certain Council members – it could translate into higher wages for better-paid employees. Other Council members argued, in turn, that the scale of the impact from the rise in the minimum wage on employment level was uncertain.

With reference to the outlook for investment, some the Council members assessed that investment growth would probably accelerate in the following quarters. In this context, attention was drawn to good financial standing of Polish companies, their high capacity utilisation and a prospect of higher absorption of EU funds under the new EU framework as expected by certain Council members already in the second half of 2016. Certain Council members were of the opinion that, over longer run, investment and, to a lesser extent, consumption might be supported by an announced government scheme for rental housing construction (“Housing Plus”). Other Council members held the view that assessment of investment outlook in the coming quarters was complicated due to the uncertainty regarding the pace of EU funds spending and firms' propensity to invest, as well as the extent of the "Housing Plus" scheme.

When assessing the potential impact of the UK’s withdrawal from the EU on the Polish economy, it was underlined this assessment was subject to high uncertainty. Some Council members expressed an opinion that the impact of the UK's exit from the EU on Poland’s economic activity would probably be limited. The effects of any changes in the conditions for trade exchange and the access to the UK labour market were also judged limited and extended over time. Certain Council members highlighted the fact that the impact of weaker external economic conditions resulting from the UK’s vote on Polish exports would be mitigated by the recently observed depreciation of the zloty. Yet, certain Council members pointed out that should the zloty appreciate, export growth might decelerate, which – given the expected sharp increase in domestic demand, fuelling import growth – might lead to current account imbalance. Other Council members believed that elevated uncertainty related to the UK's decision might encourage investors to redirect capital from the UK to other European economies, including Poland.

While analysing price developments in Poland, it was stressed that price growth remained negative, but deflation had slowed down somewhat in June. It was emphasised that this was accompanied by a slight rise in core inflation measures and a marked weakening in the pace of decline in producer prices. It was also noted that wage growth in the corporate sector had risen recently, which might be a sign of accelerating wage growth in the whole economy.

The majority of the Council members were of the opinion that the ongoing deflation had not yet adversely affected the decisions of economic agents. Certain Council members additionally expressed the view that due to the stable – though low– inflation expectations of economic agents, the risk of negative effects of deflation materialising in the future was also limited. In turn, certain Council members held the view that the ongoing deflation could be one of the factors dragging on corporate investment activity. These members indicated that due to deflation borrowing costs in real terms were higher than in nominal terms. In their opinion, deflation has been also adding to the uncertainty about future profitability of corporate activity, which might deteriorate the assessment of the outlook for the corporate sector. Other Council members noted, however, that relatively mild deflation might only discourage projects with a low expected rate of return. Yet, certain Council members were of the opinion that the decline in prices might increase firms' propensity to launch modernisation investment projects, as falling sales prices encourage labour productivity improvements and reduction in costs.

With respect to the outlook for price growth, it was observed that in line with the July projection it should increase above zero in the last quarter of 2016 and return near the lower bound for deviations from the target in 2017 Q2. The opinion was expressed that the path for price growth in the July projection – despite the output gap closing more slowly than expected – was only marginally weaker than previously anticipated. It was emphasised that price growth might be boosted by the weaker zloty exchange rate, higher child benefits and the forecasted acceleration in wage growth, additionally supported by the announced rise in the minimum wage.

While discussing decisions concerning the NBP interest rates, the Council judged that they should remain unchanged at the July meeting. A majority of the Council members pointed out that deflation was not adversely affecting decisions of economic agents and within one year and a half price growth was expected to have approximated the lower bound for deviations from the inflation target. Furthermore, in the opinion of the Council members, sustainable economic activity growth would be continued in the coming quarters. It was observed that weakening in external demand, if any, would be offset by expanding domestic demand, additionally supported by looser fiscal policy. The Council members confirmed that against this background stabilisation of interest rates helped to keep the Polish economy on a sustainable growth path and maintain macroeconomic balance. An additional argument for interest rate stabilisation was – in the opinion of the Council members – the elevated uncertainty surrounding domestic and external conditions for monetary policy. Some Council members pointed out that the Council's decision should also take into account the impact of the interest rates level on the stability of the domestic financial sector.

Some Council members did not rule out the possibility of an interest rate decrease in the future should domestic economic growth weaken considerably, or in the event of deeper deflation or signs of its negative impact on the behaviour of economic agents. Certain Council members suggested that an interest rate cut might be justified already in the following few quarters. They argued that the interest rate on corporate and household loans remained high in comparison with other European countries, and its reduction – which would be supported by a cut in the NBP interest rates – would be conducive to higher GDP growth, most notably by boosting investment activity growth. In contrast, other Council members judged that the present interest rate on investment lending was already low, with an interest rate cut possibly triggering the launch of projects with a low expected rate of return.

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%.

Minutes of the Monetary Policy Council decision-making meeting held on 7 September 2016

At the meeting, the Council members discussed monetary policy against the background of macroeconomic developments in Poland and abroad.

The Council reviewed the developments abroad, which are relevant for economic conditions in Poland. It was recognised that global economic growth remained moderate, but the uncertainty about its outlook continued. It was noted that economic growth in the euro area was stable and emphasised that in Germany – Poland's main trading partner – in 2016 Q2 it was higher than expected despite a certain slowdown. GDP growth in this country has been supported by stable rise in consumption driven by improving labour market conditions and high public expenditure growth.

A number of factors, which had a negative impact on economic activity in the euro area, particularly on investment expenditure, were cited. Attention was drawn to weak economic conditions in non-European emerging market economies, low growth in global industrial production and trade, and the uncertainty regarding the situation in the banking sector in several euro area member states. It was underlined that – contrary to previous concerns – the uncertainty related to the United Kingdom's withdrawal from the European Union had not yet had a significant impact on economic activity in Britain or the euro area.

With reference to developments in the United States, it was noted that conditions in the US labour market had improved, which had eased concerns about persistent deterioration in economic conditions in this country. However, it was highlighted that GDP growth in the United States was lower than in previous years due to a fall in investment, particularly in the oil extraction industry, related to earlier sharp fall in oil prices, and to slower export growth amid moderate global economic growth and relatively strong US dollar.

Regarding the emerging market economies, the Council members noted that the economic activity indicators pointed to further slowdown in China. At the same time, it was assessed that temporary stabilisation of GDP growth in China in 2016 Q2 had been achieved thanks to significant fiscal expansion and an acceleration in lending growth, which had perpetuated long-term risks for the Chinese economy. It was pointed out that the recession in Russia was gradually receding, though economic conditions in this country would most likely stay weak.

The Council members emphasized that the prices of oil and many other commodities remained lower than in previous years. It was indicated that low commodity prices, along with moderate global economic activity, were the main factors behind the low consumer price growth in many economies.

The Council members pointed out that against this background, the European Central Bank was keeping interest rates close to zero, including the deposit rate below zero, and continued financial asset purchases. It was pointed out that although the Federal Reserve had indicated a possible interest rate increase in the future, there was a considerable uncertainty about its timing. An opinion was expressed that this uncertainty had a negative impact on financial market sentiment. However, it was highlighted that global financial asset prices had risen since the previous Council meeting, which was due to lower concerns regarding the United Kingdom's withdrawal from the European Union.

When discussing developments in Poland's real economy, the Council members pointed to a slight increase in GDP growth in 2016 Q2. It was noted that economic growth – although somewhat lower than in 2015 – was close to potential output growth, which does not result in imbalances building up in the economy. It was stressed that the main factor behind the growth in 2016 Q2 had been still a steady increase in consumer demand, supported by favourable consumer sentiment and gradual improvement in the labour market, translating into an acceleration in wage growth in 2016 Q2. It was recognised that higher growth in consumption could also be driven by the launch of the "Family 500 plus" programme, although the scale of its impact on consumption growth was hard to assess at the time of the meeting. Another factor contributing to higher GDP growth in 2016 Q2 was significant acceleration in exports. However, the Council members observed that GDP growth had been contained by the fall in investment, caused mainly by temporarily lower EU funds absorption after the previous EU financial framework had expired. As some Council members argued, the same factor stood behind a fall in investment in other Central and Eastern European economies. In addition, some Council members pointed out that the uncertainty regarding the legal environment of business could also be contributing to weaker investment growth.

While discussing the economic outlook in Poland, the Council members judged that stable economic growth would continue in the coming quarters and – in the opinion of some Council members – it could even accelerate slightly. The Council members assessed that consumption would remain the major driver of economic growth. It was stressed that although in early 2016 Q3 retail sales growth was still moderate, incoming data, including data on wages, and also the growth in consumer sentiment indicators, suggested that consumption was likely to accelerate further. Growth in consumption in the coming quarters should also be driven by emerging effects of an acceleration in disbursement of the child benefits.

Some Council members pointed out that stable consumption growth could be insufficient for keeping GDP growth close to the currently observed level in 2017. For this reason, investment outlays would be crucial for GDP growth remaining close to the level observed at the time of the meeting. Referring to the investment outlook, some Council members judged that in 2017 investment growth would most likely pick up, supported by an increase in the EU funds absorption amid good financial standing of enterprises and growing capacity utilisation of firms. Some Council members pointed out that in the longer run investment growth should be additionally supported by government infrastructure projects, including those implemented under the Responsible Development Plan. In the opinion of some Council members, investment growth in the coming quarters is, however, fraught with uncertainty. Certain Council members pointed out that investment could rise slower than expected in the July projection due to i.a. the uncertainty about economic growth outlook for Poland and abroad, the uncertainty about the timing of an acceleration in the EU funds absorption as well as the uncertainty regarding the legal environment of business. Some Council members noted in addition that – due to fiscal convergence criterion on the level of the general government deficit – increasing public spending needed to co-finance investments within the new EU financial framework might prove difficult.

When analysing price developments in Poland, it was stressed that the annual consumer price index remained negative, yet signs of a reversal in deflationary trends had appeared. In particular, attention was drawn to the increase in the GDP deflator and the growth of consumer prices influenced by domestic economic conditions. Attention was also drawn to the signs of cost pressure in the economy, manifested in the positive and rising growth in producer prices excluding energy and an acceleration in unit labour cost growth. The majority of the Council members underlined that there were no visible signs that the current deflation had a negative impact on the activity of economic agents. However, certain Council members pointed out that there was considerable uncertainty regarding the potential effects of deflation. Taking this into account, the Council members underlined that it was necessary to continue to analyse the business conditions of enterprises and consumer behaviour for possible adverse effects of the negative price growth.

Referring to the outlook for price growth, it was pointed out that in the coming months the annual consumer price index would remain negative, although the scale of deflation would be gradually subsiding due to dissipating effects of the earlier drop in global commodity prices. It was emphasised that higher price growth in the coming quarters would also be supported by stable GDP growth and further acceleration in wage growth. As a consequence – in the opinion of the majority of the Council members – in 2017 price growth would be materially positive. However, certain Council members did not rule out that deflation in Poland could last longer. It was stressed that the main source of uncertainty for growth outlook came from a possibility of a deterioration of the global economic conditions and of a fall in commodity prices, which would reduce price growth in the environment of the Polish economy and thus also domestic price growth.

While discussing the NBP interest rates, the Council members judged that they should remain unchanged. The majority of the Council members pointed out that – given the available data at the time of the meeting – deflation was not adversely affecting decisions of economic agents. Moreover, in 2017 price growth should already be clearly positive. The majority of the Council members also pointed out that GDP growth – despite some deceleration compared to the previous year – remained close to the potential growth rate, and in 2017 it was expected to accelerate. The Council members confirmed their assessment that against this background stabilisation of interest rates helped to keep the Polish economy on a sustainable growth path and maintain macroeconomic stability. An additional argument for interest rate stabilisation was – in the opinion of the Council members – the elevated uncertainty regarding domestic and external conditions for monetary policy.

At the same time, some Council members assessed that a further slowdown in economic growth, prolonged period of deflation and adverse effects of deflation might be a justification for a decrease in the interest rates in the future. Certain Council members suggested that the interest rate cut could be justified already in the following few quarters. They emphasised that the reduction in the NBP interest rates would be conducive to higher GDP growth, most notably by boosting investment activity growth. However, other Council members judged that the level of interest rates on loans was not currently a factor curbing investment growth in the economy. For this reason – in the opinion of these Council members – the reduction in the NBP interest rates could not have a limited impact on economic activity; however, it could lead to imbalances in the financial and real estate markets. At the same time, some Council members pointed out that should economic growth accelerate markedly and inflationary pressure appear, creating a risk of exceeding the inflation target in the medium term, it could be appropriate to raise the interest rates. However, these Council members indicated that in light of the current forecasts, stabilisation of the interest rates in the future was the most likely scenario.

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%.

Minutes of the Monetary Policy Council decision-making meeting held on 5 October 2016

At the meeting, the members of the Monetary Policy Council discussed monetary policy against the background of macroeconomic developments in Poland and abroad.

The Council reviewed the developments abroad, which have an impact on economic conditions in Poland. It was recognised that global economic growth remained moderate, but uncertainty about its outlook continued. It was noted that economic growth in the euro area was stable despite negative impact of weak economic conditions in the non-European emerging market economies. Attention was drawn to signs of recovery in European and German industrial sector and to a rise in export orders in Germany. It was stressed that this could support growth in Polish industrial output, particularly export manufacturing. It was assessed that GDP growth in the United States might have picked up slightly in 2016 Q3, but – like in the previous quarters – had been held back by low investment growth rate. It was also pointed out that in China GDP growth was lower than in previous years, yet data on activity indicated a stabilisation of economic conditions in the previous months. At the same time, an opinion was expressed that this stabilisation had been achieved due to significant fiscal expansion and an acceleration in lending growth, which had perpetuated long-term risks for the Chinese economy. Also in Russia, recession had been alleviated, mainly by the rise in oil prices since the beginning of the year.

The Council members emphasised that prices of oil and many other commodities – despite the rise earlier in the year – were lower than in previous years. It was also indicated that at the time of the meeting the level of oil prices was close to that in previous year, which implied a near-zero annual price growth rate of oil. It was judged that low commodity prices and moderate global economic activity had a negative impact on consumer price growth in many economies, though to an increasingly lesser extent. Some Council members pointed out that a risk of a fall in oil prices stemming from still high supply of oil was a source of uncertainty for the expected price growth, both in Poland and abroad. They argued that this risk has been increased further in the recent period by a renewed rise in shale oil production in the United States.

Referring to monetary policy abroad, it was highlighted that the European Central Bank was keeping interest rates close to zero, including the deposit rate below zero, and continued financial asset purchases. At the same time, it was stressed that there were signs of a possible gradual reduction of asset purchases in the future. It was also pointed out that the Federal Reserve, despite the relatively favourable data on the US economic activity, had not increased interest rates in September and had again revised down their interest rate projections for the coming years.

When discussing developments in the domestic economy, the Council members underlined that stable economic growth continued in Poland. In particular, the data available at the time of the meeting indicated that GDP growth in 2016 Q3 had probably been close to that in the previous quarter. The main driver of economic growth is steadily increasing consumer demand, supported by gradual improvement in the labour market, favourable household sentiment and the child benefit payments under the "Family 500 plus" programme. It was argued that data on economic activity in August, most notably an increase in retail sales growth, had confirmed such an assessment. It was also indicated that industrial output had risen markedly in August following a temporary decline in the previous month, and that sentiment in manufacturing had improved significantly. Attention was also drawn to the balance of payments data, which confirmed the acceleration in export growth in 2016 Q2, despite the fall in world trade volumes observed at that time. It was also highlighted that fall in construction and assembly output had deepened in August, which – like in the previous months – was most probably due to a decline in investment driven by the temporarily lower absorption of EU funds after expiration of the previous EU financial framework. Some Council members were of the opinion that the lower investment growth rate might have resulted from uncertainty about the regulatory environment of business in Poland.

During the discussion about the labour market, it was noted that employment had continued to rise steadily, accompanied by a sustained decline in the unemployment rate. It was highlighted that job vacancies were at historical highs, which indicated ongoing high demand for labour. It was underlined that the recovery in the labour market was translating into growing wage pressure in the corporate sector, and, in effect, wage growth was already higher than in previous years. An opinion was expressed that a hike in the minimum wage in early 2017 could be also conducive to faster wage growth in the coming quarters.

While discussing the economic outlook for Poland, the majority of the Council members judged that stable economic growth would most likely continue in the following quarters. In the opinion of certain Council members, GDP growth could even accelerate slightly. Growing consumption will remain the major driver of economic growth. In the further quarters, the economic activity should also be propped up by the expected recovery of investment outlays, including those financed with the EU funds. To reinforce this view, some Council members cited a significant increase in the number of new EU financial framework contracts signed in the recent quarters. Certain Council members noted that the favourable outlook for consumer demand and the recent improvement in sentiment in the industrial sector would also support the recovery in corporate investment . At the same time, in the opinion of certain Council members, over the longer run investment growth might be additionally backed by the "Housing Plus" programme. However, as certain Council members pointed out, due to a deterioration of some sentiment indicators in the previous months and the uncertainty about the regulatory environment of business, it could not be excluded that low investment growth would continue in the coming quarters.

When analysing price developments in Poland, it was underlined that annual consumer price growth remained negative, yet deflation was gradually subsiding. It was judged that the increase in price growth resulted mainly from dissipating effects of the earlier sharp fall in global commodity prices. Another factor conducive to higher price growth cited during the meeting was the gradual acceleration in wage growth in Poland, translating into faster growth in unit labour costs. It was pointed out that the reversal of deflationary trends was also confirmed by the producer price index, in particular net of energy prices, which had been growing since early 2016. It was also pointed out that the growth rate of consumer prices sensitive to domestic economic conditions had been significantly positive for several months. The majority of the Council members judged that there were still no visible signs that deflation had affected the activity of most economic agents. Certain Council members underlined that it was still necessary to analyse the business conditions of enterprises and consumer behaviour for possible adverse effects of the negative price growth.

Referring to the outlook for price growth, the majority of the Council members judged that the scale of deflation would continue to gradually decrease in the coming months. It was stressed that, according to both NBP's and external forecasts, the annual price growth rate should be close to 1% in 2017. It was pointed out that higher price growth would be supported by stable GDP growth, amid accelerating wage growth and higher child benefits. However, certain Council members were of the opinion that, due to downside risks to oil prices in the global markets, it could not be ruled out that the period of deflation in Poland might extend. In turn, certain Council members expressed a view that the price growth rate could be higher than indicated by the forecasts available at the time of the meeting. Stronger acceleration in price growth could, in their opinion, be backed by faster closure of the output gap and higher growth in unit labour costs. At the same time, these Council members underlined that the impact of unit labour cost growth on price developments could be mitigated for some time if companies reduced their profit margins.

While discussing the level of NBP interest rates, the Council members judged that they should remain unchanged. The Council members confirmed their assessment that the stabilisation of interest rates helped to keep the Polish economy on a sustainable growth path and maintain macroeconomic stability. The majority of the Council members pointed out that in 2017 price growth should already be clearly positive. The majority of the Council members also assessed that GDP growth – though somewhat lower than in 2015 – remained close to potential output growth. An additional argument for interest rate stabilisation was elevated uncertainty regarding domestic and external conditions for monetary policy. Some Council members noted that the Council's decisions should also take into account the impact of the interest rates level on the stability of the domestic financial sector.

At the same time, some Council members pointed out that should economic growth accelerate markedly and inflationary pressure appear, creating a risk of exceeding the inflation target in the medium term, it could be appropriate to raise the interest rates. However, these Council members indicated that, in light of the data available at the time of the meeting, stabilisation of the interest rates in the following quarters was the most likely scenario. In turn, some Council members assessed that a further slowdown in economic growth, prolonged period of deflation and adverse effects of deflation might justify a decrease in the interest rates in the future. They emphasised that the reduction in the NBP interest rates would be conducive to higher GDP growth, most notably by boosting investment activity. Certain Council members underlined in addition that the level of real interest rates in Poland was relatively high compared to other countries in Central and Eastern Europe. Other Council members judged that the level of NBP interest rates was currently not a factor curbing investment growth in the economy, particularly taking into account high corporate savings allowing firms to finance business activity from their own funds.

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 8-9 November 2016

Global economic growth remains moderate with uncertainty about its outlook. In the euro area, despite negative impact of weak economic conditions in the non-European emerging markets on exports, economic growth is stable, as indicated by national accounts data for 2016 Q3. In the United States, GDP growth picked up in 2016 Q3 following several quarters of deceleration. In China, economic growth has stabilised at a lower level than in previous years. In Russia, recession is gradually receding.

Amid moderate global economic growth and lower commodity prices than in previous years, price growth in the environment of the Polish economy is still very low. However, annual price growth in commodity prices has been positive, leading to slightly higher inflation in some economies.

The European Central Bank has kept interest rates close to zero, including the deposit rate below zero, and has continued financial asset purchases. The Federal Reserve – after a hike in December 2015 – has kept the interest rates unchanged, pointing to their probable increase in the future.

In Poland, stable economic growth has continued, although current data indicate that in 2016 Q3 it may have fallen slightly. The main driver of growth is rising consumer demand, which is supported by the gradual improvement in the labour market, favourable household sentiment and the child benefit payments under the ”Family 500 plus” programme. Data on construction and assembly output indicate that declining investment is still containing economic activity. The decrease in investment is related to temporarily lower absorption of EU funds after expiration of the previous EU financial framework, as well as continued uncertainty about the regulatory environment of business.

Annual growth in prices of consumer goods and services has remained negative, yet deflation is gradually subsiding. Descending deflationary trends are also reflected by a growth in producer prices. The increase in price growth results from the dissipating effects of the earlier sharp fall in global commodity prices, and also the higher wage growth in Poland compared to previous quarters. Price growth is contained by low inflation abroad and negative output gap in the domestic economy. At the same time, inflation expectations remain low.

The Council became acquainted with the projection of inflation and GDP prepared by the Economic Institute. 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 21 October 2016 – there is a 50-percent probability that the annual price growth will be in the range of -0.7 ÷ -0.6% in 2016 (against -0.9 ÷ -0.3% in the July 2016 projection), 0.5 ÷ 2.0% in 2017 (compared to 0.3 ÷ 2.2%) and 0.3 ÷ 2.6% in 2018 (compared to 0.3 ÷ 2.6%). The annual GDP growth – according to this projection – will be with a 50-percent probability in the range of 2.5 ÷ 3.4% in 2016 (against 2.6 ÷ 3.8% in the July 2016 projection), 2.6 ÷ 4.5% in 2017 (compared to 2.4 ÷ 4.5%) and 2.2 ÷ 4.4% in 2018 (compared to 2.1 ÷ 4.3%).

In the Council's opinion, price growth will continue to gradually increase and in the coming quarters it will turn positive. Besides waned effects of the earlier falls in commodity prices, price growth in 2017 will be driven by an expected acceleration in GDP growth amid a further rise in wage growth and higher child benefits. In the coming quarters, the investment growth rate should also rise, supported by the good financial standing of enterprises and their high capacity utilisation, as well as the gradual increase in the absorption of EU funds. Such an assessment is supported by NBP November projection. The source of uncertainty for expected price developments is the risk of a fall in commodity prices.

The Council confirms its assessment that – given the available data and forecasts – the current level of interest rates is conducive to keeping the Polish economy on the sustainable growth path and maintaining macroeconomic balance.

The Council adopted *Inflation Report – November 2016* and *Opinion on the 2017 Draft Budget Act*.

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, work involved in the creation of this projection was supervised by Andrzej Sławiński, Director General of the Economic Institute. The process was coordinated by the Bureau of Macroeconomic Forecasts of the Economic Institute. Using the macroeconomic model NECMOD[50], 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 2016 Q4 to 2018 Q4. The starting point for the projection is 2016 Q3.

The projection was prepared under the assumption of the constant NBP interest rates taking into account the data available until 21 October 2016.

[50] 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

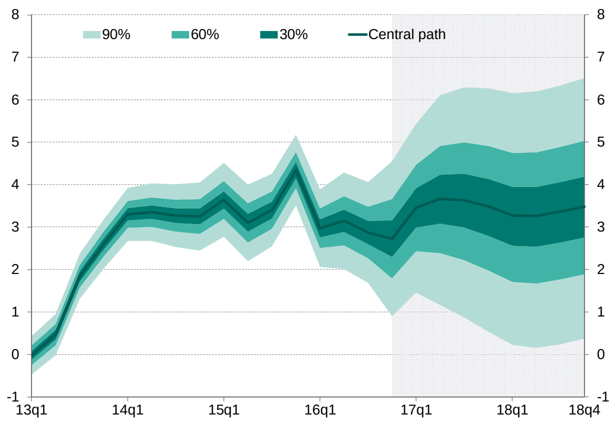
4.1 Summary

After a significant slowdown in GDP growth in Poland observed in the first half of 2016, acceleration in GDP growth may not be expected before 2017, and its scale will be close to that envisaged in the July projection. In the second half of 2016 the boosting effect of the "Family 500 plus" programme on economic growth will continue to be inhibited by declining investment driven by reduced absorption of EU funds resulting from the end of the EU financial framework 2007-2013.

Growing private consumption throughout the projection horizon will be driven by a further improvement in the labour market, as reflected in the pick-up in wage growth and a further gradual decline in the unemployment rate. In 2016-2017, growth in household disposable income will be supported by increased benefits under the "Family 500 plus" programme. Growth in consumer demand will also be fuelled by the low level of interest rates and rising consumer confidence.

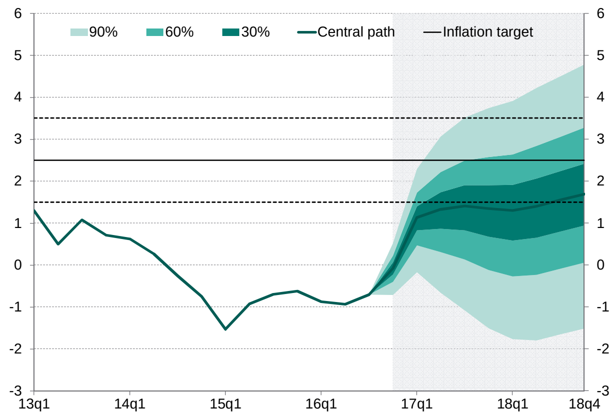
Declining investment in 2016, being mainly the result of the EU funding under the financial framework 2007-2013 having come to an end and the expected disbursement of funds under the new financial framework 2014-2020, is partly driven by corporates postponing their investment projects on account of heightened uncertainty in the economy that they signal. In this context, the increased scale of utilization of EU funds under the new financial framework in the years 2017-2018 will support growth in fixed capital formation, which will be also supported by the low interest rate level and high capacity utilization.

Figure 4.1 GDP (y/y %)



Source: GUS data, NBP calculations.

Figure 4.2 CPI inflation (y/y, %)



Source: GUS data, NBP calculations.

The economic growth path expected in the projection translates into only gradually closing of the currently negative output gap, reaching a level of -0.1% of potential GDP at the end of the projection horizon. The forecasted slight deterioration in the global business climate is a barrier to faster growth in domestic demand. The persistence of the negative output gap points to a relatively low demand pressure in the economy in the years to come, and consequently, the limited impact of growth recovery on the rise in inflation.

Over the projection horizon import prices are expected to rise only slightly, which is suggested by the forecasted low and relatively stable level of commodity prices in the global markets and the subdued inflationary pressure in the euro area. Rising cost pressure in the economy will also be curbed by slow growth in unit labour costs. Such developments of demand and costs determinants of consumer prices imply only a gradual rise in inflation, which will remain below the NBP inflation target by the end of 2018.

The uncertainty of the current projection is, to the greatest extent, determined by the uncertainty in the global economic developments. One of the major sources of this uncertainty is the risk of deeper than projected slowdown in China, mainly on account of a high and still growing debt of enterprises and local government entities.

Positive effects of the ECB's bond purchase programme and the implementation of the European Commission's Investment Plan may be a factor improving the global economic conditions. In such a scenario, especially under the assumption that the withdrawal of the United Kingdom from the European Union proceeds in a controlled manner, investment demand could fuel the euro area's GDP to a greater extent than at present.

The expected possible developments in the environment of the Polish economy point to a close-to-symmetric distribution of risks for CPI inflation and GDP which is reflected in the fan charts (Figure 4.1, Figure 4.2).

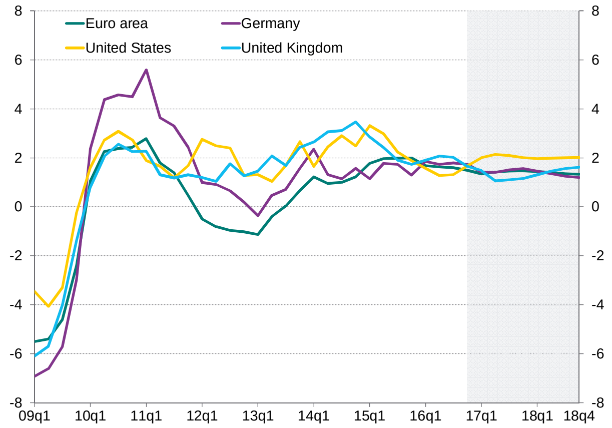
4.2 External environment

The current data point to a slight decline in uncertainty and a certain improvement in sentiment as compared to the initial strong negative response of the financial markets to the UK's decision to leave the European Union (Brexit).

Immediately after the referendum, the British pound weakened sharply. However, in the subsequent weeks the situation in the financial markets stabilized, and indices on the London stock market gradually returned to their previous levels. The prompt response of the Bank of England, namely the interest rate cut in August and the announcement of a further easing of monetary policy, was probably an important factor reducing the uncertainty. Indicators of economic activity in most sectors – apart from the construction and financial sectors – point to a slightly stronger sentiment after its rapid deterioration observed immediately after the announcement of Brexit. Due to the favourable situation in the labour market and the robust retail sales data, consumption in 2016 is expected to continue to fuel economic growth. At the same time, however, there appeared signs of the negative impact of the Brexit vote on future investments: the number of companies intending to reduce the scale of investment has increased, the situation in the commercial real estate market has deteriorated and the production of capital goods has diminished. This information is indicative of the likely reduction in fixed capital formation in the UK, despite improving price competitiveness of British exports after the depreciation of the British pound. Consequently, the years 2017-18 are expected to bring a slowdown in economic growth in the UK, which will be offset only to a limited extent by the government's announced more expansionary fiscal policy (Figure 4.3).

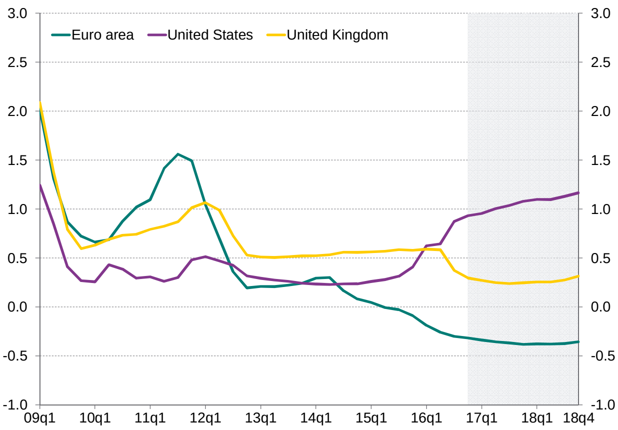
In the euro area the consequences of the UK referendum have been moderate to date. Consumer and corporate sentiment deteriorated to a relatively small extent. Adverse effects of Brexit on GDP growth in the euro area will probably not be felt before 2017, manifesting themselves, in the first place, through the trade channel. Due to growing employment, the conditions for private consumption remain favourable, which posts a stable and positive growth. Consumption will continue to grow over the projection horizon, while the expected acceleration in consumer price growth will have a curbing effect on growth in real disposable income. Investment in the euro area will be, on the one hand, supported by persisting strong trends in residential construction, which will be driven by positive growth in household disposable income, low cost of credit and its relatively high availability. On the other hand, investment demand will be curbed by the uncertainty associated with the external environment and deteriorating outlook for growth of the main trading partners of the euro area. These factors will also lead to a negative contribution of net exports to GDP growth as forecasted in the projection. As the cost of public debt servicing continues to be low, fiscal policy in the euro area may remain slightly expansionary, sustaining, among others, expenses related to the immigration crisis. It is expected that over the projection horizon the ECB will pursue accommodative monetary policy, which will include, among others, keeping short-term interest rates at a negative level (see Figure 4.4). Despite these measures, due to the weaker global

Figure 4.3 GDP abroad (y/y, %)



Source: Bloomberg, Eurostat data, NBP calculations.

Figure 4.4 Interest rate abroad (%)



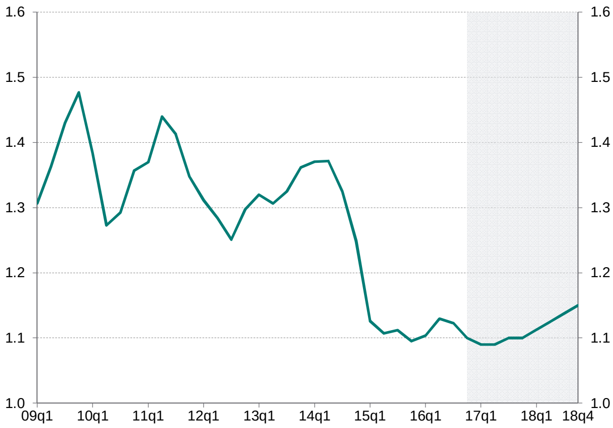
Source: Bloomberg data, NBP calculations.

growth and heightened uncertainty, the current projection assumes a slowdown in the recovery in the euro area, and the real GDP growth only slightly faster than the growth of potential output.

In the United States, as in the euro area, private consumption will continue to be the key driver of economic growth, being supported by rising employment and a marked increase in wages, which translates into an improvement in the financial situation of households, and a favourable situation in the property market. On the other hand, negative trends in the corporate sector – production cutbacks in the mining sector as a result of low oil prices, the downturn in industry and low demand from the external sector – contributed to limiting investment in the first three quarters of 2016. With the fading negative impact of the current shocks it may be expected that by the end of 2016 corporate investment will start to recover. This should also be supported by the Fed's accommodative policy of keeping interest rates at low (taking into account projected limited scale of interest rate hikes) and of reinvestment of principal payments and maturing government bonds. If, however, the economic downturn in industry and the associated phase of decline in fixed capital formation of businesses is protracted, the likelihood of the US economy entering recession will increase. The projection assumes that at the end of the horizon, GDP growth in the US may be inhibited by sluggish growth of labour productivity and the US economy approaching full employment.

Prices of energy commodities have followed divergent trends in the past few months. After a period of relative stability, oil prices surged in October after the OPEC had clearly announced, for the first time since 2008, it would cut its oil

Figure 4.5 EUR/USD exchange rate

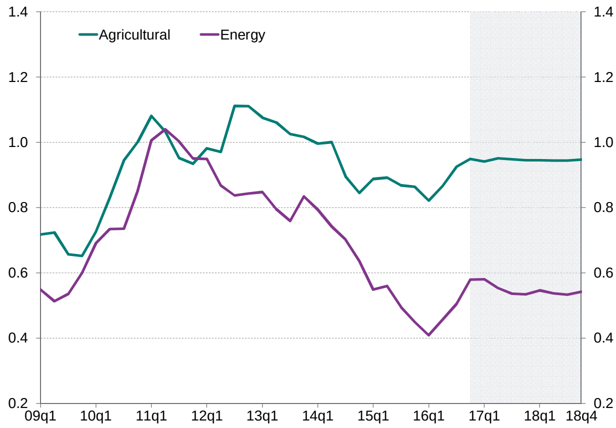


Source: Bloomberg data, NBP calculations.

production.[51] Yet, uncertainty persists about the impact of this announcement, as details of the agreement will be ultimately finalized at the next meeting of the OPEC cartel at the end of November. The impact of fundamental factors – mainly the levels of oil reserves rising to historical highs – reduces the possibility of a further sharp rise in oil prices. Taking into account the above considerations, the current forecast assumes only a small, close to the expectations of the previous projection, scale of oil price increases, associated with the anticipated increase in global demand above the level of oil supplies in the second half of 2017. After a marked increase in coal prices in the recent months as a result of reduced coal output in China and coal production disruptions in major coal exporting countries (Australia, Indonesia), in the current projection they are assumed to run at markedly higher levels than in the previous forecasting round. The increase in natural gas supplies from Norway and Russia, and the increasing availability of liquefied natural gas from the US contributed to the downward revision of the projected path of oil prices. As a result, the index of energy commodity prices in the November projection is slightly above the path assumed in July (Figure 4.6).

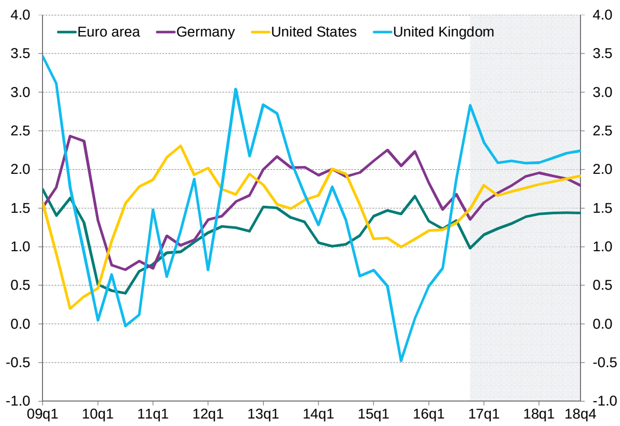
A tightening in the supply of food products of animal origin (declining population of swine and cattle in the EU) and growing export demand, primarily from China, resulted in higher prices of meat and dairy products in the recent months. These trends are partially offset by the developments in the plant product market, particularly cereals and oilseeds, where high levels of global production and the rising stocks support price cuts. As a result, the index of agricultural commodity prices in the recent years has increased and it is expected that this

Figure 4.6 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 4.7 Inflation abroad (y/y, %)



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

51 The assumptions concerning oil prices over the projection horizon were formulated given information accessible until 21 October 2016 r.

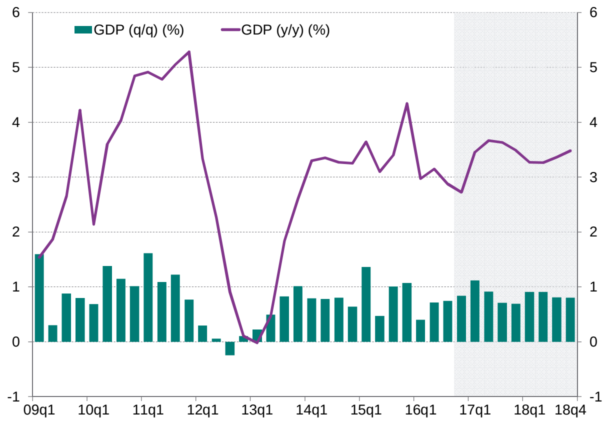
increased level as compared to the years 2014-2015 will continue also in the coming years.

The current forecast assumes that the external environment of the Polish economy will see a moderate rise in inflation. In the euro area a slight increase in the value added deflator in the coming quarters (Figure 4.7) will be driven by further increase in corporate margins and profits. From the second half of 2017, with the unemployment rate approaching the equilibrium level, a gradual acceleration in wage growth is expected, further pushing up inflation. Increased price growth in the United States will be supported by the closing of the negative output gap. In turn, a strong depreciation of the British pound will significantly boost inflation in the United Kingdom. The waning impact of the decline in energy prices will be another factor behind price growth in the coming quarters in those economies.

4.3 Polish economy in 2016-2018

Despite the expected acceleration of private consumption growth related to, among others, the launch of the "Family 500 plus" programme, in the second half of 2016, GDP growth will remain slower than in the previous quarters. This will be caused by a further decline in gross fixed capital formation, resulting largely from the completion of the 2007-2013 financial framework and reduced absorption of EU funds. In the coming years, along with an increase in absorption of EU funds from the new framework, GDP growth will pick up (Figure 4.8). Its main drivers, like in 2014 and 2015, will be consumption and gross fixed capital formation. Consumer demand, and consequently corporate investment, will be supported by rising household disposable income as a result of a pick-up in wage growth, continued increase in employment, as well as higher family benefits. Consumption and investment will also be supported by low prices of energy commodities

Figure 4.8 Economic growth



Source: GUS data, NBP calculations.

and the low level of interest rates. However, the slight downturn in the global economy and the heightened uncertainty will drag down growth.

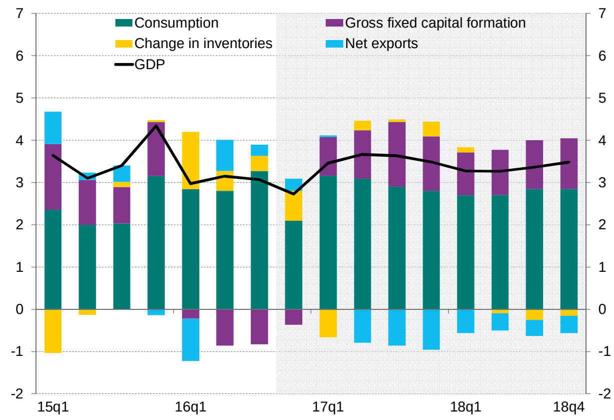
After the period of declining consumer prices, a gradual increase in inflation is expected over the projection horizon (Figure 4.10). The cost determinants of inflation, as well as the persistently weak demand pressure (reflected in only a gradual narrowing of the negative output gap), indicate that growth in consumer prices will remain below the NBP inflation target until the end of 2018. In particular, over the projection horizon growth in import prices will remain subdued, which is suggested by the forecasted low level of commodity prices and the moderate inflationary pressure in the euro area. Also, cost pressure in the economy will be supported only to a limited extent by the gradual growth in unit labour costs.

Domestic demand

Growth in private consumption (Figure 4.11) throughout the projection horizon will be fuelled by the forecasted acceleration in wage growth and further increase in employment. The introduction of child benefits under the "Family 500 plus" programme launched in April 2016, has also boosted households' disposable income. These additional family benefits, due to the intertemporal consumption smoothing mechanism, will translate into a rise in household spending within a time lag. The more optimistic consumer sentiment, related to the improvement in their economic situation, will also have a positive impact on consumption. In particular, GUS surveys indicate that households give optimistic assessments regarding their future financial situation and current major purchases, as well as exhibit reduced fears of rise in unemployment.[52] Consumption growth will also

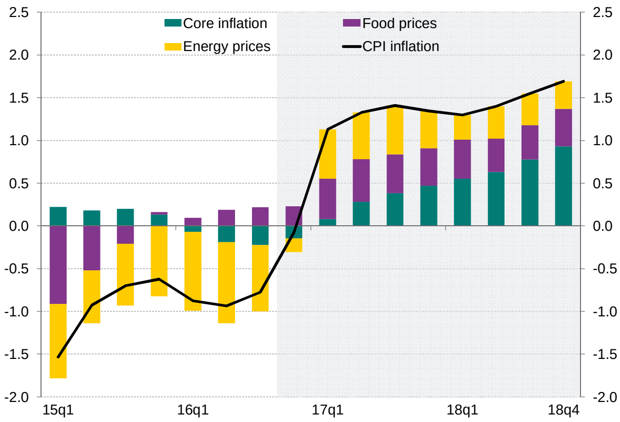
[52] *Consumer sentiment survey. October 2016*, GUS, October 2016.

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



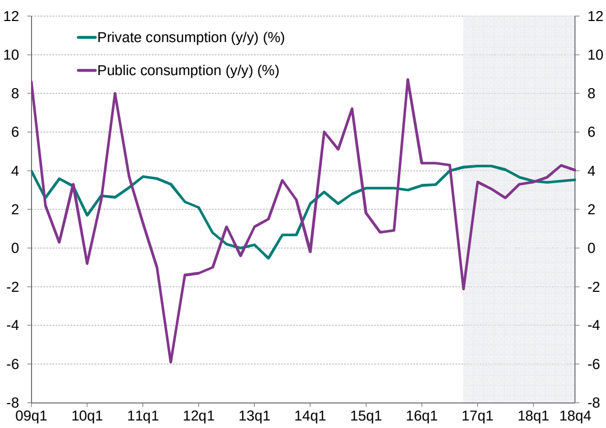
Source: GUS data, NBP calculations.

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



Source: GUS data, NBP calculations.

Figure 4.11 Private and public consumption



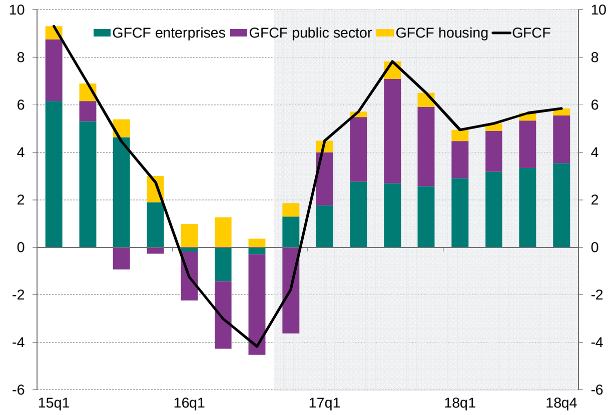
Source: GUS data, NBP calculations.

be supported by low interest rates, which have a favourable impact on the cost of financing consumer spending with loans. The findings of the NBP survey on the credit market[53] and data on the newly signed credit agreements indicate that the banking tax introduced in February 2016 has not significantly affected the availability of consumer loans or their costs. As a result of the above factors, private consumption growth over the horizon projection will run at an average level of 3.8% y/y. Due to the impact of the "Family 500 plus" programme, consumer growth will exceed the long-term average, reaching its peak in 2017.

Growth in gross fixed capital formation of enterprises will slow down over the projection horizon compared to 2014-2015 (Figure 4.12). In particular, 2016 will see a fall in investment, which is largely a result of the end of the absorption of funds from the EU financial framework for 2007-2013. At the same time, projects financed by the 2014-2020 framework are being implemented only gradually, because of the need to update and verify investment plans and harmonise certain Polish regulations with EU law.[54] This is confirmed by the number of signed agreements for the use of EU funds. By the end of September 2016 they constituted only 1% of the funds earmarked for corporate investment in 2014-2020, i.e. significantly less than in the case of the previous framework. This situation affects mostly the companies owned by the state and local government, and to the greatest extent the energy sector and sectors related to water supply.

Heightened uncertainty, mainly regarding the regulatory environment, which enterprises have indicated since the end of 2015, may also put constraints on corporate investment activity.[55] Although they remain at a relatively high level, a companies' lower forecasts of demand, have

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



Source: GUS data, NBP calculations.

[53] *Senior loan officer opinion survey on bank lending practices and credit conditions. 2016 Q4*, NBP, October 2016.
[54] *Financial situation in the enterprise sector in 2016 Q2*, NBP, September 2016.
[55] *NBP Quick Monitoring. Economic climate in the enterprise sector in 2016 Q3 and forecasts for 2016 Q4*, NBP, October 2016.

also contributed to postponed decisions of firms about embarking on new investments.

Despite this, corporate investment is expected to rise in 2017-2018 along with an increasing absorption of EU funds from the financial framework for 2014-2020. Such a scenario is suggested by the still favourable conditions for investment activity of companies. In particular, in accordance with the results of NBP surveys, investment plans of private enterprises, particularly in the manufacturing sector, are at a historically high level, and capacity utilisation continues to run at much higher level than the long-term average.[56] Moreover, the estimated value of newly started investment, in particular concerning the installation of new assets exhibits robust growth rate.[57] The current financial situation of enterprises also continues to be good. This has a favourable impact on the possibility to finance investments from own funds and also improves the creditworthiness of companies. At the same time, the lack of significant changes in the interest rates and criteria for granting corporate loans, as well as the high percentage of accepted credit applications indicate the limited negative impact of the banking tax on investment activity. The favourable financial situation of companies over the projection horizon will be supported by low prices of energy commodities, reducing operating costs and allowing enterprises to maintain the relatively high profitability of production despite the persistence of low prices growth.

Over the projection horizon, housing investment will be supported by the good situation on the labour market. This has a positive impact on consumer sentiment, boosting their propensity to undertake long-term debt. Also, the government scheme "Flat for the Young" helps to finance

[56] *NBP Quick Monitoring. Economic climate in the enterprise sector in 2016 Q3 and forecasts for 2016 Q4*, NBP, October 2016.

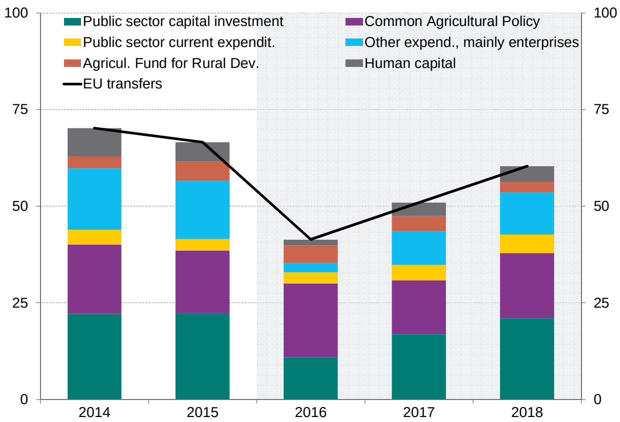
[57] *Financial situation in the enterprise sector in 2016 Q2*, NBP, September 2016.

home purchases, although its impact on investment has declined since the scheme began to cover also the secondary housing market. The positive impact of growing households' income on housing investment is curbed by institutional changes limiting loan availability. In particular, since the beginning of 2016 and 2017, housing loan granting criteria have been tightened as the result of the amendment of Recommendation S introduced in 2014.

Like in 2016, public consumption growth rate in 2017 will be slightly lower than that of expected GDP. The moderate public consumption growth assumed for 2017 in the projection results from the provisions of the draft *2017 Budget Act*, which stipulates a relatively slow growth in current expenditure of budgetary units and spending on targeted subsidies financing other sector units' current expenditure. Due to the lack of detailed information on the continuation of efforts aimed at limiting spending in the general government sector in the following years, a neutral fiscal policy is assumed in the long-term projection horizon. That would mean accelerated growth in public consumption in 2018.

Investment spending of the public sector is related to the absorption of EU capital funds. In 2016, investment outlays of the sector will fall considerably due to the end of utilisation of EU funds from the 2007-2013 financial framework (Figure 4.13). At the same time, absorption of funds from the 2014-2020 perspective will progress gradually. This is corroborated by data on agreements concerning the use of EU funds under the individual operating programmes and beneficiaries' requests for payments to be certified, as well as data on local government expenditure in the first half of 2016. In the following years, public investment is expected to rise, driven by, in particular, the launch of projects implemented by local government

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



Source: NBP calculations.

entities under regional programmes, as well as transportation investment.

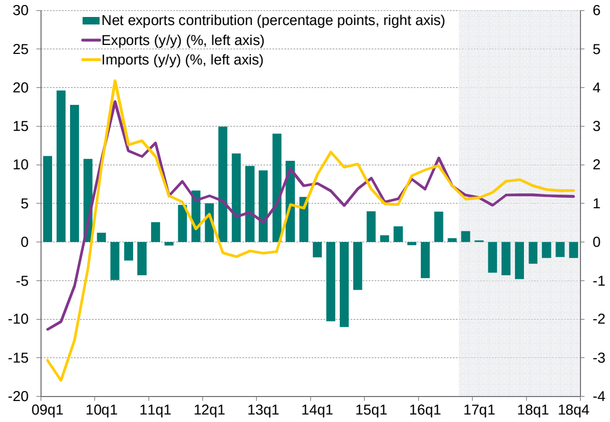
Current and capital account balance

Despite weaker economic conditions abroad and the deteriorating outlook for global trade, Polish exports will be expanding robustly in 2016. This is supported, among others, by a depreciation of the exchange rate, which improves the price competitiveness of domestic production, and increased production of cars in plants located in Poland. In light of the prevailing external conditions, it will be difficult to sustain this high rate of export growth in the following years (Figure 4.14). Export growth will slow down due to a deceleration in the (so far robust) growth of the share of trade in global GDP, as well as a further, although slight, decline in the growth rate of some European economies, among others, as a result of the referendum outcome in the United Kingdom. At the same time, high price competitiveness and profitability of Polish exports, which helps exporters maintain high profit margins, will be undermined by the anticipated appreciation trend of the real effective zloty exchange rate.

Despite slower growth of exports, which is characterised by high import intensity, in the projection horizon imports is expected to rise at relatively stable rate, driven by accelerated consumption and investment growth. In effect, net exports, after a neutral contribution to growth in 2016, will hamper GDP growth slightly in 2017-2018.

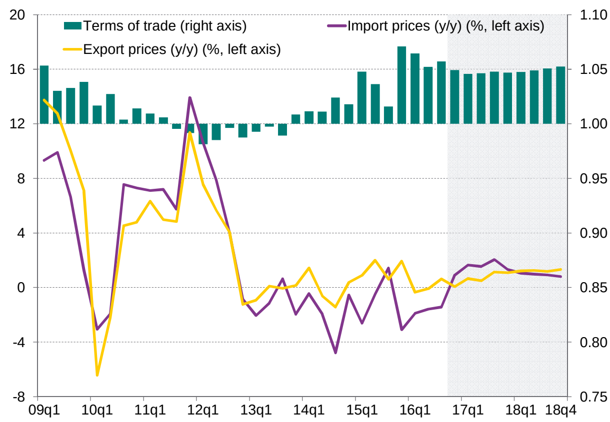
In 2015, the balance of the current and capital account was running at a record-high level of 1.7 of GDP, which was supported by an improvement in the terms of trade (Figure 4.15), resulting to a large extent from a slump in energy commodity prices. Besides a surplus on the trade account, 2015 also saw a strongly positive balance

Figure 4.14 Foreign trade



Source: GUS data, NBP calculations.

Figure 4.15 Export and import prices



Source: GUS data, NBP calculations.

on secondary income and capital account, encompassing a significant part of the EU funds and workers' remittances. The balance of current and capital account is adversely affected by the negative balance of primary income, substantially reducing the positive contribution of the remaining components (both in 2015 and in the projection horizon). The negative balance of the primary income account results from the high yields on foreign capital invested in Poland, both in the form of direct and portfolio investment (debt instruments and equity securities).

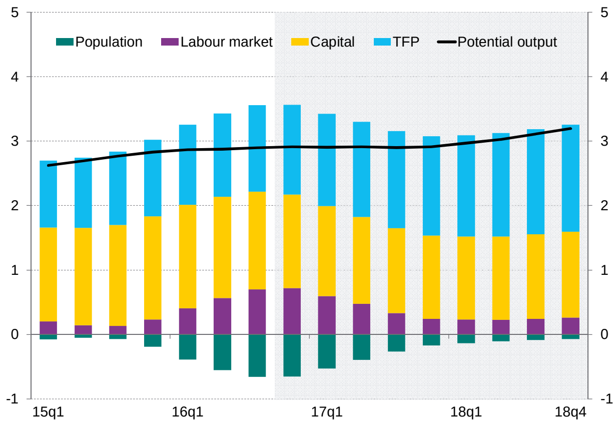
In 2016, the trade account balance is expected to improve further due to favourable terms of trade. Yet, it will be accompanied by a sharper deterioration in the secondary income and capital account owing to diminished inflow of EU funds. As a consequence, the balance of the current and capital account will decrease on the record level seen in 2015. The current and capital account balance will decline further in 2017, yet it will stay positive – albeit close to zero – until at least the end of 2018. Unlike in 2016, the diminished 2017 balance will result from lower surplus on the trade balance amid higher EU fund inflow.

Potential output

Potential output growth accelerates slightly in the projection horizon, from 2.9% y/y to 3.1% y/y. Therefore, until the end of 2018 it will run lower than the long-term average, below which it fell in the wake of the global financial crisis. In the projection horizon, potential output growth will be dragged by the shrinking labour force and slowing capital accumulation. These developments will be curbed by the falling level of the equilibrium unemployment rate and a pick-up in total factor productivity (TFP) growth (Figure 4.16).

The increase in TFP in the projection horizon results from the ongoing process of real

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



Source: NBP calculations.

convergence of the Polish economy. This is manifested in the moderate upward trend, observed since 2013, in total factor productivity growth from its currently low levels. Yet, TFP growth rate will not be restored to its pre-crisis levels within the projection horizon.

On the other hand, potential output growth is being enhanced by a steady fall in the equilibrium unemployment rate (NAWRU), which will continue until the end of 2018 (Figure 4.19). The low equilibrium unemployment rate reflects the ease of striking a balance between the demand for and supply of labour. The NAWRU rate is decreasing due to structural shifts in the labour market, reflected in a lasting and significant decrease in the current unemployment rate. In particular, a sharp decline has been observed recently in the number of the long-term unemployed. This means that people returning to the labour market are finding it easier to gain the qualifications required by employers, and subsequently to stay in this market. In recent years, a relatively sharper decline in the unemployment rate has been observed in younger cohorts, i.e. individuals without work experience, as well as people with low educational background. One of the causes of this situation is the tendency observed in 2014-2016, when demand for labour rose sharply towards higher demand for less qualified employees. This translated into employees' skills being matched more easily with the needs of employers.[58]

The positive impact of the above factors on the potential of the Polish economy in the projection horizon is partially curbed by the diminishing labour force (Figure 4.16). The decline is related to the effect of the consistent downward demographic trends observed in Poland, i.e. the decline in the size of the cohorts entering the labour market and the rising proportion of people

[58] *Quarterly Labour Market Report 2015 Q4*, NBP, March 2016.

of post-productive age. The adverse impact of these demographic trends on labour supply is in part mitigated by an improvement in the labour participation rate in the age groups in which this rate was previously low (pre-retirement age group and young people). The improvement stems from the greater opportunities to find a job. Furthermore, the higher activity of pre-retirement group age is related to the prospect of a prolonged period of remaining without retirement benefits as a result of the pension system reform involving, from the beginning of 2013, a systematic increase in the retirement age.[59]

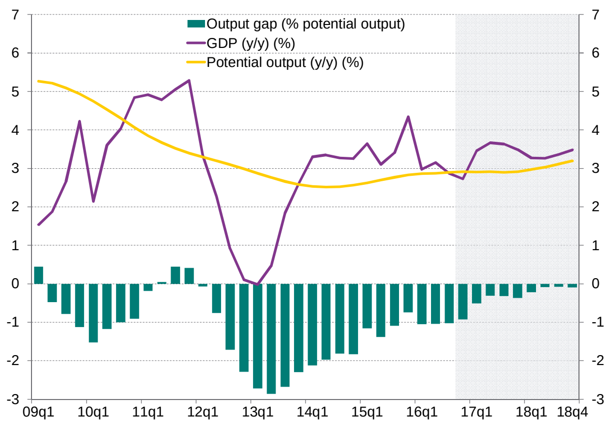
The impact of the "Family 500 plus" programme on the labour market is difficult to determine as yet. On the one hand, concerns arise about some currently economically active groups becoming less active owing to increased family benefits. Higher transfers boost the opportunity cost of employment, in effect discouraging persons on lower incomes from seeking and taking up a job. On the other hand, higher consumer demand, boosted by the social transfers, supports the upward trend in employment.[60]

Potential output growth in the Polish economy is being slightly affected by the slowdown in capital formation due to the lagged effect of the 2016 reduction in the investment expenditure of the public and corporate sectors.

Output gap

Since the second half of 2013, when the Polish economy entered the recovery stage, with potential output growth progressing at relatively slow rates, the negative output gap has been gradually narrowing down (Figure 4.17). This process will continue in the projection horizon, supported by the fiscal stimulus related to the increased family benefits under the "Family 500

Figure 4.17 Output gap



Source: GUS data, NBP calculations.

[59] *Quarterly Labour Market Report 2016 Q2*, NBP, September 2016.
[60] *Quarterly Labour Market Report 2016 Q2*, NBP, September 2016.

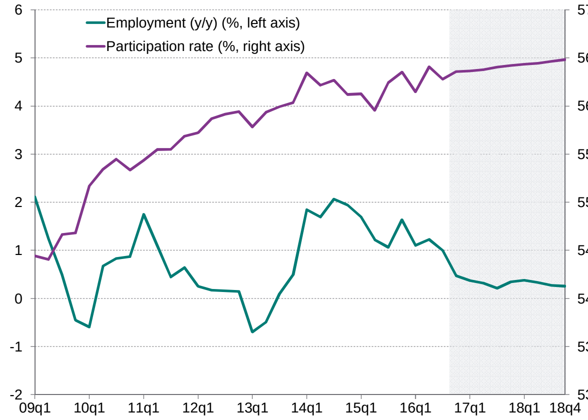
plus" programme. Yet, owing to moderate investment growth – which in the short term affects actual GDP more than potential GDP – the output gap will remain negative until the end of 2018, when it will reach -0.1% of potential GDP. This level of the output gap warrants the conclusion that demand pressure in the economy will be persistently low in the coming years, and hence that the business climate will have little effect on the inflation rate.

Labour market

Within the projection horizon, the growth in the number of employed is expected to continue to slow down (Figure 4.18). This trend in employment is related to the anticipated pick-up in the growth of total factor productivity (TFP), which is conducive to labour productivity growth. The fall in the unemployment rate to historical lows will work in the same direction, as it may boost employers' propensity to increase the labour input by raising the average number of hours worked.

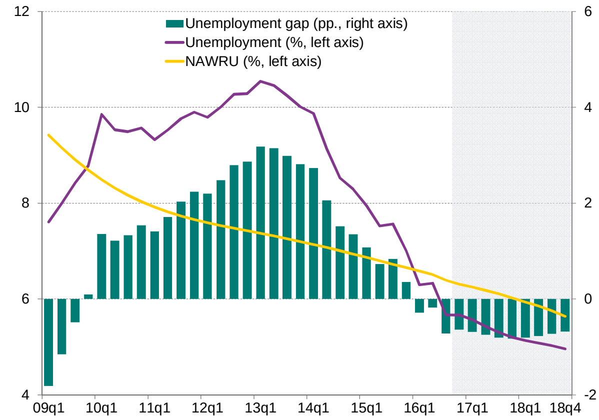
With the positive growth in employment and the diminishing number of the economically active, a further fall will be observed in the projection horizon in the LFS unemployment rate, which is already at the lowest level on record (Figure 4.19). Falling unemployment, the large number of vacancies and the diminishing probability of losing a job will result in accelerated wage growth, as indicated by the robustly rising percentage of firms reporting employee pressure on wage increases in 2016 Q3 (Figure 4.20).[61] In addition, the improved financial situation of households is contributing, through a negative income effect, to a decline in employees' preference for hours worked: the preferred number of hours is currently below the actual hours worked.[62] Wage pressure will be mitigated

Figure 4.18 Employment and labour force participation



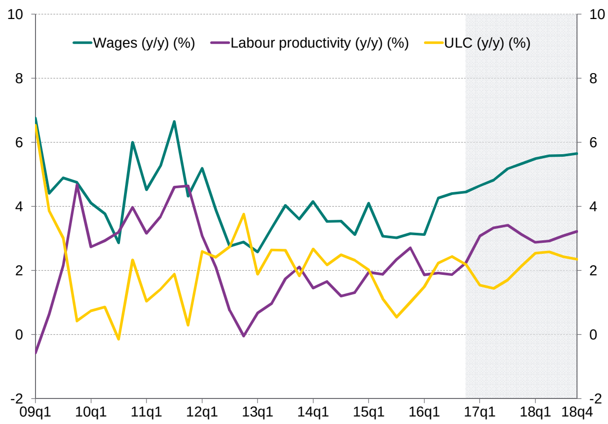
Source: GUS data, NBP calculations.

Figure 4.19 Unemployment



Source: GUS data, NBP calculations.

Figure 4.20 Unit labour costs



Source: GUS data, NBP calculations.

[61] *NBP Quick Monitoring Survey. Economic climate in the enterprise sector in 2016 Q3 and forecasts for 2016 Q4*, NBP, October 2016.

[62] *Quarterly Labour Market Report 2016 Q2*, NBP, September 2016.

by the decline in the equilibrium unemployment rate (Figure 4.19), and low CPI inflation, curbing the scale of wage demands posed by employees. Amid the relatively stable labour productivity growth, steeper wage growth is translating into a gradual increase in unit labour costs, which will reach 2.5% y/y at the end of the projection horizon.

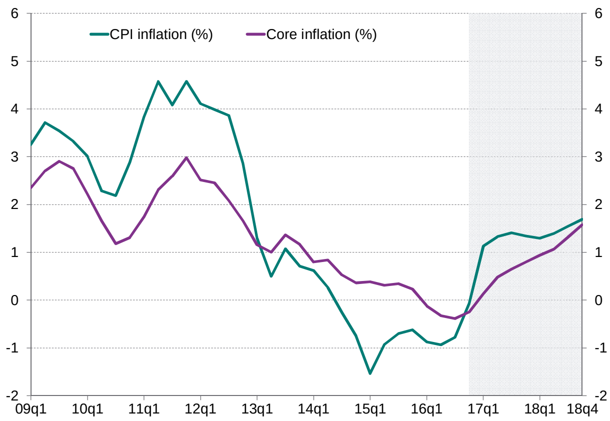
Exchange rate

Since the beginning of 2016, the exchange rate of the zloty has seen considerable fluctuations driven by movements in both domestic and global factors. Consequently, despite a slight appreciation, in 2016 Q3 the zloty exchange rate was running significantly lower than the level resulting from fundamental factors. This is evidenced, in particular, by the exceptionally favourable balance of the current and capital accounts given the current period. In the projection horizon, additional one-off factors potentially affecting the exchange rate are not taken into account; it is expected that as the situation in the financial market normalizes, the effective zloty exchange rate will continue to appreciate gradually, coming close to the equilibrium exchange rate. The appreciation of the currency will also be supported by the further real convergence of the Polish economy, reflected in the domestic potential output growth exceeding that of Poland's trading partners.

Components of CPI inflation

In recent years, the Polish economy has seen a very low level of demand and cost pressures. This was reflected in the negative output gap, falling import prices and prices for industrial production sold, coupled with slow unit labour cost growth. Over the projection horizon, these phenomena will gradually recede, triggering a rebound in core inflation from its current negative level – although the extent of this growth

Figure 4.21 CPI and core inflation



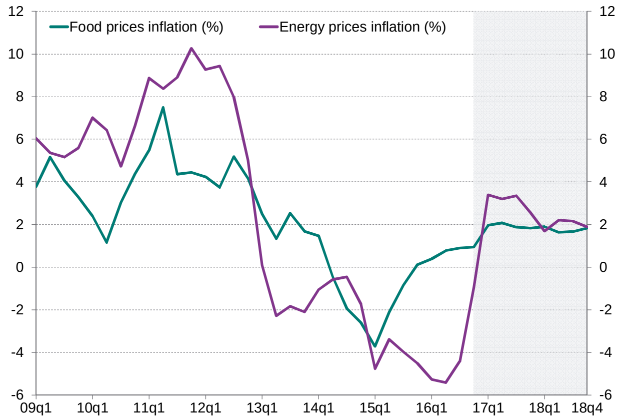
Source: GUS data, NBP calculations.

will be moderate (Figure 4.21). The output gap will improve only a little in the coming years, and will remain negative. It is also expected that import price growth will remain slow, as suggested by the forecast low inflation in the euro area and the appreciation trend of the zloty assumed in the projection horizon. The increase in the cost pressure in the economy will benefit, to a limited extent, from the moderate rise in unit labour costs forecast for the coming year (Figure 4.20).

The scale of the decline in energy prices in the current year will probably be close to that observed in 2015 (Figure 4.22). This will be supported by lower levels of fuel prices than a year ago, and the new, lower tariffs on the sale and distribution of electrical energy and natural gas coming into effect. In the subsequent years energy prices will embark on an upward trend, which will be supported by a gradual waning of the impact of the positive supply shock in the oil market. Yet, energy prices will rise at a moderate pace, being dragged by low global energy commodity prices, which are forecast to persist throughout the projection horizon, and the gradual strengthening of the zloty. A factor temporarily driving up energy price growth will be the rise, as of January 2017, in households' average expenditure on energy in connection with the likely rise in the cost of supporting renewable energy sources, energy efficiency and standby power sources.

Following sharp declines in food prices in 2014-2015, those prices are anticipated to pick up only moderately in the projection horizon. On the one hand, the impact on food price growth of the high supply of agricultural produce in recent seasons will gradually weaken. The rise in food prices will also be supported by gradually expanding consumer demand. On the other hand, food price growth will be dampened by global prices of agricultural commodities, which will be only

Figure 4.22 Food and energy price inflation



Source: GUS data, NBP calculations.

slightly higher than in 2015, combined with goodcrops boosting supply, and the gradual appreciation of the zloty (Figure 4.22).

4.4 Current versus previous projection

In 2016, the pace of both economic growth and inflation will run slightly below the levels forecasted in the July projection round (Table 4.1, Figure 4.23, Figure 4.25). In the subsequent years, both these variables will rise and, as a consequence, the path of inflation and GDP dynamics will remain close to the expectations of the last projection.

The key source of revision of the GDP projection in 2016 is the lower than expected reading of this category in Q2, which is mainly due to slower inflow of EU capital transfers (intended for investment). The accelerated absorption of EU funds will not materialise until 2017, when it will shift the GDP growth path upwards. CPI inflation in 2016, in turn, is being dragged by weaker core inflation data for 2016 Q3.

GDP

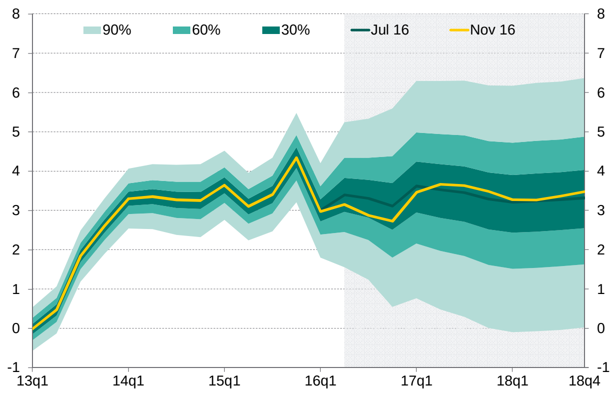
In line with the preliminary GUS estimate, GDP growth in 2016 Q2 amounted to 3.1% y/y, thus running below the expectations of the July projection round. This revision results from slower growth in gross fixed capital formation and in private consumption (Figure 4.24). The decline in investment is related to the slow implementation of projects financed under the EU 2014-2020 financial framework. The data on the signed agreements suggest that the inflow of EU capital transfers might be slower than anticipated also in the subsequent quarters. Weaker consumption growth in 2016 Q2 could in turn be put down to the fact that payments under the "Family 500 plus" programme were staggered (more than half of the disbursements in that quarter took place in June). This information

Table 4.1 November projection versus July projection

	2016	2017	2018
GDP (y/y, %)			
November 2016	3.0	3.6	3.3
July 2016	3.2	3.5	3.3
CPI inflation (y/y, %)			
November 2016	-0.6	1.3	1.5
July 2016	-0.5	1.3	1.5

Source: NBP calculations.

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



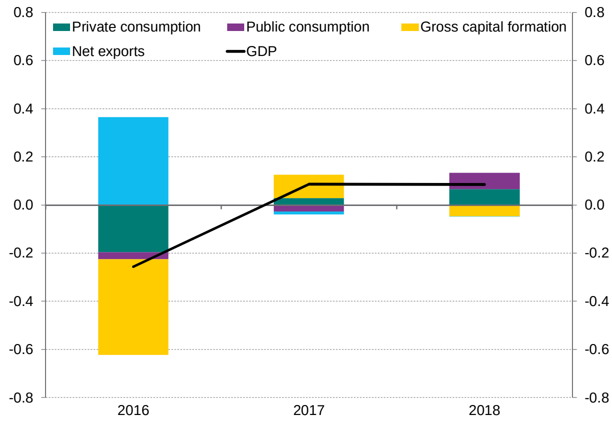
Source: NBP calculations.

prompted a revision of the 2016 forecast of investment outlays, while consumption was adjusted downwards to a lesser extent.

Higher contribution of net exports to GDP growth in 2016 is working in the opposite direction reducing the scale of the GDP revision. An upward revision in net exports is suggested by both lower domestic demand, affecting the level of imports, and higher than expected export growth in 2016 Q2 related, in part, to increased production of cars.

Late in the projection horizon, the impact of factors exerting downward pressure on GDP growth in 2016 will gradually wear away. In 2017 in particular, the inflow of EU funds under the new financial framework is expected to increase, which will contribute to an upward revision of investment growth, and hence economic growth. At the same time, the impact on net exports of slightly higher growth abroad than that assumed in the July projection is offset by the appreciation of the exchange rate, which works in the opposite direction

Figure 4.24 Decomposition of deviations between November and July projection: GDP growth (percentage points)[63]



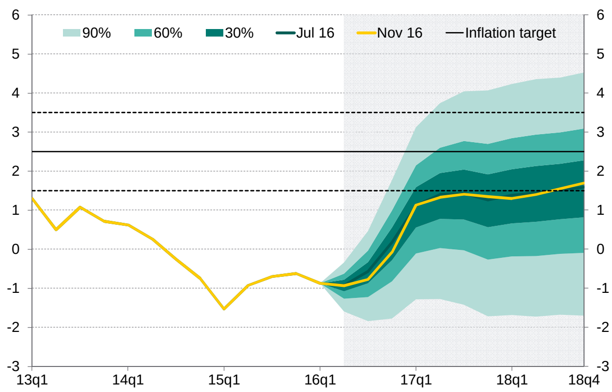
Source: NBP calculations.

Inflation

The information received after the cut-off date for the July projection has resulted in a slight downward revision of the 2016 CPI inflation path, yet in the subsequent years the multi-directional impact of the individual factors is largely balanced (Figure 4.26).

The minor revision of the anticipated price growth in 2016 was driven by lower than expected inflation readings for 2016 Q3, in particular with respect to core inflation, which was related to weaker demand. Lower inflation is also due to the stronger zloty exchange rate, depressing import prices (the forecast for this

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



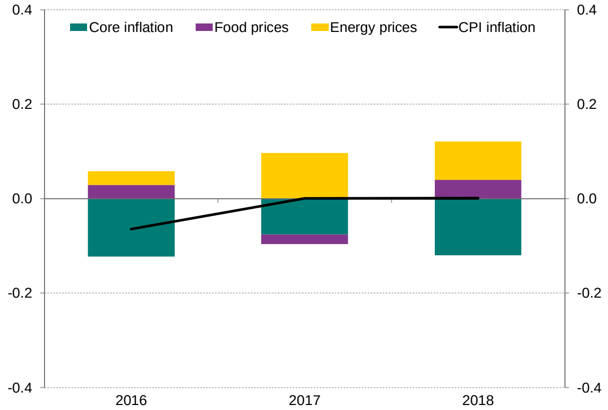
Source: GUS data, NBP calculations.

[63] The data presented in the chart may vary slightly from those in Table 4.1, due to rounding of numbers to one decimal place.

category was also affected by the 2016 Q2, which was lower than expected).

The above factors – weaker demand pressure reflected in the more negative output gap and slower import price growth due to the stronger exchange rate – will affect inflation adversely also in the coming quarters. On the other hand, the government's decision to leave the VAT rates at their current level will put upward pressure on inflation.[64] In accordance with the estimates of the July projection, the cut in the VAT rates should have rendered a drop of 0.3 pp. in the 2017 CPI rate. Energy price inflation will additionally be boosted by rising global prices of energy commodities. As a result, the inflation rate forecast for 2017-18 has not changed on the expectations of the July forecasting round, with slower core inflation growth being offset by sharper energy price growth.

Figure 4.26 Decomposition of deviations between November and July projection: CPI inflation (percentage points)[65]



Source: NBP calculations.

4.5 Forecast uncertainty sources

The central scenario of the November projection, presenting the most likely macroeconomic developments in Poland, is subject to significant uncertainty. The balance of its factors points to a near-symmetrical distribution of risks to CPI inflation and GDP growth (Table 4.2). With the assumption of no change in the NBP reference rate, the probability of CPI inflation remaining within the tolerance band of the NBP inflation target (1.5%-3.5%), which is currently close to zero, increases gradually in the coming quarters, while in 2017-2018 it stabilises at around 36% (Table 4.2). The most significant forecast uncertainty sources for the November projection are presented below.

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%)
16q4	1.00	1.00	1.00	0.52	0.00
17q1	0.72	0.98	1.00	0.53	0.28
17q2	0.59	0.88	0.98	0.53	0.39
17q3	0.57	0.82	0.95	0.54	0.39
17q4	0.58	0.80	0.94	0.54	0.35
18q1	0.59	0.79	0.92	0.54	0.34
18q2	0.55	0.76	0.90	0.53	0.34
18q3	0.51	0.71	0.87	0.52	0.36
18q4	0.47	0.67	0.84	0.51	0.37

Source: NBP calculations.

[64] The July projection assumed that the VAT rate, in line with the provisions of the Act of 8 November 2013 amending the Goods and Services Tax Act and some other acts (Journal of Laws 2013, item 1608) would be reduced as of 2017.

[65] The data presented in the chart may vary slightly from those in Table 4.1, due to rounding of numbers to one decimal place.

Deterioration in the prospects of growth in the global economy

One of the major sources of risk to the November projection is related to the possibility of lower than assumed growth in China. Despite the stabilisation of economic indicators in recent months, supported by the accommodative fiscal and monetary policy, there is still a significant risk of a deeper slowdown in the Chinese economy. This is largely driven by the threats to the financial system stability. Should the effects of over-investment in heavy industry prove more severe than currently assessed, firms' problems with debt servicing might trigger a surge in uncertainty about the stability of the Chinese banking and shadow banking sector. Besides excessive debt in the corporate sector, the source of risk to financial stability in China is the considerable debt of local government units resulting from heavy spending on infrastructure investment. The problems in the banking sector, combined with the weaker than expected impact of the government's stimulus, could additionally lead to a fall in foreign investors' confidence and consequently another round of capital outflow and downward pressure on the yuan. The growing imbalance in the real estate market, reflected in the rapid growth of housing prices, also represents a risk for the Chinese economy. On the one hand, the increased demand for housing is a result of the persistently high wage growth, low interest rates and the continuation of the process of urbanisation. On the other hand, amid unfavourable conditions in the China's stock market, the availability of investment alternative to housing is limited. Uncertainty regarding economic developments in China is also associated with possible changes in economic policy that might be introduced by the Chinese Communist Party.

A stronger slowdown in China, which is one of the major trading partners of the United States, would contribute to a significant downward revision of growth in the US economy as compared to the projection assumptions. The weakening of Chinese demand would further deepen the currently observed slowdown in US industry, especially amid a stronger US dollar. Decline in oil prices in the global markets in response to the lower demand from China would in turn curb investment and activity of the US mining sector.

Another factor that increases uncertainty regarding economic growth in the United States is the risk of a deterioration of liquidity position of enterprises, resulting in the fall in investment expenditure. Should the currently observed trend of falling corporate profits amid the accompanying rise in enterprises' debt continue, it would become much more difficult for the corporate sector to settle its liabilities, which could push the United States into recession.

A simultaneous downturn in China and the United States would bring about turmoil in the global financial markets and a slowdown in the global economy, both through the trade channel and as a result of deteriorating consumer and corporate sentiment.

So far the decision of the United Kingdom to leave the European Union (so-called Brexit) has had only a limited impact on sentiment of consumers and enterprises in the European Union, while the reaction of financial markets has been moderate. However, Brexit remains a significant source of risk for the current projection, in particular if the period of uncertainty about the shape of future exit-agreement is prolonged. The agreement will define, among others, the level of tariff and non-tariff barriers in international trade and the degree of labour and capital mobility between the United Kingdom and continental Europe. If the agreement is not reached for a prolonged period, the willingness of companies to enter into long-term business relations may be adversely affected. This uncertainty may also translate into a deterioration of household and corporate sentiment, not only in the United Kingdom and the European Union, but also in the global economy, especially when it affects the functioning of the financial markets, leading to a fall in asset prices and an increase in the cost of capital.

Alongside fears about the form of Brexit agreement and the risk of weaker business conditions in China and the United States, the uncertainty regarding growth prospects in the euro area is also associated with ECB running out of bonds to buy under QE. Yields of the considerable share of bonds are already lower than the ECB's deposit rate and in accordance with the principles of quantitative easing scheme, these bonds are ineligible for the purchases. At the same time, the potential cuts in the deposit rate could additionally limit the already low profitability of European banks. A reduction in the deposit rate is also associated with the risk of translation of the low profitability of the banking sector into lower bank lending, causing a reduction in corporate investment.

The risk of weaker growth in the global economy, particularly in the long term horizon, is also associated with slower labour productivity growth observed in many economies. If this process continues and productivity growth remains low, it will be an additional factor hindering the return of the global economy to the path it followed before the global financial crisis.

The growth prospects in the economies of Poland's major trading partners are also subject to significant political uncertainty. In the next 12 months there will be elections in Germany and France, a constitutional referendum in Italy and presidential elections in the United States, the results of which may have an impact on the shape of future economic policy.

A deeper slowdown in the euro area, the United States and the United Kingdom, than assumed in the central scenario, would have significant repercussions for economic growth in Poland, and particularly for the gross fixed capital formation. Weaker external demand would be accompanied by a reduction in Polish exports, and consequently by lower growth of investment outlays (as well as employment) of domestic exporters, as compared to the projection assumptions. Unfavourable external conditions would also affect gross fixed capital formation indirectly, through a deterioration in corporate sentiment regarding future demand, leading to a more sluggish investment recovery after the period of slowdown in investment activity. A deterioration in sentiment would also affect the household sector, translating into a reduction in consumer spending. Consequently, the propensity of enterprises to invest would be further reduced.

Continued uncertainty in the global financial markets and a downturn in Poland and abroad would also increase the risk of a higher budget deficit than assumed in the baseline scenario of the November projection. In such a situation, the government would most likely undertake measures aimed at tightening of fiscal policy. A reduced appetite for risk in the financial markets would also contribute to a depreciation of the zloty as compared to its exchange rate assumed in the November baseline, which would be an additional factor increasing the public debt to GDP ratio (part of the bonds are issued in foreign currency). However, at the same time the weak zloty would partly mitigate the scale of slowdown in domestic economy by improving the price competitiveness of Polish exports and by increasing import prices.

Economic activity in Poland may also be constrained by heightened institutional environment uncertainty associated with the numerous initiatives of legislative changes, which could weaken the incentives of enterprises to start new investment projects.

A lower business activity in Poland and abroad would curb demand pressure, which, along with falling prices of agricultural and energy commodities in the global markets, would prolong the period of deflation in Poland. Second-round effects caused by an extended period of very low price growth in euro area countries as well as possible permanent de-anchoring of inflation expectations in these economies would further decrease inflationary pressure in Poland. However, the impact of these factors would be mitigated by: the depreciation of the zloty, that would contribute towards higher prices of imported goods and services and a possible decrease of labour productivity growth in Poland, driven by developments abroad.

Growth of domestic demand supported by the improving economic situation in the euro area

A source of uncertainty for the November projection contributing, in turn, to higher GDP growth in Poland is the possibility of faster than assumed in the central scenario economic growth abroad, particularly, in the euro area. This may result from a stronger impact of the ECB's bond purchase programme than currently assessed. In the case of a greater depreciation of the euro against the US dollar, the euro area countries would increase their exports, which could lead to increased investment, particularly amid easier access to credit. The low cost of money, along with an improving situation in the labour market, would also increase the purchasing power of households. Faster growth in the euro area would also be supported by a greater scale of expansionary fiscal policy than assumed in the projection.

An improvement in the business climate in the euro area economies would lead to greater demand for Polish exports and faster growth of corporate investment. The favourable situation in the domestic labour market and the low level of NBP interest rates could prompt households to use real wage growth to increase consumption at the expense of a lower than assumed in the baseline projection scenario savings rate. Higher growth in domestic demand would translate into significantly faster GDP and consumer price growth.

Over the projection horizon, faster economic growth in Poland could be supported by the implementation of the European Commission's Investment Plan for Europe in 2015-2017. In particular, in accordance with government announcements, the funds available under this programme will be an important source for financing the national Responsible Development Plan. In recent months several large Polish companies have signed loan agreements with the European Investment Bank (EIB) regarding the co-financing by the bank of investment amounting to over PLN 7 billion, while further projects, whose total value exceeds PLN 24 billion are being evaluated. In addition, 2700 smaller companies have also signed loan agreements with the EIB. According to the estimates of the European Commission, the full realisation of the plan would lead to GDP growth in the European Union of EUR 330-410 billion and the creation of 1-1.3 million jobs, which, apart from having a direct impact on investment in Poland, would have an indirect effects on domestic demand through an improvement in the business climate among Poland's main trading partners.

Should such a scenario materialise, GDP and CPI inflation would run above the baseline scenario of the projection.

Oil prices in the global markets

Another source of uncertainty for the baseline scenario are prices of oil and of other energy commodities in the global markets over the projection horizon. The risk of significant fluctuations in oil prices is primarily driven by factors affecting global oil supply. Apart from a possible agreement of the OPEC countries regarding the volume of oil production in the coming years, these include the resumption of oil production from under of the Caspian Sea. Future trends in oil supply will also be affected by the scale of the renewed increase in the number of drilling rigs, and consequently, in oil production in the United States as a result of the rise in global oil prices. Demand factors related to growth prospects in the global economy, in particular in the Asian emerging market 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

	2014	2015	2016	2017	2018
Consumer Price Index CPI (% y/y)	0.0	-0.9	-0.6	1.3	1.5
Core inflation net of food and energy prices (% y/y)	0.6	0.3	-0.3	0.5	1.2
Food prices (% y/y)	-0.9	-1.6	0.8	1.9	1.8
Energy prices (% y/y)	-1.0	-4.2	-3.9	3.1	2.0
GDP (% y/y)	3.3	3.6	3.0	3.6	3.3
Domestic demand (% y/y)	4.9	3.4	3.0	4.2	3.8
Private consumption (% y/y)	2.6	3.1	3.7	4.1	3.5
Public consumption (% y/y)	4.7	3.4	2.5	3.1	3.9
Gross fixed capital formation (% y/y)	10.0	5.8	-2.6	6.1	5.4
Contribution of net exports (percentage points y/y)	-1.5	0.3	0.0	-0.6	-0.4
Exports (% y/y)	6.4	6.8	7.7	5.7	6.0
Imports (% y/y)	10.0	6.3	7.8	7.1	6.9
Gross wages (% y/y)	3.6	3.3	4.0	5.0	5.6
Total employment (% y/y)	1.9	1.4	1.0	0.3	0.3
Unemployment rate (%)	9.0	7.5	6.0	5.4	5.0
NAWRU (%)	7.0	6.8	6.4	6.1	5.8
Labour force participation rate (% y/y)	56.2	56.2	56.3	56.4	56.5
Labour productivity (% y/y)	1.4	2.2	1.9	3.2	3.0
Unit labour cost (% y/y)	2.4	1.2	2.1	1.7	2.5
Potential output (% y/y)	2.5	2.7	2.9	2.9	3.1
Output gap (% potential GDP)	-1.9	-1.1	-1.0	-0.4	-0.1
Index of agricultural commodity prices (EUR; 2011=1.0)	0.93	0.88	0.89	0.95	0.95
Index of energy commodity prices (USD; 2011=1.0)	0.72	0.51	0.49	0.55	0.54
Inflation abroad (% y/y)	1.0	1.2	1.2	1.3	1.5
GDP abroad (% y/y)	1.5	2.0	1.6	1.5	1.4
Current and capital account balance (% GDP)	0.4	1.7	1.1	0.1	0.1
WIBOR 3M (%)	2.52	1.75	1.70	1.71	1.71

Source: Bloomberg, Eurostat, GUS, NBP calculations. The inflation and GDP projection was prepared using the NECMOD model, which is based on the quarterly data – thus it cannot take into account CSO's revision of the national accounts data of 19 October 2016 that was related to yearly data only. 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 2016

■ Date: 7 September 2016

Subject matter of motion or resolution:
Resolution No. 5/2016 of 7 September 2016 on adopting Monetary Policy Guidelines for 2017.

Voting of the MPC members:

For: A. Glapiński
G. M. Ancyparowicz
M. Chrzanowski
E. Gatnar
Ł. J. Hardt
J. J. Kropiwnicki
E. M. Łon
E. J. Osiatyński
J. Żyżyński

Against: K. Zubelewicz

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