NBP Narodowy Bank Polski

Monetary Policy Council

March 2017

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 23 February 2017.

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, although signs of its gradual acceleration have emerged over recent months. In particular, activity in global industry has picked up, yet global trade turnover continued to rise at a low pace. The rate of economic growth differs across countries. In the euro area, GDP growth has been stable amid still substantial margin of spare capacity, while in the United States it has accelerated.

The gradual acceleration of global economic growth is accompanied by a rise in inflation, mainly associated with the increase in oil and other commodity prices in the global markets. At the same time, low demand pressure in a number of economies – including the euro area – contains price growth and makes core inflation running below the long-term average.

Against this backdrop, main central banks still conduct accommodative monetary policy. The European Central Bank (ECB) is keeping interest rates close to zero, including the deposit rate below zero, while continuing its credit support programme and purchasing of financial assets. The Federal Reserve (Fed), in turn, raised the target range for the federal funds rate by 0.25 pps to 0.50-0.75% in December 2016, indicating the likely further interest rate hikes in 2017. Notwithstanding the increase in interest rates, the Fed is maintaining the policy of reinvesting principal payments from its holdings of securities purchased under the quantitative easing programme, which keeps its balance sheet stable.

Over the recent months, sentiment in the international financial markets has improved. This was due to better outlook for global economic climate. As a result, stock indices, inflation expectations and bond yields in advanced economies have risen significantly.

In Poland, CPI inflation has picked up markedly. The acceleration in annual price growth was mainly driven by external factors, mostly rising energy commodity prices in the global markets, which – coupled with an appreciation of the US dollar – caused domestic prices of energy, especially fuels, to increase. Another driver of the CPI growth was the rise in global food prices in recent months. Core inflation, in turn, remains low due to still weak, albeit growing, demand pressure, and moderately rising unit labour costs. Higher inflation is accompanied by higher inflation expectations.

Economic growth in Poland in 2016 Q4 was slightly stronger than a quarter earlier. A steadily rising consumer demand, fuelled by employment and wage growth, very good consumer sentiment and child benefit payments, remains the primary driver of growth. In 2016 Q4, an increase in inventories and net exports also added to GDP growth. Positive net exports reflected only a slight slowdown in exports amid a sharp decline in imports. At the same time, investment continued to fall, driven – as in other Central and Eastern European countries – by weak absorption of EU funds under the new EU financial framework.

Economic growth in Poland is accompanied by stable lending growth, close to that of the nominal GDP. A steady rise in loans to households, both consumer and housing loans, is the main component of lending growth, with corporate loans also continuing to increase.

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%. However, the recent higher price growth has led to a slight rise in expectations for an increase of the NBP interest rates in 2018 that, together with a pickup in term premium, led to higher Polish bond yields. The zloty – like currencies of other emerging market economies – depreciated against the US dollar and – temporarily – against the euro, while Polish share prices grew.

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 November 2016 – February 2017, together with the *Information from the meeting of the Monetary Policy Council* in March 2017 are presented in Chapter 3. *Minutes* of the MPC meeting held in March will be published on 23 March 2017 and so will be included in the next *Report*. The MPC voting records in meetings held in October 2016 – February 2017 can be found in Chapter 5. This *Report* also includes a box: *The absorption of EU structural funds in 2016*.

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 March projection – prepared under the assumption of unchanged NBP interest rates and taking into account data available until 20 February 2017 – there is a 50-per cent probability that the annual price growth will be in the range of 1.6-2.5% in 2017 (compared to 0.5-2.0% in the November 2016 projection), 0.9-2.9% in 2018 (as against 0.3-2.6%) and 1.2-3.5% in 2019. The annual GDP growth – under this projection – will be, with a 50-per cent probability, in the range of 3.4-4.0% in 2017 (as compared to 2.6-4.5% in the November 2016 projection), 2.4-4.5% in 2018 (as against 2.2-4.4%) and 2.3-4.4% in 2019.

1 External developments

1.1 Economic activity abroad

Global economic growth remains moderate, although signs of its gradual acceleration have emerged over recent months (Figure 1.1). In particular, activity in global industry has picked up, yet global trade turnover continued to rise at a low pace (Figure 1.2).

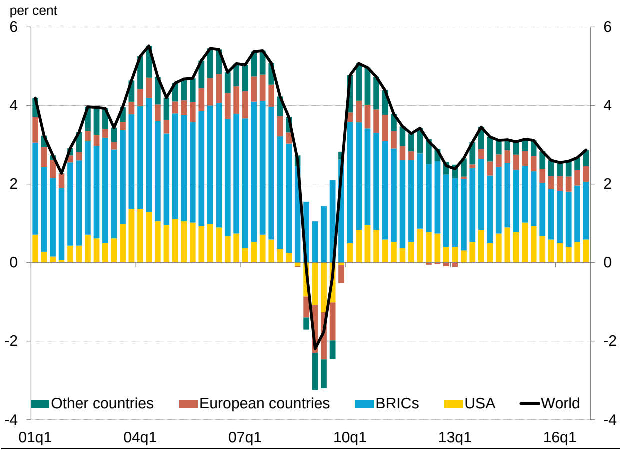
In the euro area, economic growth has been stable (Figure 1.3), driven by rising consumption. This notwithstanding, growth in retail sales decelerated somewhat in late 2016. Investment continued to rise in the second half of 2016, albeit at a slightly slower rate. Investment growth in the euro area is supported by expansionary monetary policy of the ECB (see Chapter 1.4 *Monetary policy abroad*) reinforcing economic recovery. Lower investment growth in the second half of 2016 could have resulted from higher uncertainty, related to i.a. developments in the banking sector in some euro area member states.

Although euro area has been recovering for a few quarters, the margin of spare capacity in this economy is still substantial. Most notably, the unemployment rate – in spite of improving labour market conditions – is still markedly above its pre-crisis level, while the output gap remains negative.

Most Central and Eastern European economies were growing at a slightly weaker pace than in previous years on the back of a fall in investment, mainly that financed from the EU funds. Consumption growth remained, however, a key driver of economic growth in these countries (Figure 1.4).

In the United States, GDP growth accelerated in the second half of 2016 (Figure 1.5), driven by an increase in export growth rate and a rise in

Figure 1.1 Global economic growth by country groups (y/y)

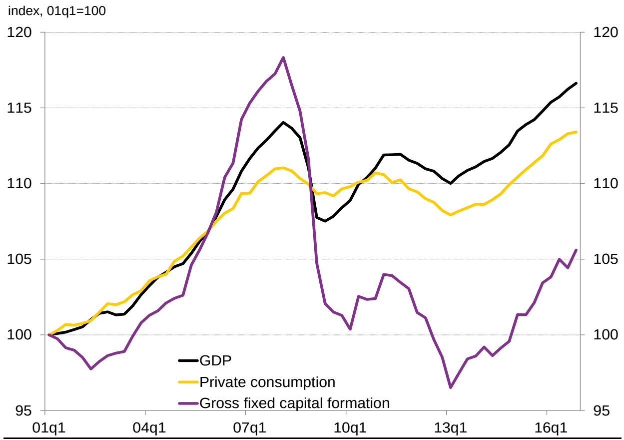


Source: Bloomberg, national statistical offices, Eurostat and IMF data, NBP calculations.
GDP-weighted average annual GDP growth in countries, which comprise 80 per cent of global GDP.

Figure 1.2 Global trade growth and the PMI Global Manufacturing index

Source: Centraal Planbureau and Bloomberg data.

Figure 1.3 GDP, private consumption and gross fixed capital formation in the euro area



Source: Bloomberg data.

investment, i.a. in the extraction sector resulting from higher oil prices (see Chapter 1.3 *Global commodity markets*). Labour market conditions continued to improve, leading to an ongoing stable rise in private consumption, which remains the main source of economic growth. Housing investment is also increasing, though slower, as the monetary policy tightening has resulted in a rise in the mortgage interest rates (see Chapter 1.4 *Monetary policy abroad* and 1.5 *International financial markets*).

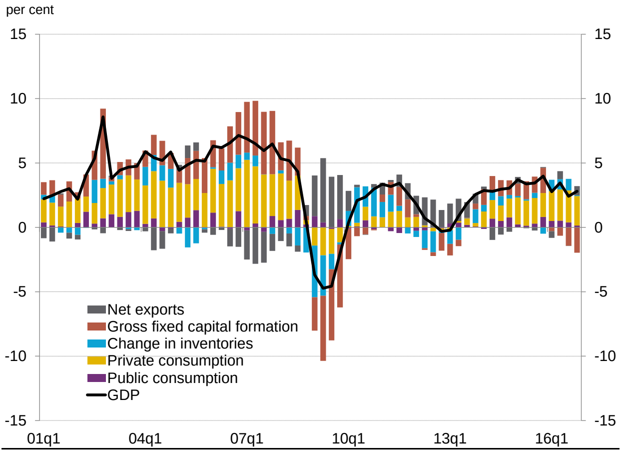
In the largest emerging market economies, economic conditions have improved somewhat, but were still worse than in previous years (Figure 1.6). Russia has recovered from recession, yet primarily on the back of higher oil prices (see Chapter 1.3 *Global commodity markets*), with still negative private consumption growth. In China in 2016 Q4, following a few years of slowdown, GDP growth ticked up, supported by a rise in public and public credit backing housing and infrastructural investments. Export growth has also rebounded of late. Consumption growth, in turn, stabilised at lower levels than in previous years.

1.2 Inflation developments abroad

Inflation in the global economy has risen in recent months (Figure 1.7). The pick-up in price growth was mainly due to the increase in commodity prices (Chapter 1.3 *Global commodity markets*) and is reflected both in consumer and producer prices.

In the immediate environment of the Polish economy – in the euro area and countries of Central and Eastern Europe – core inflation is still running below the long-term average (Figure 1.8). This is due to continued low demand pressure and moderate wage growth in these economies (see Chapter 1.1 *Economic activity abroad*).

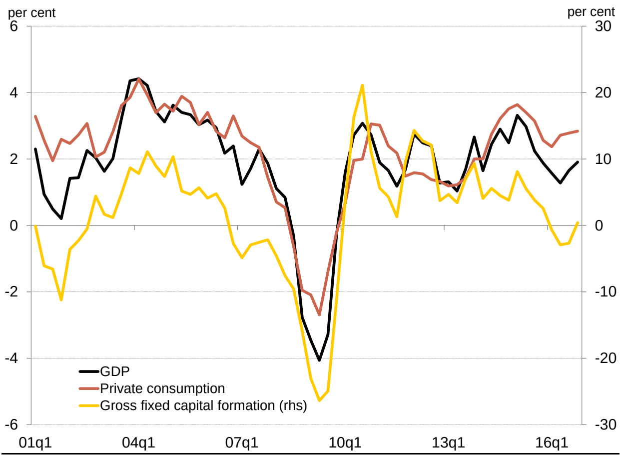
Figure 1.4 Economic growth in the Central and Eastern European economies and its components (y/y)



Source: national statistical offices data, NBP calculations.

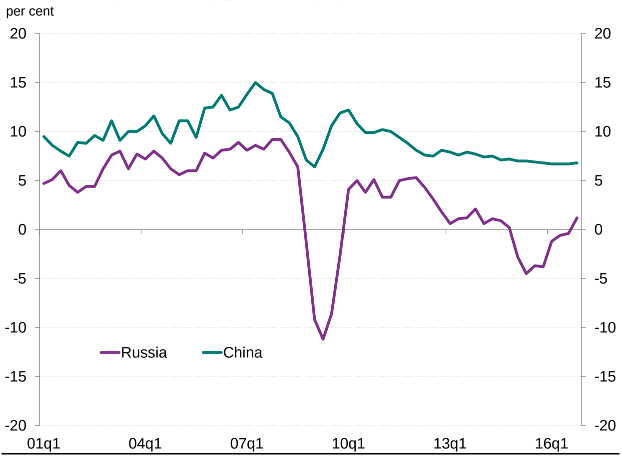
GDP-weighted aggregate based on national accounts data for individual Central and Eastern European economies (Bulgaria, Croatia, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Romania, Slovakia and Slovenia).

Figure 1.5 GDP growth in the United States and its components (y/y)



Source: Bureau of Economic Analysis data, NBP calculations.

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



Source: Bloomberg data.

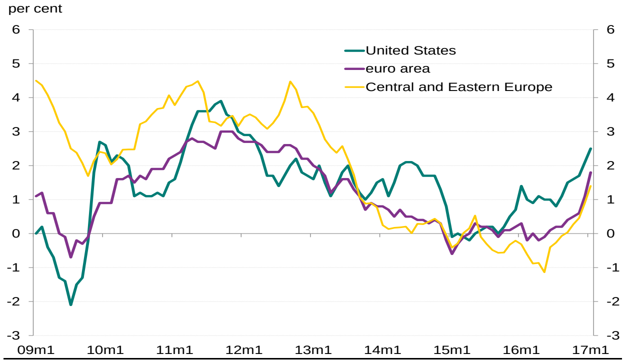
In the United States, in turn, inflation has risen above 2% in recent months, i.e. above the Fed's target. Besides the increase in commodity prices, this was caused by a markedly higher level of core inflation than in previous years. The higher core inflation is a result of growing demand pressure due to the economic recovery that has lasted for several years. Rental costs of housing are also rising relatively fast due to the favourable conditions in the real estate market.

1.3 Global commodity markets

Over the past quarters, global commodity prices have risen, primarily those of energy commodities, including oil. As a result, the annual growth of energy commodities prices in USD picked up considerably, exceeding 60% at the beginning of 2017 (Figure 1.9).

The increase in oil prices that has taken place since the publication of the previous *Report* has been related to the OPEC agreement to limit oil production.[1] This agreement has been in force since January 2017 and assumes a reduction in the OPEC members' output by 1.2 million barrels a day from the October 2016 level.[2] January data indicate, however, that the OPEC countries have so far implemented the plan only partially, reducing their output by 750 thousand barrels a day (Figure 1.10). This, together with an increasing output in the United States and an expected rise in production in countries that did not participate in the OPEC agreement, eased the upward pressure on oil prices. The same effect can also be attributed to the continued low growth in oil demand in the emerging market economies, including China.

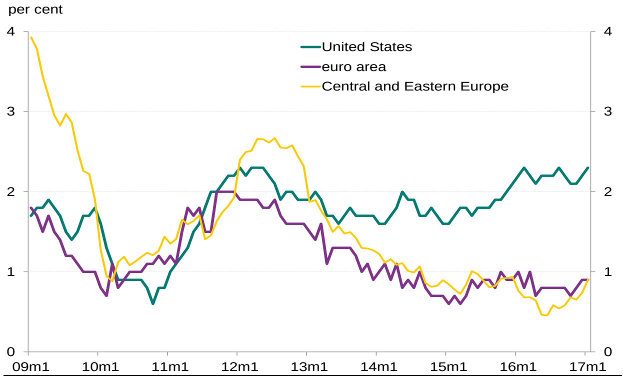
Figure 1.7 CPI inflation in the United States, the euro area and Central and Eastern Europe (y/y)



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.

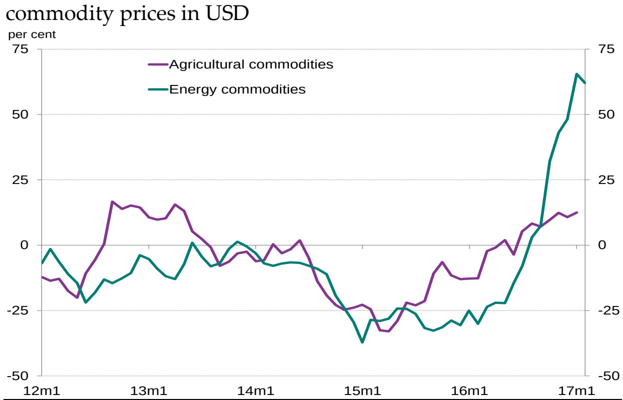
Figure 1.8 Core inflation indices in the United States, the euro area and Central and Eastern Europe (y/y)



Source: Bloomberg data, NBP calculations.

For Central and Eastern Europe, GDP-weighted average core inflation in Bulgaria, Croatia, Czech Republic, Estonia, Lithuania, Latvia, Romania, Slovakia, Slovenia and Hungary.

Figure 1.9 Annual growth in global energy and agricultural commodity prices in USD



Source: Bloomberg data, NBP calculations.

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

[1] The OPEC agreement was joined by Russia and ten smaller non-affiliated oil producers (Azerbaijan, Bahrain, Brunei, Equatorial Guinea, Kazakhstan, Malaysia, Mexico, Oman, Sudan and South Sudan), who committed themselves to reducing output by another 0.58 million barrels per day.

[2] Indonesia, which suspended its OPEC membership, as well as Libya and Nigeria have been exempted from output limits.

Global coal prices – following a hike in 2016 triggered by a reduction in coal production in China[3] – are noticeably higher than in recent years.

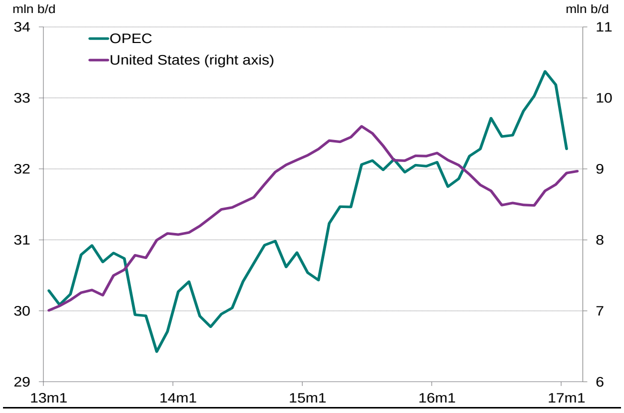
Prices of many agricultural commodities have also risen over the past few months. This was due to the growth in demand for some products, including pork, in emerging market economies as well as worse agricultural and meteorological conditions which affected mainly the prices of wheat and coffee. In turn, expectations of an increase in the supply of some agricultural products (including cocoa and sugar) had an opposite effect. As a result, the growth in the agricultural commodity price index has recently been slower than that of energy commodities.

1.4 Monetary policy abroad

In December 2016, the Federal Reserve (Fed) raised the target range for the federal funds rate by 0.25 pps to 0.50-0.75%. Further interest rate increases are expected in the United States this year. In December 2016, the median of the number of interest rate hikes anticipated by the FOMC members in 2017 rose from two to three. Market interest rate expectations rose as well (Figure 1.11). The Fed is maintaining the policy of reinvesting principal payments from its holdings of securities purchased under the quantitative easing programme, which keeps its balance sheet stable (Figure 1.12).

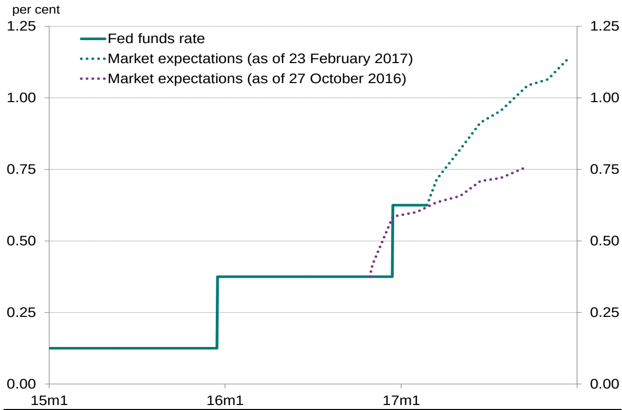
The European Central Bank (ECB) is keeping interest rates close to zero, including the deposit rate below zero. The ECB continues its Targeted Longer-Term Refinancing Operations II programme and is purchasing financial assets. In December 2016, the ECB decided to prolong the asset purchase programme until at least the end of 2017, and simultaneously to reduce, from

Figure 1.10 Crude oil production in OPEC countries and in the US



Source: US Department of Energy data.

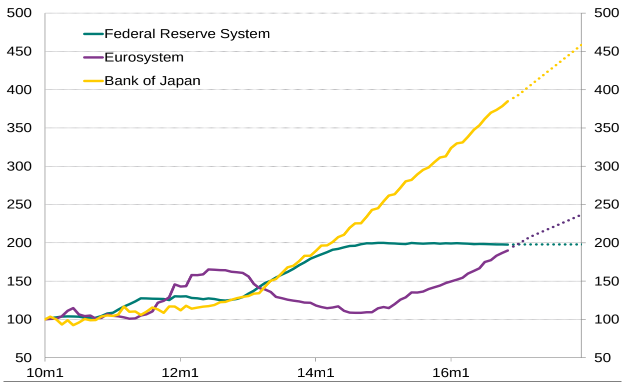
Figure 1.11 Historical and expected interest rates in the United States (middle range of fed funds target)



Source: Bloomberg data and Fed.

Market expectations based on *fed funds futures* contracts.

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



Source: Bloomberg and central banks data, NBP calculations.

Forecasts prepared under an assumption of the Eurosystem's assets growing by 80 billion euro a month until March 2017 and by 60 billion euro from April to December 2017. Bank of Japan's assets are assumed to grow by 86 trillion yen a year and Fed's assets are assumed to be constant

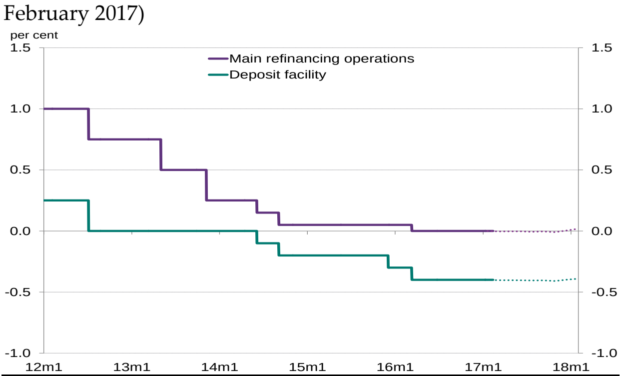
[3] Between January and November 2016 coal prices in Richards Bay (RSA) increased by more than 80% to drop slightly afterwards and stabilize at around 85 USD/t. It should be noted, however, that global coal prices impact the prices of this commodity in Poland with some delay and only to a limited extent due to the specific nature of contracts between domestic producers and the main recipients of coal.

April 2017, the scale of the monthly purchases from EUR 80 billion to EUR 60 billion. The ECB has announced maintaining the interest rates at the present or lower level over a longer period of time. As a result, market participants expect the ECB to continue a highly expansionary monetary policy in the coming quarters (Figure 1.13).

Most other central banks in advanced economies are keeping interest rates at historically low levels, and some of them are still applying unconventional monetary policy measures. The central banks of Japan, England and Sweden are conducting asset purchase programmes.[4] The Czech central bank in turn maintains the asymmetric exchange rate policy, and the Swiss National Bank intervenes in order to prevent an excessive appreciation of its currency.[5]

Also the Chinese central bank is conducting expansionary monetary policy. It is keeping the interest rates at record low levels and additionally supports lending by granting medium-term loans to financial institutions. However, at the beginning of 2017, it slightly raised the interest rate on these loans as well as on open market operations. In recent months, in the face of capital outflows from China, the capital controls has been tightened and the Chinese central bank intervened in the foreign exchange market, which translated into a larger drain on its currency reserves (Figure 1.14).

Figure 1.13 ECB's interest rates, current and expected (as of 23 February 2017)



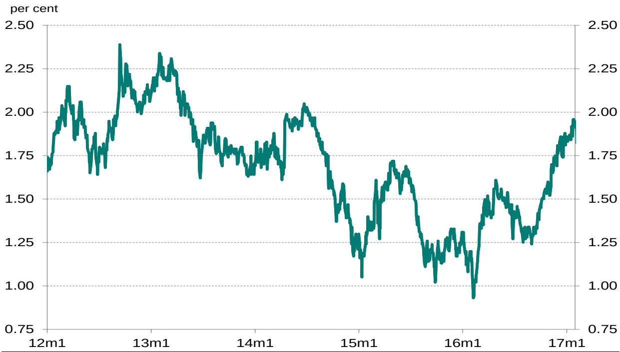
Source: Bloomberg data.

Future interest rates calculated from the overnight index swaps for the deposit and refinancing rates

Figure 1.14 Foreign exchange reserves of the People's Republic of China

Source: Bloomberg data.

Figure 1.15 Medium-term inflation expectations in the United States



Source: FRED data.

Market-based measure of expected inflation in 5-year period calculated as difference between 5-year fixed-rate Treasury bond yield and 5-Year Treasury inflation-indexed bond yield.

[4] The Bank of Japan is purchasing government bonds at the scale allowing for the stabilization of yields on 10-year bonds at a level close to zero, i.e. approximately JPY 80 trillion a year, and also carrying out purchases of other financial assets, including Exchange-Traded Funds. Since August 2016, the Bank of England has been purchasing government bonds and corporate bonds of a joint value of respectively GBP 60 billion and GBP 10 billion over an 18-month period. In December 2016, the Riksbank extended its programme of government bond purchase until June 2017, at the same time reducing its scale from SEK 45 billion to SEK 30 billion over a half-year span.

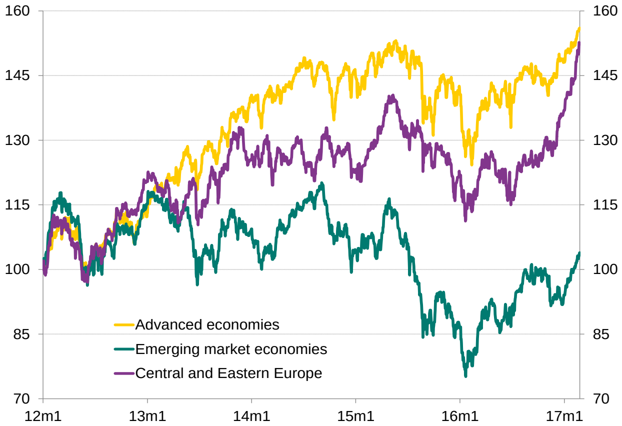
[5] The Czech National Bank is maintaining its commitment to intervene in the foreign exchange market in order to prevent the Czech koruna from appreciating beyond 27 CZK/EUR and indicates that it will probably withdraw from this commitment in mid-2017. At the same time, it communicates the readiness to intervene against the appreciation of the exchange rate also after the asymmetric exchange rate policy is terminated. In turn, the Swiss National Bank withdrew from a similar commitment in January 2015, however it intervenes in order to prevent excessive appreciation of the Swiss franc, without specifying the threshold level of the exchange rate of its currency.

1.5 International financial markets

Over the recent months, sentiment in the international financial markets has improved. This was due to better prospects for global economic climate. As a result, stock indices in advanced economies have risen significantly (Figure 1.16; see chapter 1.1 *Economic activity abroad*). The improved economic outlook, together with the increase in commodity prices and inflation, has also led to rising inflation expectations, in particular in the United States (Figure 1.15; see Chapter 1.3 *Global commodity markets*). Consequently, expectations of monetary policy tightening by the Fed have strengthened as well (see Chapter 1.4 *Monetary policy abroad*). Against this background, bond yields in advanced economies increased (Figure 1.17). The rise in yields was particularly strong in the United States and translated into a marked appreciation of the US dollar against most currencies (Figure 1.18).

Bond yields increased also in the emerging markets, mainly on account of the negative consequences of the monetary policy tightening by the Fed. In non-European emerging market economies, this factor together with the expectations of possibly tighter restrictions in international trade to be introduced by the United States and still weak economic growth outlook, e.g. for Russia and Brazil, led to some decrease in stock prices. A factor acting in the opposite direction was the higher than expected economic growth in China in 2016 Q4. The stock indices in Central and Eastern Europe, in turn, increased markedly, mainly driven by the rise in stock prices in the euro area.

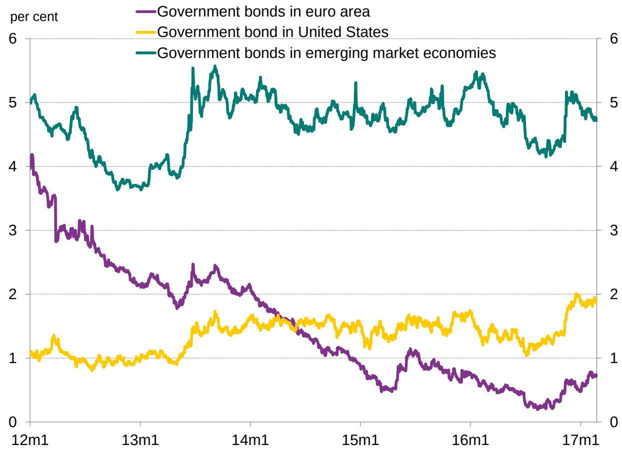
Figure 1.16 Stock indices in selected economies (January 2012=100)



Source: Bloomberg data, NBP calculations.

Advanced economies – *MSCI world equity index*, emerging market economies – *MSCI emerging markets equity index*, Central and Eastern Europe – GDP-weighted stock market indices of Poland, Czech Republic and Hungary.

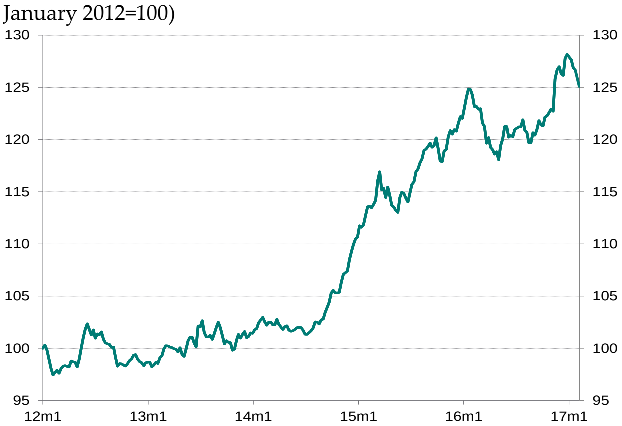
Figure 1.17 Bond yields in the world



Source: Bloomberg data.

Yields from Bloomberg bond indices: Eurozone Sovereign, US Treasury and Emerging Market Sovereign.

Figure 1.18 Nominal effective exchange rate of US dollar (index January 2012=100)



Source: FRED data.

2 Domestic economy

2.1 Consumer prices

In recent months, inflation in Poland has picked up markedly (Figure 2.1), running at 1.8% y/y in January.[6] This acceleration in annual price growth was mainly driven by external factors, such as rising energy commodity prices in the global markets, which – coupled with an appreciation of the US dollar – led to an increase in domestic prices of energy, especially fuels.[7]

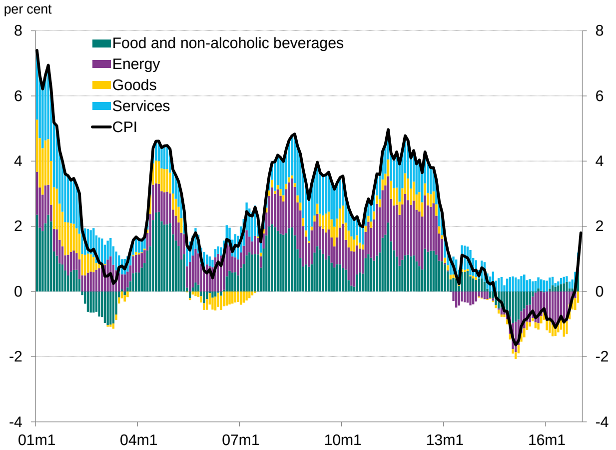
Another driver of the CPI growth was the rise in global food prices in recent months. This was related to expanding demand from emerging market economies amid constraints to the supply of certain food products (including some vegetables, sugar and coffee) resulting from adverse weather conditions in the regions where their production was concentrated.

Core inflation remains low (Figure 2.2) due to still weak, albeit growing, demand pressure, and moderately rising unit labour costs. Factors dragging down domestic price growth also include the continued low demand pressure abroad (see Chapter 1.1 *Global economic activity*).

The rise in consumer inflation is supported by steeper producer price growth (Figure 2.3). As in the case of consumer prices, this is primarily caused by the rise in production costs on the back of higher commodity prices.

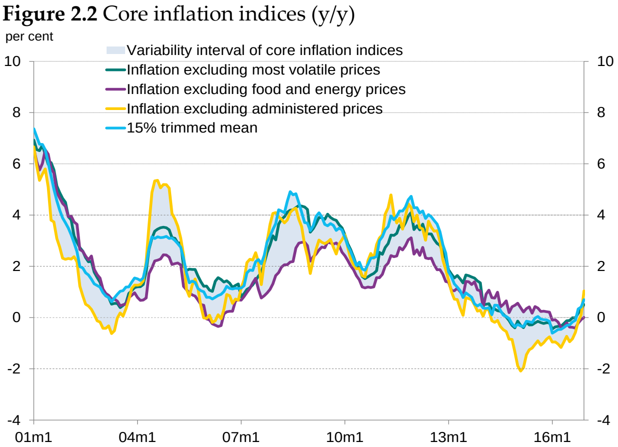
Higher inflation is accompanied by higher inflation expectations. The forecasts of the financial sector analysts and economists surveyed by NBP currently indicate that within a 4-quarter horizon

Figure 2.1 Composition of CPI inflation (y/y)



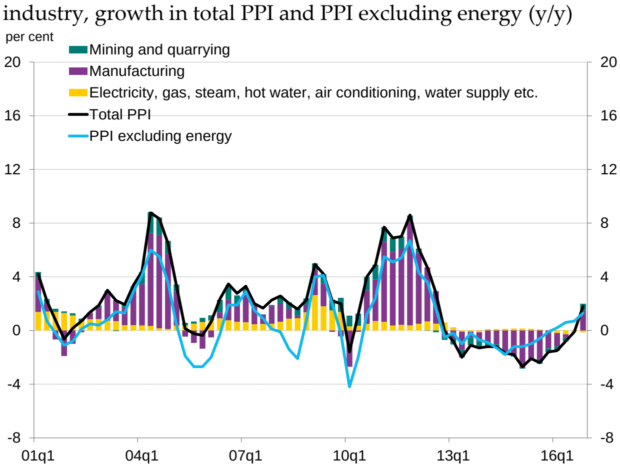
Source: GUS data, NBP calculations.

Figure 2.2 Core inflation indices (y/y)



Source: GUS data, NBP calculations.

Figure 2.3 Composition of total PPI growth by sections of industry, growth in total PPI and PPI excluding energy (y/y)



Source: GUS, Eurostat data.

[6] Data on January inflation may be revised due to the re-weighting of the CPI basket carried out at the beginning of each year. Due to the preliminary nature of the data, GUS did not publish the information on changes in the prices of all the components of the CPI basket.
[7] The increase in domestic energy prices in January 2017 was additionally compounded by a rise in the electrical energy distribution tariffs.

inflation will run above the lower bound for deviations from the inflation target, and in an 8-quarter horizon it will approximate the target (Table 2.1).

Similarly, consumers and enterprises expect an acceleration in price growth. In recent months, the share of respondents expecting prices to rise has increased, while the percentage of those anticipating no change or decline in prices has fallen (Figure 2.4).

2.2 Demand and output

In 2016 Q4, the pace of economic growth was slightly higher than a quarter earlier (Figure 2.5). A steadily rising consumer demand, fuelled by employment and wage growth, very good consumer sentiment and child benefit payments, remains the primary driver of growth. In 2016 Q4, an increase in inventories and net exports also added to GDP growth. Positive net exports reflected only a slight slowdown in exports amid a sharp decline in imports. At the same time, investment continued to fall, driven by weak absorption of EU funds under the new EU financial framework.

2.2.1 Consumption

Private consumption growth accelerated in the second half of 2016 to reach 3.9% y/y in 2016 Q3 and 4.2% in 2016 Q4 (against 3.3% in 2016 Q2; Figure 2.6). The growth in consumption is supported by rising disposable income of households due to favourable labour market conditions as reflected in the rise of employment and wages (see Chapter 2.4 *Labour market*). Other factors accelerating private consumption growth include upbeat consumer sentiment (Figure 2.7) and child benefit payments under the "Family 500 plus" programme (in 2016 Q3, these payments increased the annual growth in household disposable income by 3.2 pp; Figure 2.6).

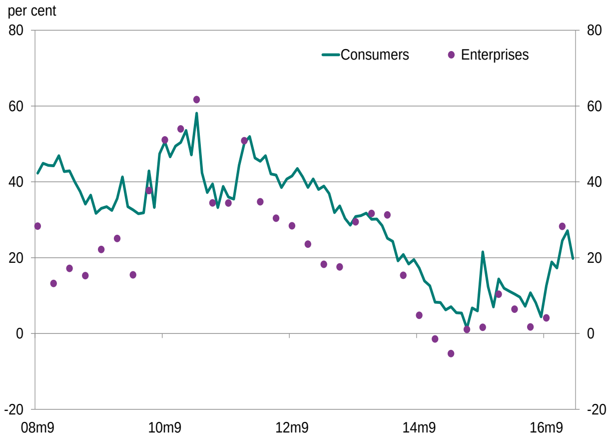
Table 2.1 Inflation expectations of bank analysts and participants in the *NBP Survey of Professional Forecasters* (in per cent)

	Survey conducted in:				
	16q1	16q2	16q3	16q4	17q1
Thomson Reuters Survey, inflation expected in 4 quarters	1.3	1.6	1.4	1.4	1.9
NBP Survey, inflation expected in 4 quarters	1.3	1.3	1.2	1.7	-
NBP Survey, inflation expected in 8 quarters	1.7	1.8	1.8	2.2	-

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 (for 2017 Q1 – in February). 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.

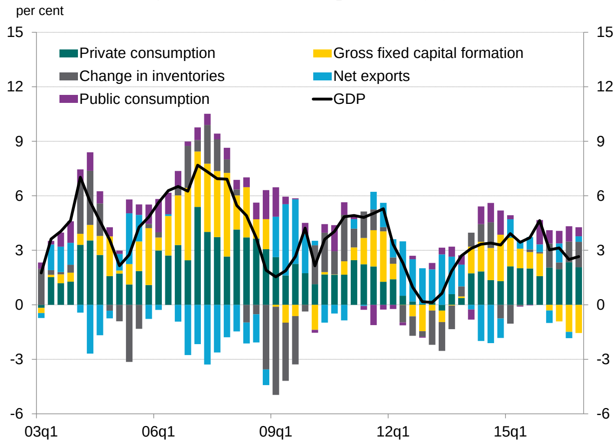
Figure 2.4 Balance statistics of consumer and enterprise inflation expectations



Source: GUS and NBP data, NBP calculations.

Balance statistics 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 statistics should be interpreted as a shift in opinions towards higher rise in prices. For more on the balance statistics calculation, see: http://www.nbp.pl/homen.aspx?f=/en/statystyka/expectations.html

Figure 2.5 GDP growth and its components (y/y)



Source: GUS data.

The consumption growth could have also been spurred by the advance payments of the 2017 direct subsidies for farmers.

In 2017 Q1, the growth in private consumption probably remained high, as suggested by an increase in the retail sales growth in January 2017 on the back of continued improvement in labour market and favourable consumer sentiment.

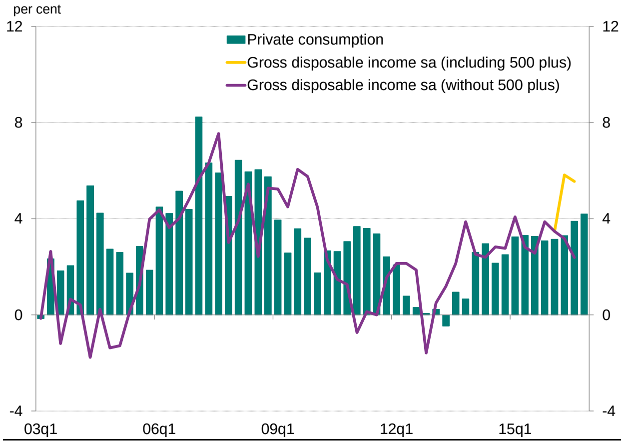
2.2.2 Investment

In the second half of 2016, investment growth in the economy was still negative (Figure 2.8). The decline in gross fixed capital formation resulted from falling public and corporate investment, while housing construction continued to grow.

As in other countries of Central and Eastern Europe, the fall in investment is caused by lower absorption of EU structural funds in 2016 after the completion of the EU 2007-2013 financial framework (see Chapter 1.1 *Economic activity abroad* and Box: *The absorption of EU structural funds in 2016*).

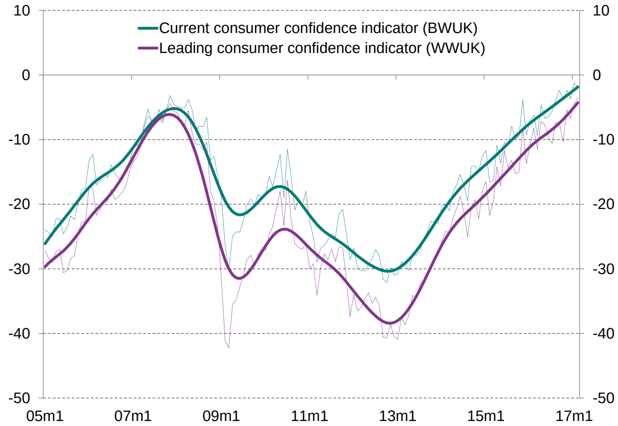
In 2016 Q4, the absorption of EU funds picked up somewhat, which – in line with accelerating consumer expenditures and the resultant improvement in demand outlook – supported growth in corporate investment. Corporate investment was also backed by very good financial standing of enterprises, high capacity utilisation as well as relatively high mortgage loan affordability and lower interest rates compared with previous years. At the same time, corporate investment, particularly in the private sector, might be contained by heightened uncertainty reported by companies.[8]

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



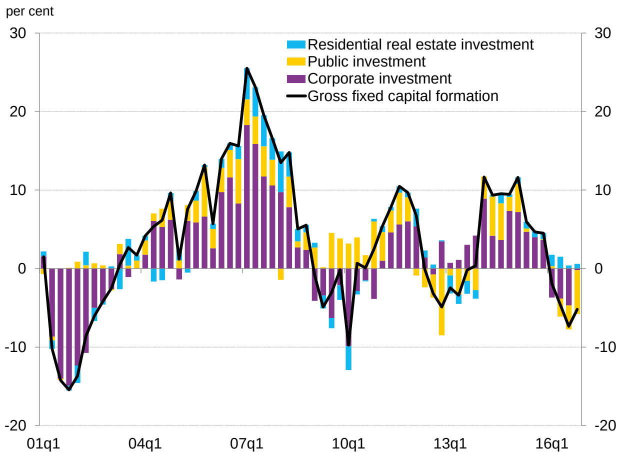
Source: GUS data, NBP calculations.

Figure 2.7 Consumer confidence indicators



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

Figure 2.8 Investment in the economy and its major components (y/y)



Source: GUS data, NBP calculations.
NBP estimates, not seasonally adjusted. Data for 2016 Q4 based on 2016 national accounts data. A corresponding chart in Chapter 4 Projection of inflation and GDP shows seasonally adjusted data, which may differ from presented above.

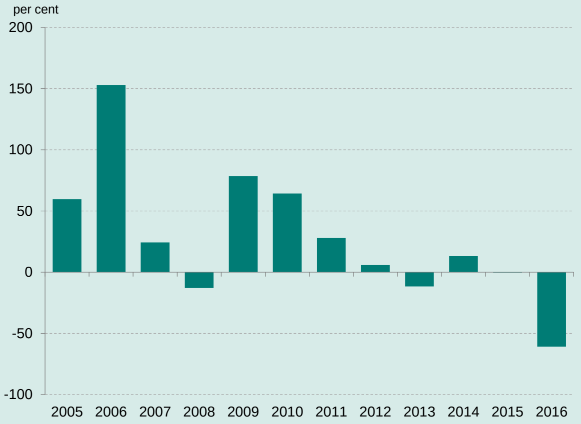
[8] See *NBP Quick Monitoring Survey. Economic climate in the enterprise sector in 2016 Q4 and forecasts for 2017 Q1*, NBP, January 2017.

Box: The absorption of EU structural funds in 2016

Like other countries in the region of Central and Eastern Europe, Poland receives significant support from structural funds of the European Union.[9] In recent years, the extent of this funding has regularly exceeded 2% of GDP. Most of this amount is allocated for financing infrastructural investment, in particular that of the public sector. In 2010-2015, i.e. a period of high absorption of funds under the 2007-2013 financial framework, approx. 1/4 of total general government investment was financed from this source. EU funds also provided financing for infrastructural investment of the corporate sector, particularly in the case of enterprises owned by the state or local governments in sectors such as rail transport, water supply, liquid and solid waste disposal, and energy generation.

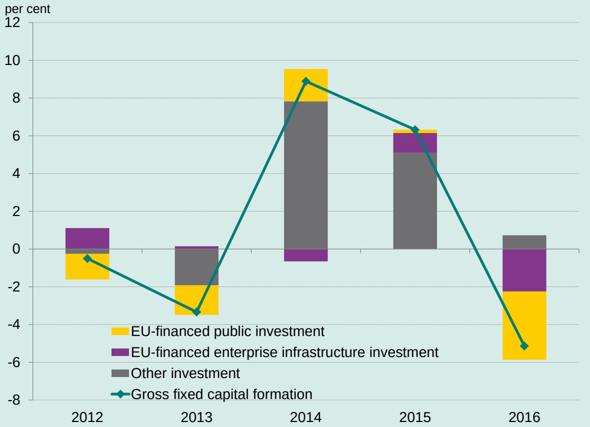
Available data show that 2016 has seen the sharpest decline (both in nominal and percentage terms) in the absorption of structural EU funds since Poland's accession to the European Union (Figure B.1). There was a significant fall in the absorption of EU funds earmarked for infrastructural investment (Figure B.2), which had a major downward effect on overall gross fixed capital formation growth in 2016. According to NBP estimates based on Ministry of Development data, growth in investment other than financed with EU funds was positive in 2016.

Figure B.1. Growth in EU structural fund absorption by Poland (y/y)



Source: NBP estimates based on Ministry of Development data.

Figure B.2. Contribution of EU funds to growth in gross fixed capital formation (in nominal terms)



Source: GUS, NBP estimates based on Ministry of Development data.

The decline in the absorption of EU structural funds and its adverse effect on investment growth was observable almost across the entire region of Central and Eastern Europe (CEE) in 2016 (Figure B.3; Figure B.4). The European Commission releases data on interim payments made to individual countries, which approximate the level of absorption of EU funds.[10] These data show that the 2016 reimbursement of expenditure under the 2014-2020 financial framework did not exceed 1% of GDP in any EU country, and in the CEE region[11] it stood at an average of less than 0.5% of GDP. In contrast, in 2012-2015, i.e. a period of intensive absorption of

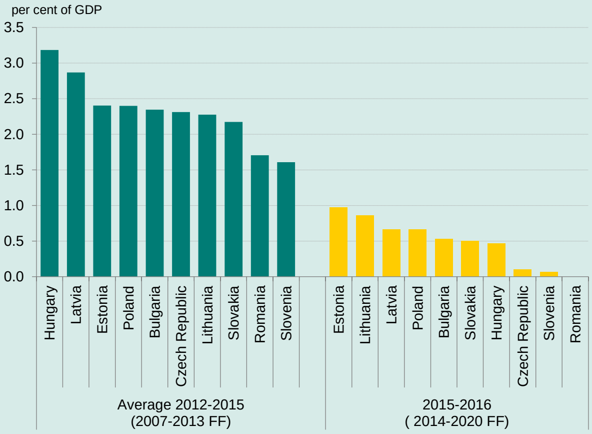
[9] This Box and the data cited relate exclusively to EU funds earmarked for cohesion policy (i.e. originating from the European Regional Development Fund, European Social Fund and Cohesion Fund). They do not cover the financial support directed to the agricultural and fishery sectors.

[10] Data on interim payments are a less precise reflection of the timing of expenditure made by beneficiaries than data on beneficiaries' payment requests, published by the Polish Ministry of Development. Moreover, EC data are in particular not representative in the last year of a financial framework, when, even in the case of beneficiaries using up the entire available allocation, interim payments are capped with a limit of 95% of the allocation (the remaining 5% of the allocation is reimbursed only after the operational programme has been completely settled).

[11] The list of the countries of the region does not include Croatia, which, due to later EU accession, drew the funds of the 2007-2013 framework to a limited extent in comparison to other CEE countries.

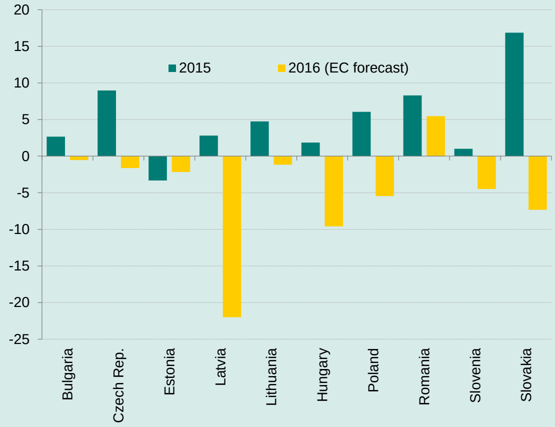
funds under the previous framework, the countries of the region received an average reimbursement of around 2.3% of GDP per annum. Similarly to Poland, in other countries of the region, the lower absorption of EU funds in 2016 was accompanied by a slowdown in gross fixed capital formation.

Figure B.3 Interim payments from structural funds in the CEE countries



Source: Own calculations based on European Commission and Ministry of Development data.

Figure B.4 Gross fixed capital formation in the CEE countries (real annual growth)



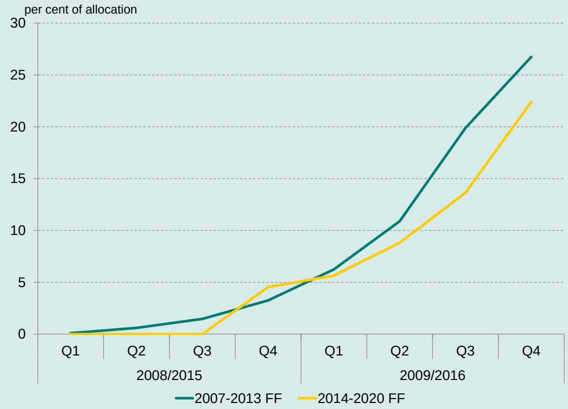
Source: European Commission (*Winter Economic Forecast*, February 2017).

The low absorption of the EU funds in 2016 in comparison with previous years resulted from the considerably delayed onset of large-scale absorption of structural funds following the opening of the framework, a phenomenon typical of the EU financial frameworks. Another contributory factor was the statistical base effect, i.e. the implementation in 2015 of high expenditure from the previous financial framework which was closing that year. The heavy spending in 2015 was also related to the aforementioned delay. The later the absorption of funds takes off, the greater the risk of a pile-up of spending in the final years of the framework, particularly in the case of the most administratively complex projects. Of major significance in this context is the n+2 rule, according to which (in a slight simplification), for expenses to be reimbursed from EU funds under a given financial framework, these need to be incurred no later than within two years following the closure of the framework. For example, in the case of the 2007-2013 framework, the expenses had to be incurred by the end of 2015.

The above-mentioned delay in the launch of absorption of EU funds is a common phenomenon. It has been observed in practically all EU countries, on a similar scale in the current financial framework as in the case of the previous one. The delay is related to the complexity of legislative and administrative procedures necessary to implement the absorption of EU funds. Although preparation of a new financial framework at the EU level typically starts a few years ahead of the inception of the framework, experience shows that this advance period is sufficient only to adopt relevant regulations on the EU forum. The negotiations of the programme documents between member countries and the EC, such as partnership agreements and operational programmes, occur largely after the framework has commenced. Both in the previous and current framework, operational programmes were adopted at the end of the first or at the beginning of the second year of the framework. This, in turn, meant that the procedures of allocating the funds to the end-beneficiaries took place even later.

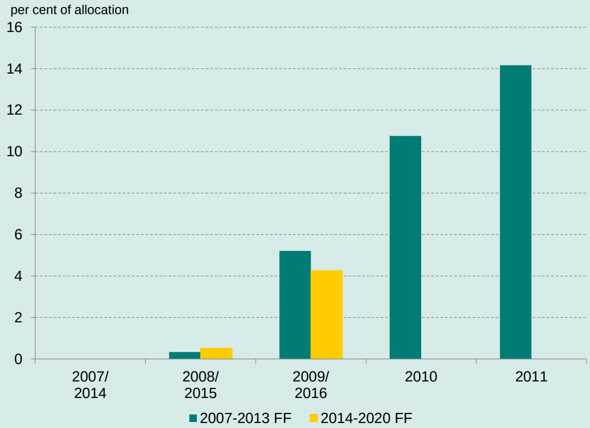
As a consequence of such timing of subsequent stages of the fund allocation procedure, the absorption of funds on a noticeable scale does not start until the third year of the framework, and does not reach a high level (approx. 15% of the allocation per year) until the fifth year (Figure B.5; Figure B.6). This was the case with the 2007-2013 framework and, so far, appears to be the case with the current one.

Figure B.5. Agreements signed with beneficiaries (per cent of allocation under the MFF, cumulatively)



Source: Ministry of Development.

Figure B.6. Absorption of EU funds (per cent of allocation under the MFF)



Source: Ministry of Development.

At the turn of the 2004-2006 and 2007-2013 frameworks – in contrast to the situation observed in 2016 – the absorption of EU funds did not decline, even though fund absorption under the 2007-2013 framework also took off with delay. This was related to certain characteristics of the 2004-2006 financial framework. Firstly, the n+2 rule did not operate at that time. For most of the funds under that framework, the deadline resulting from this rule was extended by half a year on account of the financial crisis. In addition, in the case of funds from the Cohesion Fund, this deadline was longer from the start (n+4, sometimes even longer). Secondly, funds intended for cohesion policy available under the 2004-2006 framework were smaller than those under the following framework. In the years 2004-2008, their absorption did not exceed 1.1% of GDP annually, while in the period 2010-2015 it was running at 2-3% of GDP per year.

As in the 2007-2013 financial framework, in the current framework we may expect a marked rise in the pace of absorption of funds in the fourth and fifth year, i.e. in 2017-2018. This is indicated by the rate at which agreements with beneficiaries were signed, which accelerated significantly in the second half of 2016.

2.2.3 Public finance

In 2016, fiscal policy had a slightly positive impact on aggregate demand growth. The demand was primarily supported by higher expenditure on social[12] and child benefits (the "Family 500 plus"[13] programme), which largely offset the decline in public investment related to the completion end of EU funds absorption under the 2007-2013 financial framework.[14]

[12] The result of, among others, the introduction of parental benefits for the persons who had previously not been eligible to receive maternity benefits; changes in rules for the payment of family benefits (after exceeding the income threshold, the benefits will be gradually lowered as income rises) and a one-off payment of allowances granted to some pensioners.

[13] According to information from the Ministry of Family, Labour and Social Policy, in 2016 the beneficiaries of the "Family 500 plus" programme were paid a total of over PLN 17 billion (approx. 0.9 of GDP).

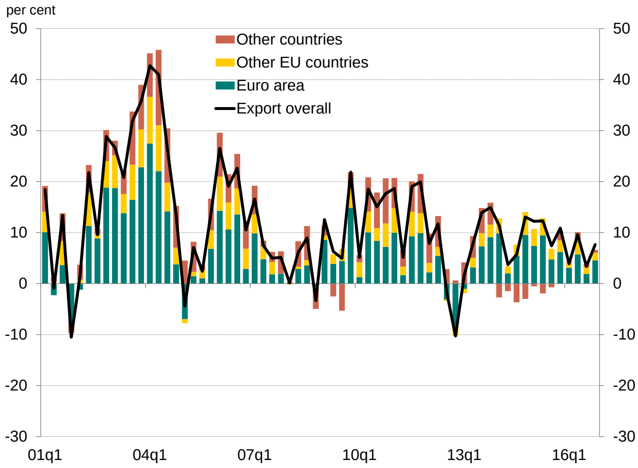
[14] In particular, the decline concerned local government units. Available data for the period of January-September 2016 show that the total capital expenditure of local government units was lower by 44.2% y/y (i.e. approx. 0.5% of GDP), including for projects co-financed with EU funds – by 89.1% y/y (i.e. a fall by approx. 0.3% of GDP). According to the central and local government units sector statistics in ESA2010 terms, expenditure partly subject to reimbursement from EU funds is neutral to the sector's result.

In 2016, the general government deficit (according to ESA 2010) did not exceed 3% of GDP and was probably close to the amount assumed in the *Budget Act for 2016* (2.8% of GDP). Earlier forecasts of the Polish Ministry of Finance and the European Commission pointed to a possibility of lower general government deficit; however the change in the Eurostat decision on registering revenue from the LTE auction will have a significantly adverse effect on this result.[15]

Under the *Budget Act for 2017*, maintaining a slightly positive impact of fiscal policy on economic growth can be expected in 2017.[16] This will be related in particular to the expected acceleration of EU funds absorption (mostly by the local government subsector) and – to a lesser extent – measures aimed at increasing households' disposable income.[17] On the revenue side, in turn, the provisions of the Act indicate that the current level of fiscal policy restrictiveness will remain unchanged.

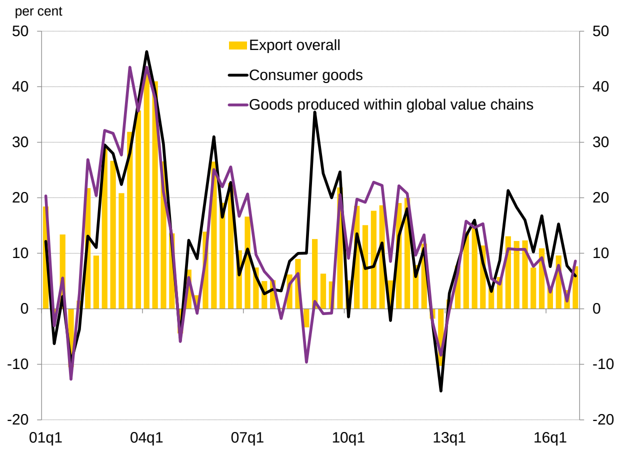
The *Budget Act for 2017* envisages maintaining a general government deficit (according to ESA2010) below 3% of GDP. The forecast incorporates, among others, the full-year costs of the "Family 500 plus" programme (an increase in expenditure of approx. 0.3% of GDP), restoration of the general retirement age of 65 years for men and 60 years for women from October 2017, and also the expected results of measures aimed at improving tax collection efficiency.

Figure 2.9 Polish export growth by destination (y/y)



Source: GUS data, NBP calculations.

Figure 2.10 Polish export growth by commodity (y/y)



Source: GUS data, NBP calculations.

Consumer goods encompass durable, semi-durable and non-durable consumer goods as well as food and vehicles purchased by households. Goods produced within global supply chains include food purchased by industry, investment and supply goods and vehicles not purchased by households.

[15] Instead of accounting for the full amount of the revenue in 2016 (approx. 0.5% of GDP), it would be spread over the period for which telecommunication spectrum was awarded for (15 years).

[16] See *Opinion of the MPC on the 2017 Draft Budget Act*.

[17] The measures include, among others, the full-year expenditure on the "Family 500 plus" programme and modification of the rules for the indexation of old age and disability benefits (setting the minimum amount of a pension benefit increase of PLN 10), coupled with upward adjustment of minimum pension benefits (to the amount of PLN 1,000).

2.2.4 External trade

In 2016 Q4 export and import growth accelerated following a temporary slowdown in the previous quarter[18].

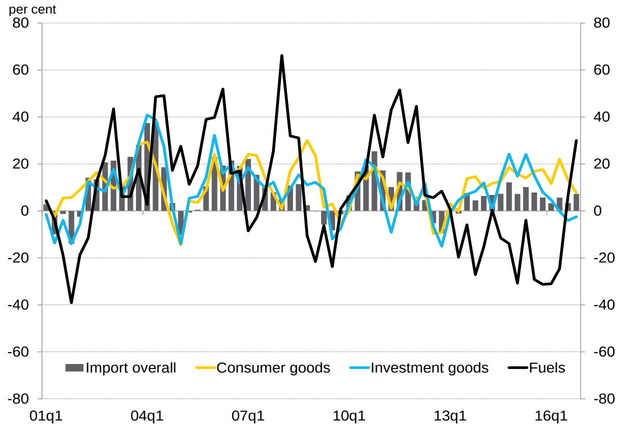
The reacceleration in exports in 2016 Q4 resulted mainly from higher imports of the European economies, particularly the euro area (Figure 2.9), stemming from improving conditions in global industry (see Chapter 1.1 *Economic activity abroad*), which have translated into a recovery in trade in the global value chains. The growth in export value was, however, contained by a fall in some agricultural commodity prices in the second half of 2016 and lower external demand for certain durable consumer goods (Figure 2.10).

Value of imports, in turn, rebounded on the back of higher than a year before crude oil prices (see Chapter 1.3 *Global commodity markets*). In addition, a fall in imports of investment goods narrowed amid higher investment growth rate in Poland (see Chapter 2.2.2 *Investment*). At the same time, imports of consumer goods slowed down after a significant upsurge in the first half of 2016 (Figure 2.11, see also Chapter 2.2.1 *Consumption*).

2.2.5 Output

Decomposition of the GDP growth by sectors of the economy indicates that in the second half of 2016 the main driver of economic growth was rising activity in services. Industry also had a positive contribution to GDP growth, albeit lower than in the previous years. Construction, in turn, saw a further decline in output, yet its scale diminished at the end of the year (Figure 2.12).

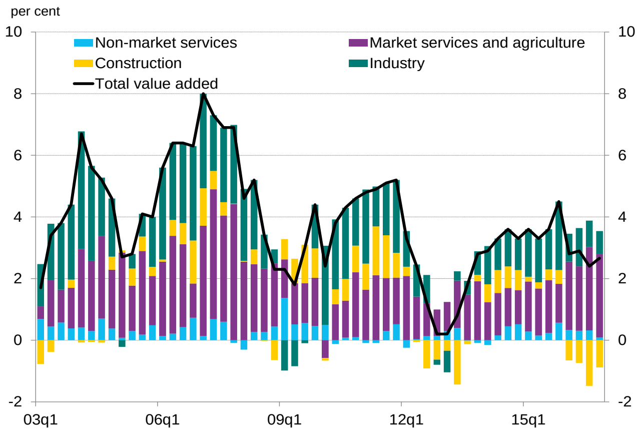
Figure 2.11 Polish import growth by commodity (y/y)



Source: GUS data, NBP calculations.

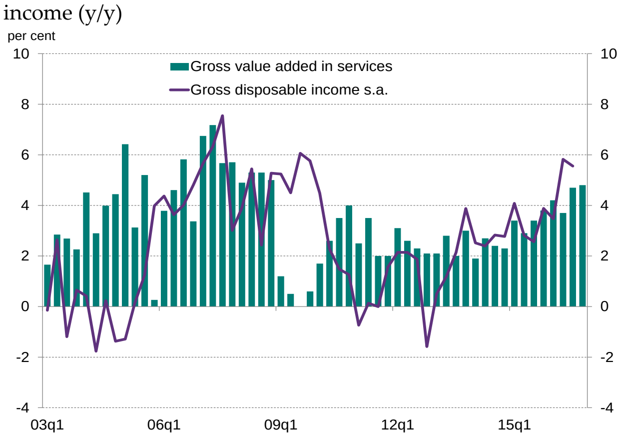
Consumer goods encompass durable, semi-durable and non-durable consumer goods as well as food and vehicles purchased by households.

Figure 2.12 Sector contribution to gross value added growth (y/y)



Source: GUS data, NBP calculations.

Figure 2.13 Gross value added in services and gross disposable income (y/y)



Source: GUS and Eurostat data, NBP calculations.

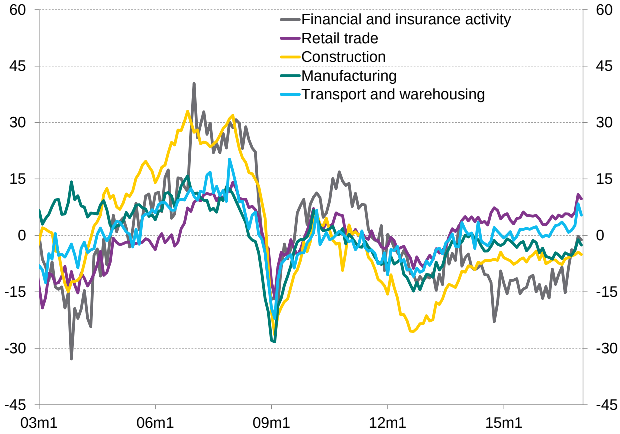
[18] The content of this Chapter bases on the Central Statistical Office (GUS) data on the value of exports and imports of goods expressed in the Polish zloty. Trade of services is not widely discussed due to a lack of a detailed breakdown by destination or type of services. Yet, it should be noted that according to NBP data, the value of the exports of services increased to 13.0% y/y in the second half of 2016 as compared to a 12.4% y/y increase posted in the first half of 2016 and the value of imports picked up to 7.6% y/y as compared to a 6.8% growth in the first half of the year.

In the second half of 2016, the growth in gross value added in services picked up again and reached the highest level since 2008, supported by growing disposable income of households (Figure 2.13). A significant rise in value added was observed in all branches of the sector with the most pronounced acceleration in financial activity, information and communication (in 2016 Q3) as well as transport (in 2016 Q4). A very good assessment of business conditions by commercial, transportation and financial enterprises indicate that in 2017 Q1 positive trends in services most likely continued (Figure 2.14).

The growth in gross value added in industry, following a slight increase in 2016 Q2, declined in Q3 and Q4. The slowdown in 2016 Q3 was driven by weaker growth in consumer goods exports (see Chapter 2.2.4 *External trade*) and a decline in domestic demand for investment goods (Figure 2.15). In 2016 Q4, the growth in value added in industry slowed down further, which was mainly related to statistical effects[19]. 2017 Q1 is expected to bring a recovery in economic conditions[20] fuelled by rising domestic investment demand (see Chapter 2.2.2 *Investment*) and an improvement in economic conditions worldwide (see chapter 1.1 *Economic activity abroad*).

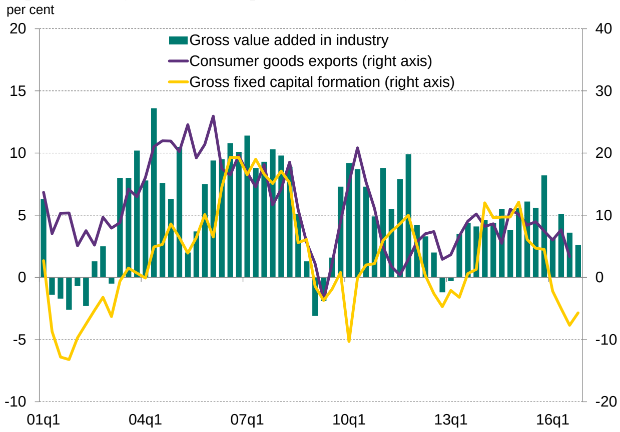
In 2016 Q4, construction saw a further decline in gross value added due to a temporary lower absorption of EU funds, following the completion of the previous EU financial framework. Yet, the scale of this decline narrowed (to 9.5% y/y as compared to 16.5% in 2016 Q3) as a result of an increased absorption of funds under the 2014-2020 framework. This translated into a rise in investment in infrastructure, which, however, continued to fall markedly in year-on-year terms

Figure 2.14 Economic situation forecast vs. multi-year average, seasonally adjusted data



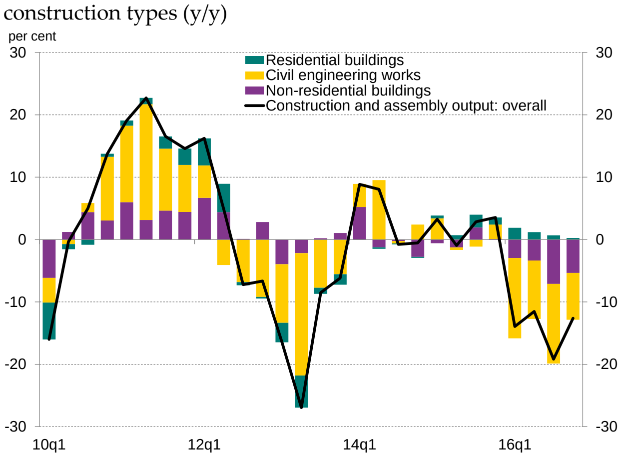
Source: GUS economic conditions survey.

Figure 2.15 Gross value added in industry vs. consumer goods exports and gross fixed capital formation (y/y)



Source: GUS and Eurostat data.

Figure 2.16 Construction and assembly output growth by construction types (y/y)



Source: GUS data, NBP calculations.

[19] In 2016 Q4, the number of working days was lower than in 2015 Q4. Moreover, at the end of 2015 production of transport equipment rose strongly which through the base effect had a negative impact on growth in 2016 Q4.

[20] An improvement in economic conditions in 2017 Q1 is indicated by an acceleration in industrial output growth and a favourable assessment of business conditions in manufacturing in January 2017.

(Figure 2.16). An improvement was also seen in commercial construction, although in year-on-year terms output continued to decline considerably in this sector too.[21] At the same time, output in residential construction kept growing, although at a slower pace (2.1% y/y). In 2017 Q1, recession in construction will probably come to an end as indicated by a renewed growth in construction and assembly output in January.

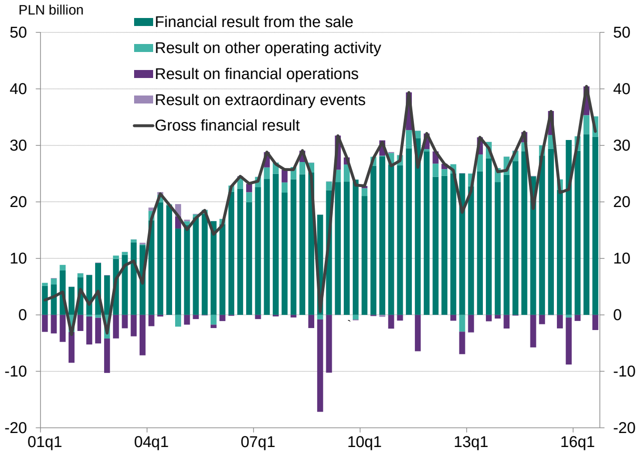
2.3 Financial situation in the enterprise sector

The financial standing of the enterprise sector remains strong. Corporate profitability is higher than in recent years and the liquidity position of the sector is favourable. Yet, the situation varies to some extent across industries.

In 2016 Q3, the financial result of companies increased in annual terms due to a high growth in revenues from foreign sales, partly related to the weaker than a year earlier zloty exchange rate (Figure 2.17).[22] However, a slowdown in domestic sales growth, associated with weak investment demand in the economy, curbed profit growth (see Chapter 2.2.2 *Investment*). At the same time, the rise in costs remained moderate as prices continued to fall.

Profitability ratios remained high in 2016 Q3, while the percentages of both profitable and highly-profitable companies were close to the highest levels recorded (Table 2.2; Figure 2.18). However, the companies' performance differed across industries. Firms selling consumer goods and services were characterised by relatively high profitability as demand for their products was supported by favourable labour market conditions and rising consumer income following the launch

Figure 2.17 Gross financial result of enterprises and its components



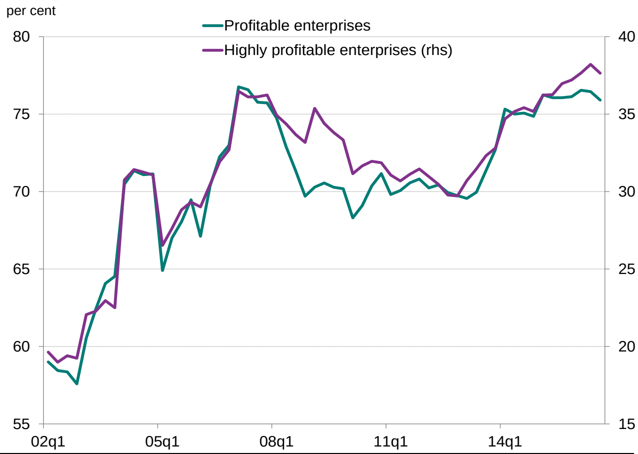
Source: GUS data based on F-01/I-01 forms, NBP calculations.

Table 2.2 Selected financial efficiency ratios in the enterprise sector

per cent	2013	2014	2015 q1	2015 q2	2015 q3	2015 q4	2016 q1	2016 q2	2016 q3
	Period average data								
Sales profitability ratio	4.3	4.5	4.9	4.9	3.6	4.8	4.9	5.1	5.0
Net turnover profitability	3.8	3.7	3.9	5.0	2.9	2.8	4.2	5.5	4.2
	End of period data								
1st degree liquidity ratio	35.0	38.9	37.8	36.2	37.5	38.3	37.4	37.2	38.5

Source: GUS data.

Figure 2.18 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%.

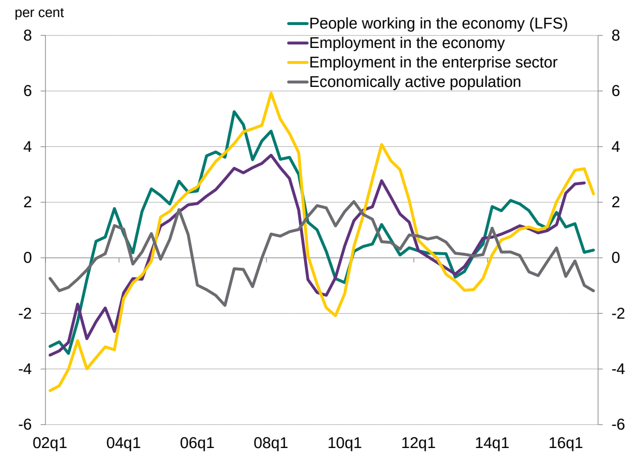
[21] In 2016 Q4, output in commercial construction declined by 15.4% y/y as compared to a fall of 18.2% in 2016 Q3.
[22] The annual growth of the financial result was further enhanced by the low base effect from 2015 Q3, which was due to high amortisation in one of the largest power companies in the country.

of the "Family 500 plus" programme. At the same time, companies offering investment goods, particularly in construction, experienced a fall in profitability ratio, although it remained positive. The decline in profitability of this group of enterprises was associated with weaker investment demand in the economy.

2.4 Labour market

Employment in the Polish economy has been growing for three years, although in the second half of 2016 the pace of this growth slowed somewhat (Figure 2.19).[23] Growing employment is accompanied by a steady decline in unemployment as indicated by both data on registered unemployment and the Labour Force Survey results (Figure 2.20). Over the past quarters, the decline in unemployment has mainly been driven by a fall in labour supply, which is reflected in the decrease in economically active population. In the second half of the year, the working-age population declined and the growth in the pre-retirement age labour force participation was weaker than in previous quarters. Rising problems of enterprises to fill in vacant posts also indicate that employment growth is constrained on the supply side.[24] A weaker labour demand resulting from the slowdown in economic growth in the second half of 2016 is another possible reason for the slower pace of employment growth. However, the acceleration in employment growth in the enterprise sector and a substantial decline in the seasonally-adjusted unemployment rate in

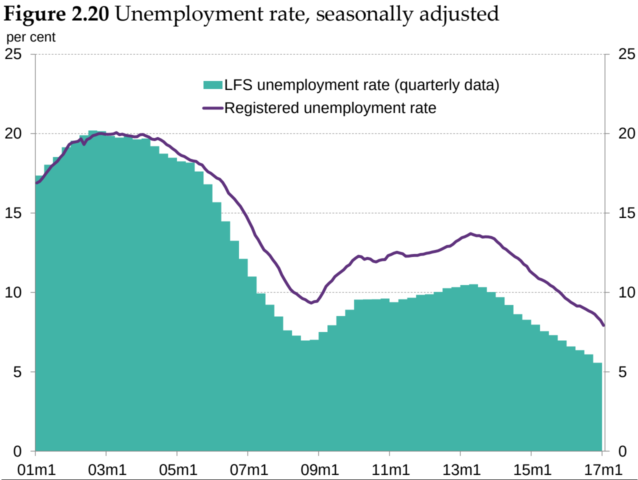
Figure 2.19 Annual growth in employment and economically active population



Source: GUS data, NBP calculations.

People working in the economy (LFS) is a survey-based estimate of the number of working persons, no matter what kind of employment relationship. Employment in the economy denotes the enterprise-reported average number of persons performing work against pay in the reference period, converted to the number of full-time jobs. This data does not cover, among others, entities employing up to 9 persons, individual farmers, persons contributing to a family business without pay, and persons working under civil law contracts. In addition, data on employment in the enterprise sector does not cover the public sector and entrepreneurs.

Figure 2.20 Unemployment rate, 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.

[23] The growth in the number of working persons according to LFS is lower than employment growth mostly on account of a decline in the self-employment in agriculture. In 2016 Q4 this decline amounted to 10.4% y/y. Temporary contract employment is also falling, which may be related to a movement away from civil law contracts as social insurance contributions were imposed on them since2016 and they have been included in the minimum hourly wage scheme from the beginning of 2017.

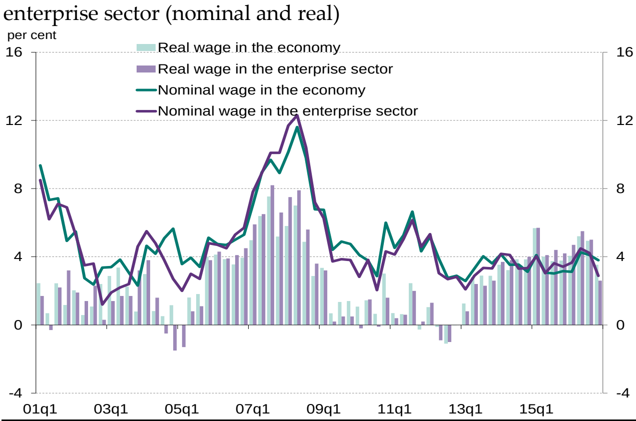
[24] As NBP's economic climate survey shows, 7% of enterprises considered problems with finding workers as the barrier to development in 2016 Q4. In 2016 Q2, the percentage of such enterprises stood at 3% (*NBP Quick Monitoring Survey. Economic climate in the enterprise sector in 2016 Q4 and forecasts for 2017 Q1*, NBP, January 2017).

January 2017 indicate that the weakening of labour demand was probably temporary.[25]

The above trends are accompanied by a moderate wage growth, which – despite a steady decline in unemployment – is not accelerating. In 2016 Q4, in particular, the pace of nominal wage growth decreased (Figure 2.21). The decrease was most likely driven by one-off factors[26] and a slower employment growth. Moreover, the nominal wage growth continues to be constrained by an influx of Ukrainian workers. However, according to January data, wage growth in the enterprise sector has already returned to the level observed in previous quarters as it was supported by the higher-than-in-2016 minimum wage growth.[27] Declining unemployment, the forecast acceleration in economic growth and a higher price growth – all indicate that a further speeding up in the pace of nominal wage growth can be expected in the coming quarters. The NBP-surveyed enterprises confirm this hypothesis, pointing to a mounting upward pressure on wages from employees.[28] However, in real terms, growth in wages will be limited by consumer price growth.

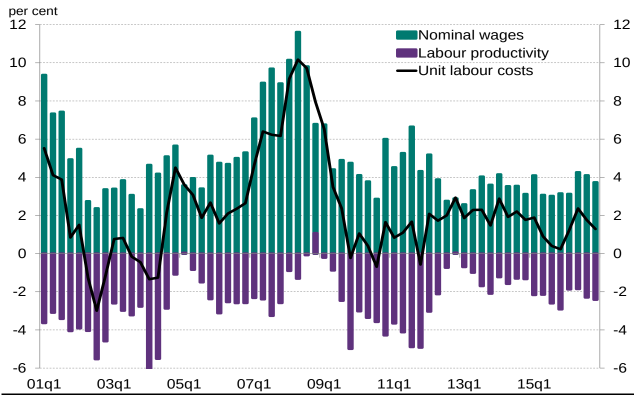
Rising wages are accompanied by labour productivity increasing at the rate close to 2% per year. Consequently, unit labour cost growth remains moderate, although it slowed down slightly in the second half of 2016 – to 1.3% in 2016 Q4 vs. 1.8% in 2016 Q3 and 2.4% in 2016 Q2 – as a result of a slower wage growth (Figure 2.22). These developments in wage and productivity growth indicate that the labour market is not, so far, a source of significant inflationary pressure.

Figure 2.21 Annual wage growth in the economy and the enterprise sector (nominal and real)



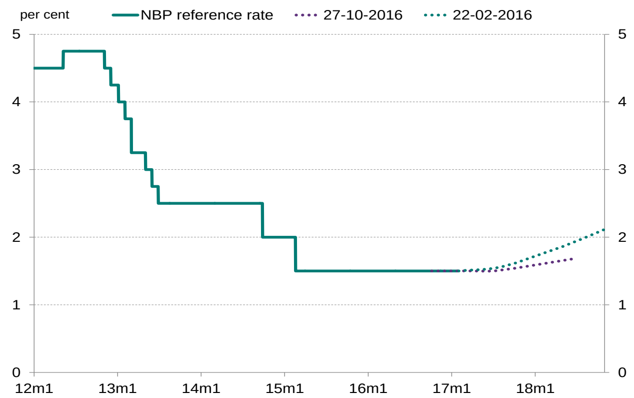
Source: GUS data.

Figure 2.22 Decomposition of unit labour costs growth



Source: GUS data, NBP calculations.

Figure 2.23 NBP reference rate and FRA-implied 3M interest rate



Source: NBP and Bloomberg data, NBP calculations.

[25] In January, the growth rate of employment in the enterprise sector rose to 4.5% y/y from 2.3% in 2016 Q4, which, however, resulted mainly from the Central Statistical Office's update of the sample of enterprises employing more than 9 workers. At the same time, the seasonally-adjusted unemployment rate fell by more than 0.2 percentage points. A recovery in the labour market is also indicated by a renewed increase in the number of job offers according to the BOP index, following a decrease in this measure in the second half of 2016.

[26] Primarily the postponement of bonus payments in the mining industry.

[27] The monthly minimum wage rose from PLN 1,850 to 2,000, i.e. by 8.1% (*Regulation of the Council of Ministers of 9 September 2016 on the minimum wage in 2017*). In addition, the minimum hourly wage rate was set for the self-employed and persons employed under civil law contracts.

[28] *NBP Quick Monitoring Survey. Economic climate in the enterprise sector in 2016 Q4 and forecasts for 2017 Q1*, NBP, January 2017.

2.5 Asset markets

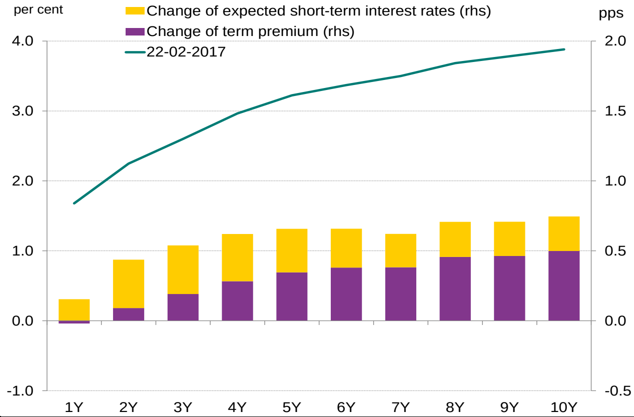
The Monetary Policy Council has been keeping the NBP interest rates unchanged since March 2015, including the reference rate at 1.5%. However, the recent higher price growth has led to a slight rise in market expectations for an increase in the NBP interest rates in 2018 (Figure 2.23).

2.5.1 Financial market

The yields on Polish government bonds, mostly of longer maturity, have grown substantially since the previous *Report*. Their growth was mainly fuelled by the decline in government bond prices in global markets, primarily Treasury bonds in the United States (see Chapter 1.5 *Global financial markets*). As a result, a term premium included in the yields on domestic long-term government bonds increased (Figure 2.24). The bond yield growth was also driven by rising expectations for the NBP interest rate hike in 2018. At the same time, amid an appreciating US dollar, (see Chapter 1.5 *Global financial markets*), the zloty – similarly to currencies of other emerging market economies – depreciated against this currency and – temporarily – against the euro (Figure 2.25).

Like in other economies of the region, improved sentiment in the international financial markets has had a positive impact on Polish share prices (Figure 2.26; see Chapter 1.5 *Global financial markets*). The increase in share prices was primarily associated with the higher prices of banking sector companies, following similar trends at European stock exchanges. In addition, rising commodity prices – in particular oil prices – resulted in higher valuation of energy sector companies (see Chapter 1.3 *Global commodity markets*).

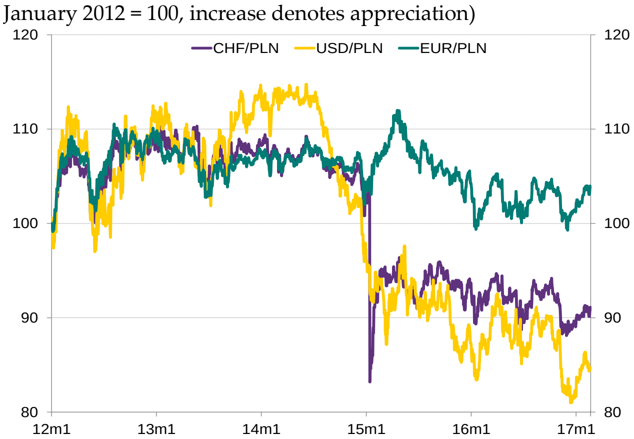
Figure 2.24 Polish government bonds yield curve and decomposition of its change since November 2016



Source: NBP calculations, Bloomberg data.

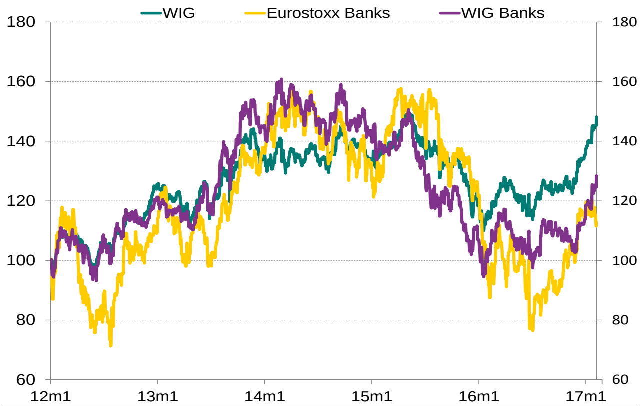
Term premium estimation is based on methodology of Adrian *et. al.(2013)* "Pricing term structure with linear regressions", Journal of Financial Economics. More: Box 2 in "Inflation report – March 2016"

Figure 2.25 Nominal exchange rate of the Polish zloty (index, January 2012 = 100, increase denotes appreciation)



Source: Bloomberg data.

Figure 2.26 Stock indices in Poland and banks index of European stock market (January 2012=100)



Source: Bloomberg data.

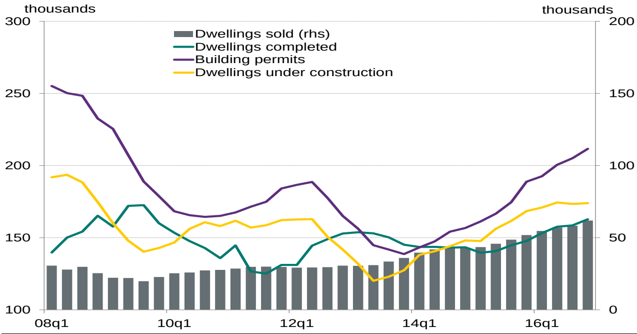
2.5.2 Residential real estate market[29]

The recovery in the housing market continues, which is reflected in a further increase in the number of dwellings sold (Figure 2.27). As sales growth is accompanied by a rising supply of housing, real estate prices remain relatively stable (Figure 2.28).

Demand for housing is fuelled by a high affordability of mortgage loans and lower interest on those loans than in the previous years, as well as robust labour market conditions (see Chapter 2.4 *Labour market*) and a relatively high profitability of home rental as compared to other forms of household investment.[30] Moreover, demand for housing continues to be supported by the government-subsidized housing scheme "Flat for the Young" („Mieszkanie dla Młodych"), although its impact on the housing market conditions will diminish in the coming quarters.[31]

Growing home sales in the primary market and high rates of return on development projects (amid still low costs of residential construction) continue to encourage real estate developers to embark on new investment. As a result, the number of building permits issued is on a steady rise and the number of dwellings under construction remains the highest since 2008 (in four-quarter moving terms; Figure 2.27).

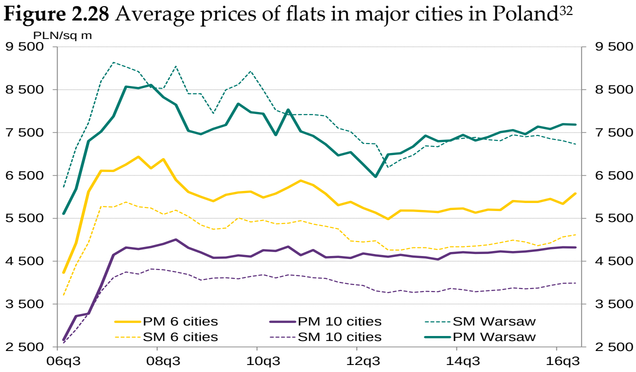
Figure 2.27 Housing residential construction in Poland in 2008-2016 (4-quarter moving averages)



Source: GUS and REAS data, NBP calculations.

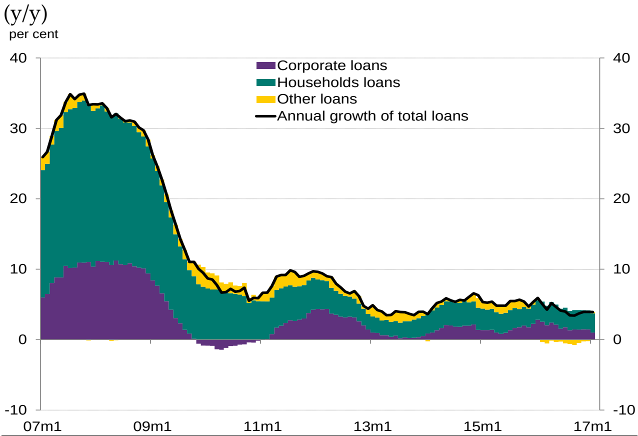
Sales data is based on 6 major markets in Poland (Warsaw, Krakow, Trójmiasto, Wrocław, Poznań and Łodź; 4-quarter moving average)

Figure 2.28 Average prices of flats in major cities in Poland[32]



Source: NBP calculations based on the NBP survey.

Figure 2.29 Composition of growth in loans to non-financial sector (y/y)



Source: NBP data

[29] 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 2016 Q4* (available on NBP's website: www.nbp.pl).

[30] The estimated profitability of home rental, excluding transaction costs, 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 Q4.*

[31] Lower impact of this factor in the coming quarters may be related to the using up of funds scheduled for 2017 as early as in January 2017 (following their partial use in 2016).

[32] 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.

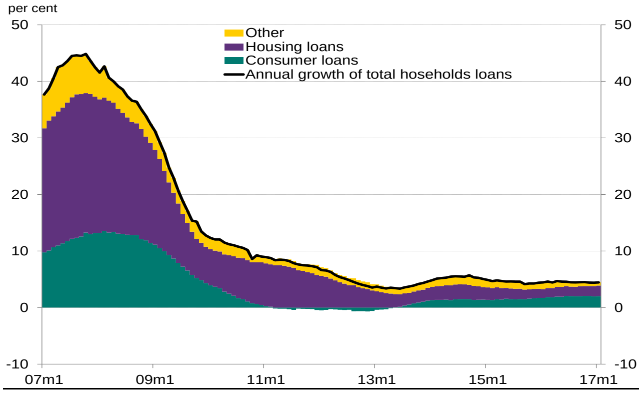
2.6 Lending and money supply

The annual growth in total lending to the non-financial sector has remained stable (3.9% y/y in 2016 Q4 compared to 3.6% in the previous quarter; Figure 2.29)[33,34] and close to the nominal GDP growth rate. A steady rise in loans to households, both consumer and housing loans, is the main component of lending growth, with corporate loans continuing to increase (Figure 2.32).

The growth in lending to households has remained close to 4.5% y/y for a couple of years. The lending activity in this sector is underpinned by favourable labour market conditions and rising disposable income, which enhance households' creditworthiness. A rise in consumer loans has recently stabilised at the highest level since 2010 (8.5% y/y in 2016 Q4, 8.4% y/y in 2016 Q3).

Housing loans have also grown at a stable pace, fuelled by a strong rise in zloty-denominated housing loans (10.3% y/y in 2016 Q4) amid a simultaneous steady decline in the banks' portfolios of foreign currency-denominated loans (at a rate of 6.4% y/y in 2016 Q4). Housing loans are rising despite a consistent tightening of lending standards by banks following regulatory changes.[35] Apart from favourable labour market conditions, growth in housing loans is driven by lower interest rates than in previous years.[36]

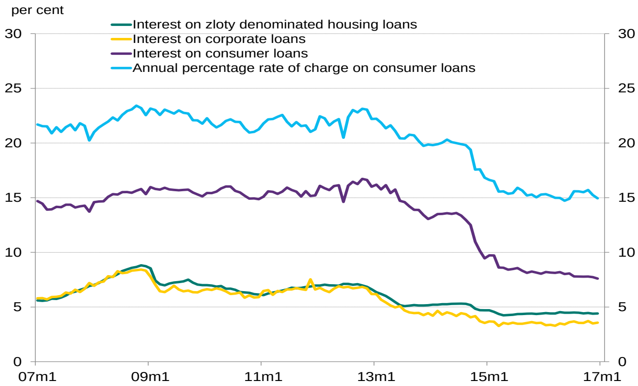
Figure 2.30 Composition of growth in loans to households (y/y)



Source: NBP data.

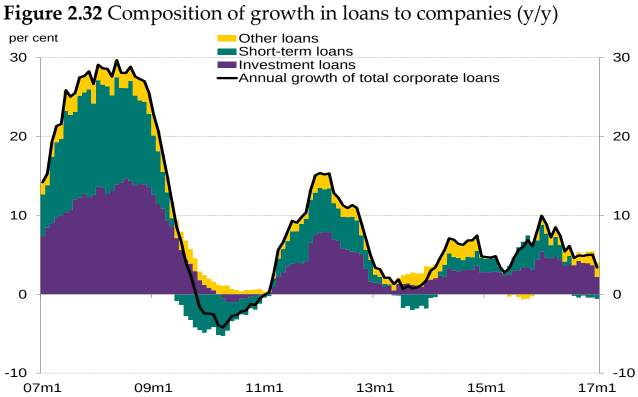
Other loans to households denote operation and investment loans to small entrepreneurs.

Figure 2.31 Interest rates on new loans by main categories



Source: NBP data.

Figure 2.32 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.

[33] In this chapter, growth in lending to a given sector of the economy is defined as growth in transaction changes in receivables of monetary financial institutions from that sector.

[34] In January 2017, loans to non-monetary sector rose by 3.9% y/y, to households by 4.5% y/y and to corporates by 3.4% y/y.

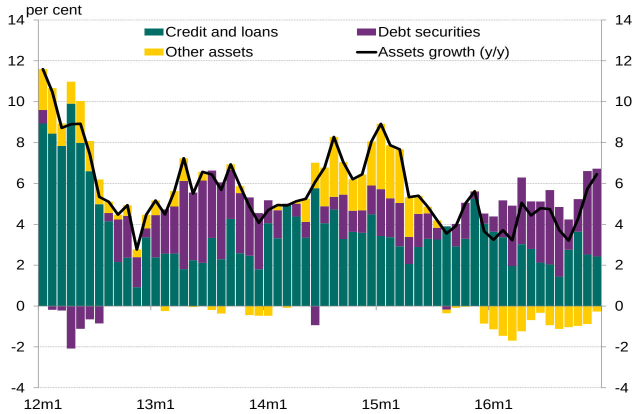
[35] In line with the requirements of Recommendation S of the Polish Financial Supervision Authority, in recent years banks have been obliged to reduce, on an annual basis, the ratio of maximum loan size to the value of real estate (LtV ratio). In 2015, the LtV ratio could not exceed 90%, in 2016 – 85%, and from 2017, it cannot be higher than 80%.

[36] Housing loan growth is also supported by the "Flat for the Young" programme. However, the limit on funds under the programme scheduled for 2017 was used up already in the first month of the year.

Lending to the corporate sector is also growing (5.0% y/y in 2016 Q4), including investment loans (by 7.5% y/y)[37], while short-term corporate loans are on a decline (by 0.8% y/y; Figure 2.32).[38] The rise in investment loans is the main driver of corporate loans growth and still continues despite the sector's relatively low investment activity. This is supported by high availability of credit to companies[39] and lower interest on loans than in previous years . These factors – along with an expected recovery in investment – should underpin lending also in the coming quarters. At the same time, lending to enterprises is constrained by uncertainty about the economic outlook as perceived by them[40] and a tightening of lending terms by banks[41], which may support the typical propensity of domestic companies to finance their business activity from their own funds (see Chapter 2.3 *Financial situation in the enterprise sector*). This is evidenced, among others, by a consistently diminishing percentage of enterprises applying for loans.[42]

The rise in lending to the non-financial sector is accompanied by a substantial increase in public sector indebtedness at commercial banks (at a rate of 31.1% y/y in 2016 Q4 and, on average, 37.7% y/y in entire 2016[43]). Consequently, banks' holdings of government bonds are steadily growing, which is

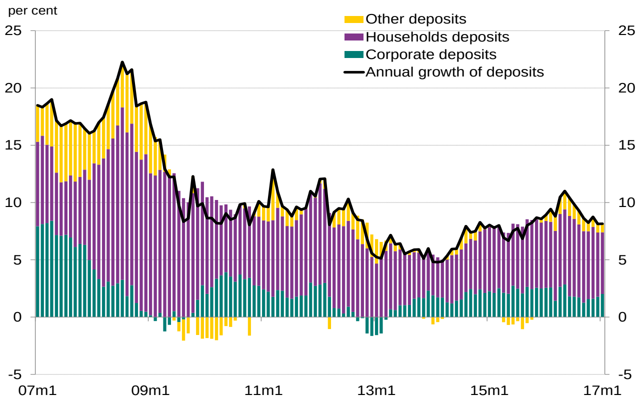
Figure 2.33 Composition of growth in banking sector assets (y/y)



Source: NBP data.

Calculation based on aggregate balance sheet data of commercial banks, credit unions and money market funds (described as other monetary financial institutions). Other assets denote holdings of equity securities, money market fund units, external and fixed assets.

Figure 2.34 Composition of growth in bank deposits included in M3 monetary aggregate



Source: NBP data.

Other deposits include to a large extent deposits of non-monetary financial institutions and local government units.

[37] The high growth of investment loans may in part result from a one-off transaction made by one entity in early 2016; it involved conversion of foreign debt into domestic debt, in the amount of approx. PLN 3.2 billion. The value of this transaction accounts for around 18% of the total annual investment loan debt growth of companies. As the impact of this factor waned in early 2017, the growth of this credit category will be lower . In January the growth of investment loans decreased to 4.2% y/y.

[38] Short-term corporate loans were on a decline also in January 2017 (by1.5% y/y).

[39] The high availability of credit for the enterprise sector is evidenced by the fact that only 12% of loan applications have been recently denied. See *NBP Quick Monitoring Survey. Economic climate in the enterprise sector in 2016 Q4 and forecasts for 2017 Q1*, NBP, January 2017.

[40] Persisting uncertainty – as a barrier to development – was also indicated by enterprises (see *NBP Quick Monitoring Survey. Economic climate in the enterprise sector in 2016 Q4 and forecasts for 2017 Q1*, NBP, January 2017)

[41] The tightening of lending policy in the enterprise sector was primarily associated with a rise in non-interest loan costs. See *Senior loan oficer opinion survey on bank lending practices and credit conditions. 1st quarter 2017*, NBP.

[42] See *NBP Quick Monitoring Survey. Economic climate in the enterprise sector in 2016 Q4 and forecasts for 2017 Q1*, NBP, January 2017.

[43] The figures relate to the change in net debt of central government institutions.

supported by the regulatory changes introduced in 2016 (Figure 2.33).[44]

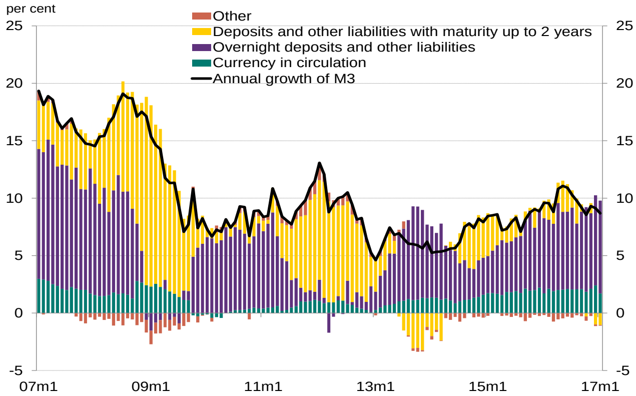
Higher lending results in higher deposits (9.3% y/y in 2016 Q4; Figure 2.34; Figure 2.35). The growth in deposits remains mainly driven by an increase in household deposits, including primarily current deposits (16.1% y/y in 2016 Q4).[45] Concurrently, cash in circulation continues to grow at a relatively fast pace (15.5% y/y in 2016 Q4).[46] As a result, the share of current deposits and cash in the growth of the broad monetary aggregate (M3) is rising, which is to a large extent associated with the interest rate on deposits lower than in previous years (Figure 2.35).

2.7 Balance of payments

Favourable trends in Poland's balance of payments have continued. The current account deficit to GDP ratio, both in 2016 Q3 and 2016 Q4, was low and amounted to -0.5% (in four-quarter moving terms). The narrow current account deficit is supported by the trade surplus driven by a substantial increase in exports of services (Figure 2.36; see Chapter 2.2.4 *External trade*).[47] However, the strongly negative balance of primary income – stemming from profits of foreign direct investors in Poland – remains the key factor behind the persistent current account deficit.

Following a stagnation in previous quarters, an inflow of EU investment funds increased significantly in November and December 2016. As a result, the capital account balance rose in 2016 Q4.[48]

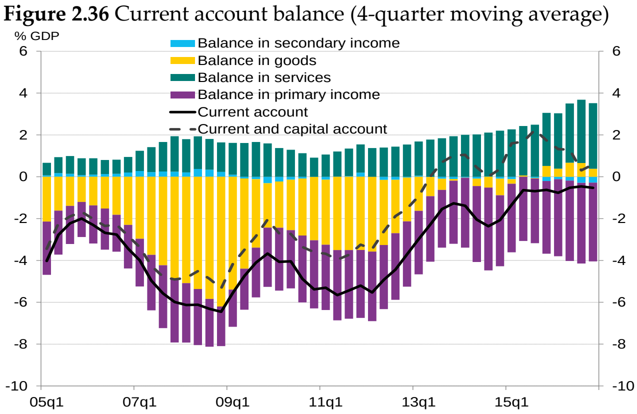
Figure 2.35 Composition of growth in M3 monetary aggregate (y/y)



Source: NBP data.

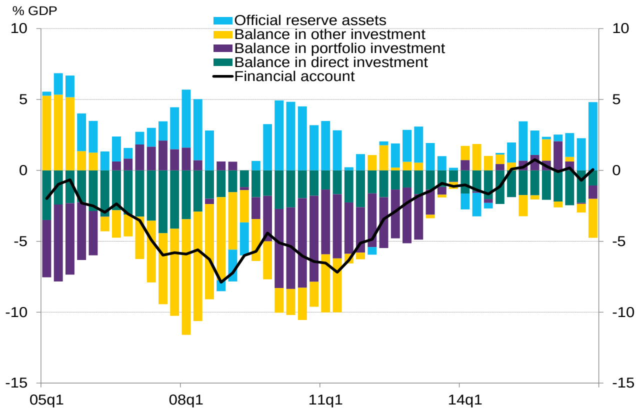
Category "other" denotes repurchase agreements between banks and non-banking sector as well as debt securities with maturity up to 2 years issued by banks.

Figure 2.36 Current account balance (4-quarter moving average)



Source: NBP data.

Figure 2.37 Financial account balance (4-quarter moving average)



Source: NBP data.

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

[44] In 2016, the change in banks' exposures to debt securities resulted, to the greatest extent, from the fact that banks expanded their government bond portfolios (92% of the change in the portfolio of debt instruments in 2016). The growth in banks' exposure to Treasury securities may be, in part, attributed to the introduction of a tax on financial institutions' assets. Under this act, government bonds are excluded from the tax base. See *Financial Stability Report*. NBP, December 2016.

[45] In this text, current deposits mean deposits with maturities of up to and including 3 months.

[46] These tendencies continued also in January 2017, with current deposit rising by 17.4% r/r, and cash in circulation – despite some slowdown – still growing at a relatively fast pace of 12.7% y/y.

[47] Balance of payments data for 2016 Q4 based on preliminary monthly data for the period.

[48] The decrease in EU funds inflow was related to the end of funds absorption under the financial framework 2007-2013, which was accompanied by only a weak inflow of funds under the financial framework 2014-2020.

The net inflow of other capital to Poland is close to zero (Figure 2.37). Its growth in 2016 Q4 was supported by a decline in Polish firms' portfolio investments abroad, mostly those of investment funds, and an increase in foreign direct investors' holdings. At the same time, a rise in Polish direct investors' holdings and a decline in foreign portfolio investments in bond market worked in the opposite direction. Moreover, official reserve assets rose, which was largely attributable to NBP's own transactions[49] and transactions conducted for the Ministry of Finance and the European Commission.

The indicators of Poland's external imbalance remain favourable (Table 2.3)[50]. In particular, the current account deficit to GDP ratio is the lowest since 1995, and the ratio of current and capital account balance to GDP is still positive.

Table 2.3 Selected external stability indicators (4-quarter moving average if not stated otherwise)

	2012	2013	2014	2015	2016			
					q1	q2	q3	q4
Current account balance (CAB)/GDP	-3.7	-1.3	-2.1	-0.6	-0.8	-0.5	-0.5	-0.5
Current and capital account balance/ GDP	-1.5	1.0	0.4	1.7	1.3	1.3	0.3	0.6
Trade balance/GDP	-2.1	-0.1	-0.8	0.5	0.4	0.7	0.7	0.4
Official reserve assets in monthly imports of goods and services	5.5	5.2	5.3	5.3	5.3	6.1	5.9	6.4
Foreign debt/GDP	70	70	73	72	71	75	74	-
Net international investment position/GDP	-65	-69	-69	-63	-62	-62	-62	-
Official reserve assets/foreign debt (up to 1Y) (per cent) plus predicted current account balance	100	85	106	105	105	112	109	-
Official reserve assets/foreign debt (up to 1Y) (per cent)	106	94	110	108	107	116	114	-

Source: NBP and Ministry of Finance data.
The last two indicators include foreign debt and the level of official reserves at the end of the period.

[49] The increase in NBP's foreign exchange reserves was accompanied by an increase in NBP's other investment liabilities. These changes resulted largely from repo transactions conducted by NBP as part of foreign exchange reserve management.
[50] Within the framework of the Macroeconomic Imbalances Procedure, the European Commission applies two external stability indicators from the Table 2.3: 1) current account balance to GDP ratio (a 3-year moving average) with the lower threshold signaling external imbalances at -4% and the upper threshold at 6% (the ratio for Poland amounts to -1.1%); 2) net foreign assets to GDP ratio with a threshold amounting to -35% (the ratio for Poland stands at -62%). In case of Poland, the excessive value of the second indicator does not point to external imbalance, since it results from the real convergence process.

3 Monetary policy in November 2016 – March 2017

At the meetings between November 2016 and March 2017 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 November 2016 and February 2017 as well as the *Information from the meeting of the Monetary Policy Council* in March 2017. *Minutes of the Monetary Policy Council decision-making meeting* in March 2017 will be published on 23 March, and thus included in the next *Report*.

Minutes of the Monetary Policy Council decision-making meeting held on 9 November 2016

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 November projection of inflation and GDP.

The Council reviewed the developments abroad which affect economic conditions in Poland. It was recognised that global economic growth remained moderate with uncertainty about its outlook. During the discussion on developments in the euro area, it was emphasised that national accounts data had confirmed stable GDP growth in this economy. Certain Council members noted that investment expenditures in the euro area were lower than before the global financial crisis. It was indicated that according to available forecasts, economic growth in the euro area might ease in the following quarters, albeit only slightly. It was highlighted that European industrial and export sectors had recently shown some signs of recovery. In particular, sentiment in European industrial sector is the highest in several years due to i.a. a significant increase in export orders. It was argued that this could support growth in Polish industrial output, most notably export manufacturing.

It was assessed that improving conditions in European industrial sector might be related to stabilising growth in the euro area's external environment. In this context, it was pointed out that in the United States GDP growth had accelerated, while in China economic conditions had stabilised. It was noted that the available forecasts for the US economy were indicating that in 2017 GDP growth might be higher than in 2016, fuelled by stable consumption growth and recovery in investment activity. Against this background, some Council members pointed to uncertainty around the US economic outlook resulting from likely shifts in economic policy after the recent elections. However, their extent and spillovers were judged as vague at the time of the meeting. It was stressed that in China GDP growth – in spite of stabilisation in previous quarters – was still the lowest since the global financial crisis. Some Council members pointed to weaker lending and infrastructure investment growth in China in 2016 Q3, which might indicate subsiding fiscal and monetary stimulus in this country. In addition, certain Council members emphasised that in some emerging market economies GDP growth might decelerate again on the back of a recent decline in global oil prices.

While discussing price developments abroad, it was highlighted that price growth in the external environment of the Polish economy was still very low, but it had picked up of late. It was assessed that the rise in the annual price growth rates resulted mainly from higher crude oil prices compared to a year before, which were gradually feeding through to the energy price growth rates. It was noted that oil price futures were indicating a rise of its prices in the following quarters, albeit – as certain Council members assessed – most probably to a limited extent, given lower costs of shale extraction in the United States and a likely increase in oil exports by some other producers. The outlook for oil prices was, however, judged as highly uncertain, particularly if the pre-agreement on oil production cuts had not become effective at the forthcoming summit of the Organisation of the Petroleum Exporting Countries (OPEC).

Referring to monetary policy abroad, it was noted that the European Central Bank had kept interest rates at close to zero, including the deposit rate below zero, and had continued financial asset purchases. It was observed that the ECB had not confirmed its intention to scale down the asset purchases in the coming months. It was further underlined that the Federal Reserve – after a rise in December 2015 – had kept the interest rates unchanged, pointing to their probable increase in the future. It was judged that – given the results of the US election – the uncertainty about the timing of the following increase in the fed funds rate had risen. Moreover, it was observed that the US election results could raise volatility in the international financial markets.

While discussing the developments in Poland's real economy, the Council members assessed that stable economic growth continued in Poland, even though data on production and retail sales in 2016 Q3 pointed to weaker GDP growth. Attention was also drawn to a deterioration in manufacturing confidence in October. A further fall in construction output was also observed. It was attributed to a decline in investment, related to a temporarily lower absorption of EU funds stemming from the completion of the previous financial framework. Some Council members judged that lower investment activity, especially of small and medium enterprises, could have been determined by the uncertainty about the regulatory environment of business. Alongside that, some Council members pointed to ongoing recovery in the housing market, which was supportive of residential investment growth. At the same time, it was stressed that the main driver of economic growth was still rising consumer demand, supported by the gradual improvement in the labour market, favourable household sentiment and the child benefit payments under the "Family 500 plus" programme.

When discussing the economic outlook for Poland, the Council members underlined that according to the November projection, economic growth in 2016 Q4 might remain soft, and then pick up in the following quarters. The Council members emphasised that consumption would remain the major source of economic growth in the quarters to come. It was noted that under the projection, consumer expenditure would rise at a faster pace in 2017. Higher GDP growth in 2017 would also be supported by the expected increase in investment related to greater EU funds absorption, as indicated by a rise in the number of new financial framework contracts. Certain Council members noted, however, that some local governments might face constraints in co-financing investment projects. In the opinion of certain Council members, in the following quarters corporate investment should be reinforced by decreasing uncertainty about the regulatory environment of business, amid the good financial standing of firms and their high capacity utilisation.

While analysing price developments in Poland, it was emphasised that the annual consumer price growth rate was still negative, yet deflation was subsiding. It was noted that in October the annual consumer price growth rate had been only slightly below zero. It was emphasised that the reversal of deflationary trends was also evidenced in positive annual producer price growth rate for the first time in four years. It was assessed that the increase in price growth resulted mainly from the dissipating effects of the earlier drop in global commodity prices. The other factor of higher price growth cited during the meeting was faster increase in wages compared to the previous quarters. At the same time, it was stressed that price growth was still contained by low inflation abroad and negative output gap in Poland. Against this background, it was reminded that most core inflation measures were still negative.

Referring to the outlook for price developments, the Council members observed that according to the November projection, price growth would be rising steadily to turn positive in the following quarters. The projection also indicates that in the coming years inflation will be close to the lower bound for deviations from the NBP inflation target. Besides waned effects of the earlier fall in commodity prices, price growth in 2017 will be fuelled by the acceleration in GDP growth envisaged in the projection. However, certain Council members were of the opinion that price growth rate in 2017 could be somewhat lower than anticipated by the projection. According to these Council members, weaker than projected price growth might result from likely decline in global commodity prices and slower than forecasted investment growth in Poland.

While discussing the level of the NBP interest rates, the Council 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 Council members assessed that an argument for keeping the interest rates unchanged was in particular the gradual increase in price growth, which – in line with the November projection – should approach the lower bound for deviations from the NBP target in the coming years. According to certain Council members, the present level of the NBP interest rates may also be conducive to a rise in the household savings rate. In the opinion of the Council, an additional argument for the NBP interest rate stabilisation was uncertainty regarding domestic and external conditions for monetary policy.

The Council members emphasised that in light of information available at the time of the meeting, stabilisation of the NBP interest rates in the following quarters was the most likely scenario. Certain Council members judged that in an event of prolonged economic slowdown and rising risk of inflation remaining below the target for an extended period of time, it would be justified to consider a decrease in the NBP interest rates. However, the majority of the Council members stressed that the Council's decisions should also take into account the impact of the level of the interest rates on the stability of the domestic financial sector.

In turn, certain Council members assessed that given the character of the factors curbing economic activity growth, the impact of a potential reduction in the NBP interest rates on the domestic economic conditions would be limited. At the same time, some Council members pointed out that should inflationary pressure appear, creating a risk of exceeding the inflation target in the medium term, it could be appropriate to raise the NBP interest rates.

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

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

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 affect economic conditions in Poland. It was recognised that global economic growth remained moderate with uncertainty about its outlook. It was emphasised that in the euro area GDP growth was stable, yet conditions were diverse across countries. It was highlighted that in Germany economic growth had eased in 2016 Q3 on the back of lower investment in machinery and equipment and slowdown in exports. It was assessed that the latter had resulted from Germany's major trading partners, i.e. other European countries and China, growing slower than in previous years. It was noted that, in line with available forecasts, economic conditions in Germany should improve in 2016 Q4 and economic growth in euro area would remain stable in the coming quarters. It was noted that sentiment in manufacturing had improved over recent months. Certain Council members, however, remarked that this improvement might not translate into an actual rebound in corporate investment activity. In the opinion of certain Council members, investment growth in the euro area might be dampened in particular by political uncertainty in several Western European countries.

While discussing developments in other economies, attention was drawn to good economic conditions in the United States. It was stressed that in 2016 Q3 growth in the United States accelerated more than initially estimated, and labour market conditions in this country were still favourable.

While discussing price developments abroad, it was emphasised that price growth in the environment of the Polish economy was still very low, albeit gradually increasing. It was highlighted that oil prices had risen since the previous Council meeting as OPEC members and some other major oil exporters had decided to reduce their output. Some Council members assessed that oil prices should not grow in the coming quarters due to high oil supply, boosted by a renewed increase in oil production in the United States, and Iran striving to regain its market share.

Referring to monetary policy abroad, it was pointed out that the European Central Bank had kept interest rates close to zero, including the deposit rate below zero, and had continued financial asset purchases. It was assessed that the Federal Reserve was likely to increase its interest rates soon. It was emphasised that the prospect of monetary tightening in the United States, along with expected fiscal stimulus in this country, had translated into an appreciation of the US dollar and a rise in government bond yields in the United States, and, in effect, in other countries. It was also noted that many emerging market currencies, including the Polish zloty, had depreciated, with the scale of the latter being increased by a rise in political uncertainty in Europe around the referendum in Italy.

While discussing developments in Poland's real economy, it was noted that GDP growth had eased in 2016 Q3. It was stressed that the slowdown, like elsewhere in Central and Eastern Europe, had been caused mainly by a fall in investment related to temporarily lower absorption of EU funds after the expiration of the previous EU financial framework. As underlined by the majority of the Council members, investment growth was also contained by uncertainty among businesses. It was highlighted that lower GDP growth in 2016 Q3 had also resulted from exports growing at a weaker pace than in the previous quarter. Slower increase in Polish exports was probably attributable to muted economic growth in Poland's major trading partners, and, as underlined by certain Council members, sluggish growth of global trade. It was estimated that the annual GDP growth rate would probably remain subdued also in 2016 Q4. Apart from weak investment activity signalled by the recent data, the lower GDP growth rate would also result from a statistical base effect associated with strong economic growth a year before.

It was emphasised that domestic economic growth was still supported by an increasing pace of consumer demand growth, which in 2016 Q3 had been the fastest in eight years. Some Council members pointed to a steady increase in housing investment expenditures associated with rising demand for residential real estate. It was assessed that the acceleration in household expenditures resulted mainly from ongoing improvement in the labour market. It was indicated that the unemployment rate was the lowest in decades, while employment continued to rise and wages were growing faster than in previous years. Certain Council members noted that, despite improving labour market conditions, the unemployment rate was still strongly diversified across regions. It was highlighted that growth in household expenditures was also supported by child benefit payments. Certain Council members remarked, however, that some of the additional income gained by households from child benefits could be spent on imported goods, leading to acceleration in imports and thereby to lower contribution of net exports to GDP growth. These Council members emphasised, however, that this effect could be alleviated by higher demand for services, which are characterised with lower import intensity.

The majority of the Council members assessed that the currently observed slowdown in GDP growth was temporary, and that in 2017 economic growth should accelerate. In the opinion of the Council members, the acceleration in GDP growth should be driven by a further increase in consumption growth and a rebound in investment activity amid gradually strengthening absorption of EU funds. In this context, surveys were cited that suggested an increase in corporate investment plans. Certain Council members indicated that economic growth in the coming quarters should also be supported by a faster increase in exports, driven by stronger growth in the environment of the Polish economy and the depreciation of the zloty. Certain Council members also expressed an opinion that a shortage of qualified staff might prove a barrier to growth for Polish companies in some regions. According to certain Council members, it could not be ruled out that subdued economic growth would continue until mid-2017. According to these Council members, GDP growth might still be contained by waning impact of child benefits starting from as soon as 2017 Q2 and the fact that investment cycle for infrastructure projects might be a few quarters long. These Council members also pointed to a risk of prolonged low export growth stemming from unfavourable developments in global trade, connected i.a. with a possible increase in protectionism.

Referring to the outlook for economic growth over the longer run, certain Council members highlighted government infrastructure projects, which would prop up the production capacity of the Polish economy. These members also pointed to a recent decline in migration preference among Polish citizens. Other Council members indicated a need to boost the labour force participation rate and promote the inflow of foreign workers, which should mitigate the adverse developments associated with population ageing.

When analysing price developments in Poland, it was stressed that annual growth in prices of consumer goods and services had been rising steadily and that deflation had ended in November. It was pointed out that producer price growth had also been accelerating. It was assessed that the increase in price growth had resulted mainly from dissipating effects of the earlier sharp fall in global commodity prices. Additional factor behind the rise in price growth cited during the meeting was the ongoing wage growth, whose pace was faster than in the previous quarters. However, it was noted that price growth in Poland was contained by low inflation abroad, negative output gap in the domestic economy and low inflation expectations.

The Council members assessed that in the coming quarters price growth would continue to gradually increase, propped up by waned effects of the earlier fall in commodity prices and the expected gradual acceleration in economic growth. Some Council members also drew attention to intensifying wage pressure indicated by companies, which, along with an increase in the minimum wage in 2017, might boost nominal wage growth. The Council members were of the opinion that price growth, in spite of the acceleration, would most likely remain low in 2017. Attention was drawn to the likely stabilization of commodity prices in the coming quarters and limited inflationary pressure at home resulting from significant import intensity of the currently observed growth in consumer demand.

While discussing the level of the NBP interest rates, the Council members judged that they should remain unchanged. The Council members confirmed their assessment that the stabilisation of the interest rates helped to keep the Polish economy on a sustainable growth path and maintain macroeconomic stability. The majority of the Council members assessed that an argument for keeping the interest rates unchanged was in particular the gradual increase in price growth. As a result, despite the nominal interest rates being kept unchanged, their level will decline markedly in real terms. In the opinion of the Council, an additional argument for the stabilisation of the NBP interest rates was uncertainty regarding domestic and external conditions for monetary policy.

The Council members pointed out that in light of information available at the time of the meeting, stabilisation of the NBP interest rates in the following quarters was the most likely scenario. This notwithstanding, they indicated that should inflationary pressure appear, creating a risk of exceeding the inflation target in the medium term, it could be appropriate to raise the interest rates. Certain Council members did not rule out a possibility of a decrease in the interest rates in the event of deepening and protracted economic slowdown. Other Council members, however, assessed that the level of the NBP interest rates was currently not a factor curbing economic growth in Poland. For this reason, in the opinion of these Council members, a reduction in the NBP interest rates would have no significant impact on economic activity, however, it could lead to imbalances in the financial and real estate markets as well as to lower household saving rate.

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

Minutes of the Monetary Policy Council decision-making meeting held on 11 January 2016

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 affect economic conditions in Poland. It was pointed out that global economic growth remained moderate. It was emphasised that in the euro area economic growth was stable, yet conditions differed across countries. It was assessed that in Germany economic growth in 2016 Q4 had probably accelerated, yet slowed down in most other member states, including Italy. It was underlined that economic growth in Germany was supported by stable growth in consumer demand and acceleration in exports backed by recovery in global industry and the improved economic conditions in some Germany's trading partners. It was indicated that there were signs of a pick-up in economic activity growth in China and that expansion in the United States continued. Attention was drawn to very good consumer sentiment in the US and further improvement in the labour market in this country, reflected both in rising employment and wages. Certain Council members also noted that the unemployment rate in the United States had declined below its equilibrium estimates.

While discussing price developments abroad, it was emphasised that in recent months inflation had risen in many economies. It was stressed that in the euro area – despite some growth – inflation was still low as weak demand pressure continued. It was emphasised that higher global inflation was related mainly to a rise in prices of energy commodities, above all oil, over recent months. The Council members assessed that oil prices should not grow in the coming quarters due to high supply of this commodity boosted by a renewed increase of its production in the US and Iran striving to regain its market share. It was noted that the recent increase in oil prices was accompanied by a fall in prices of agricultural commodities, mainly cereals, which might additionally contain global inflation in the future.

Referring to monetary policy abroad, it was pointed out that the European Central Bank had kept interest rates close to zero, including the deposit rate below zero, and had continued financial asset purchases. It was underlined that in December 2016 the ECB had extended the asset purchase programme, reducing its monthly scale. It was assessed that this decision had resulted in looser monetary conditions in the immediate environment of the Polish economy. Attention was also drawn to an increase in the fed funds rate in December 2016 and its likely further increases in 2017. At the same time, it was stressed that – in line with projections of the FOMC members – the fed funds rate would probably not exceed its pre-crisis level over the longer run. The Council members also indicated that sentiment in the financial markets had improved of late.

While discussing developments in Poland's real economy, it was assessed that in 2016 Q4 GDP growth was probably still subdued. Available forecasts indicate that GDP growth was curbed by the fall in investment resulting mainly from a temporary decline in the use of EU funds after the completion of the previous EU financial perspective. As some Council members underlined, investment growth had been also curbed by the uncertainty in the enterprise sector. It was pointed out that economic growth had been supported by growing consumer demand, an improvement in the labour market, very good consumer sentiment and the child benefit payments.

During the discussion on the labour market conditions, attention was drawn to ongoing stable growth in employment in the enterprise sector and the low unemployment rate. It was also stressed that the Labour Force Survey in 2016 Q3 had shown weak growth in the number of the employed in the economy. It was assessed that slower employment growth could reflect the deceleration in GDP growth and labour supply constraints. It was pointed out that wage growth had been moderate so far, but might accelerate in the coming quarters. In this context, attention was drawn to higher wage demands indicated by enterprises in 2016 Q4. It was also underlined that in 2017 wage growth would be additionally supported by a minimum wage hike.

Council members assessed that the slowdown in GDP growth observed in the second half of 2016 had been temporary and that in 2017 economic growth should accelerate. In the opinion of the Council members, the acceleration in GDP growth in the coming quarters would be supported by a gradual increase in investment growth and stable rise in consumption. It was emphasised that monthly data signalled some improvement in economic activity over the recent past. It was indicated that industrial output, construction and retail sales growth in November 2016 all had come out higher than expected, while industrial sentiment had improved markedly in December. Certain Council members additionally drew attention to notable acceleration in production of minerals used in construction in late

2016. In their opinion, this could point to recovering investment in structures. In the assessment of certain Council members, investment growth would also be supported by the recently launched "Housing Plus" scheme. The majority of the Council members were of the opinion that – given good labour market conditions and the child benefit payments – consumer demand outlook remained favourable. However, it was pointed out that higher prices of energy, including fuels, would reduce spending capacity of households and companies, weighing on demand growth in the economy. Certain Council members pointed to recent downward revisions in economic growth forecasts by some institutions.

While analysing price developments in Poland, it was stressed that in December 2016 the annual growth in prices of consumer goods and services had picked up notably, but remained moderate. Attention was also drawn to ongoing acceleration in producer prices. It was noted, however, that price growth was mainly supported by energy commodity prices being higher than a year before and stronger US dollar. It was argued that price growth was still contained by low inflationary pressure abroad and negative output gap in the domestic economy. In this context, some Council members pointed to core inflation remaining close to zero.

The Council members assessed that price growth would continue to increase in the coming months, supported by energy prices being higher than a year before and the expected acceleration in economic growth. Attention was also drawn to recent upward revisions of price growth forecasts for Poland. Some Council members assessed that inflation might rise faster than currently anticipated. They pointed to probable increase in wage growth in the coming quarters and assessed a rise in demand pressure as likely. Other Council members emphasised, however, that price growth in the coming months would remain moderate, and that the current forecasts did not indicate any risk of overshooting inflation target in the coming quarters. These Council members also stressed that despite an increase in wage demands indicated by enterprises, wage growth was moderate, and only slightly exceeded labour productivity growth. Moreover, as further rise in commodity prices is currently not expected, this factor will prop up inflation only temporarily. It was also indicated that economic growth in the coming quarters would probably not significantly outpace potential output growth, thus demand pressure would remain contained.

While discussing the NBP interest rates, the Council members judged that they should be kept unchanged. Council members emphasised that although the current price growth had picked up significantly in recent months and inflation forecasts had been revised upwards, this was mainly driven by external factors whose impact should dissipate in the medium term. At the same time, it was pointed out that, along with rising inflation, interest rates in real terms would decline, which should support the expected acceleration in economic growth. The Council confirmed its assessment that the stabilisation of the nominal interest rates helped to keep the Polish economy on the sustainable growth path and maintain macroeconomic stability.

The Council members pointed out that in light of information available at the time of the meeting, stabilisation of the NBP interest rates in the following quarters was the most likely scenario. Certain Council members believed, however, that given the expected rise in inflation and the related reduction of interest rates in real terms, it might be justified to consider interest rate hikes in the future. In the opinion of these members of the Council, interest rate decisions should take into account their impact on savings in the Polish economy. Other Council members judged that the Council decisions should account for their impact on the interest paid on loans. Some Council members argued, however, that given no risk of overshooting the inflation target in the coming quarters, it was difficult to assess when it might be justified to consider an increase in the NBP interest rates. Moreover, certain Council members pointed out that the rise in the interest rates could adversely affect corporate investment growth.

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

Minutes of the Monetary Policy Council decision-making meeting held on 8 February 2016

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

The Council reviewed the developments abroad which affect economic conditions in Poland. It was assessed that global economic growth remained moderate. It was stressed that in the euro area a gradual recovery continued, supported mainly by rising consumer demand and, possibly, an acceleration in investment growth. Attention was drawn to improving sentiment in European industry and an increase in export orders in Germany, which has supported manufacturing activity in Poland. It was assessed that in the United States, despite weaker GDP growth in 2016 Q4, economic conditions were still favourable. They are helped by good consumer sentiment and improving labour market, reflected both in an increase in employment and rising wages. It was underlined that investment growth in the United States had turned positive in 2016 Q4 on the back of recovering extraction activity amid higher oil prices. It was stressed that higher oil prices were also conducive to better economic conditions in its exporters, including Russia. It was emphasised that in China, following a few years of slowdown, GDP growth had picked up somewhat in 2016 Q4. However, it was also noted that in 2016 economic growth in this country had been at its slowest in over twenty years.

It was observed that forecasts for global economic growth had recently been revised upwards and pointed to its acceleration in 2017. Certain Council members stressed that it would probably remain weak in the following years. These Council members pointed to still low investment growth in advanced economies and limited wage growth, resulting in worse private consumption outlook. In this context, risks to global economic growth were cited. Attention was drawn to potential spillovers from the expected further slowdown in China and a likely exacerbation of protectionism in the international trade. In addition, risks for some emerging market economies related to higher USD debt service costs, resulting from monetary policy tightening in the United States, were highlighted.

While discussing price developments abroad, it was emphasised that in recent months inflation had risen significantly in many economies. It was stressed that the increase was related primarily to higher commodity prices as compared with the previous year, referring particularly to oil, but also coal and agricultural commodities. It was pointed out, however, that in the euro area demand pressure was still weak, and as a result core inflation was low, albeit diversified across its member states. The Council members assessed that inflation in the external environment of the Polish economy might level off in the coming quarters on the back of stabilisation in oil prices.

Referring to monetary policy abroad, it was pointed out that the European Central Bank kept interest rates at close to zero, including the deposit rate below zero, and continued its financial asset purchases. It was also noted that the Federal Reserve indicated more interest rate increases in 2017. At the same time, it was highlighted that sentiment in the financial markets had been improving further since the previous Council meeting.

While discussing developments in Poland's real economy, attention was drawn to the preliminary release of GDP data for 2016, which indicated that the annual GDP growth rate in 2016 Q4 had been close to that recorded a quarter earlier. It was stressed that growth had still been driven primarily by increasing consumer demand, supported by a rise in employment as well as child and social benefit payments. It was underlined that accelerating consumer growth was probably accompanied by slower pace of decrease in investment on the back of higher use of EU funds under the new financial framework. In the opinion of certain Council members, investment growth might be still contained by uncertainty in the enterprise sector.

The Council members assessed that economic growth should accelerate in the coming quarters. Some Council members pointed to recent upward revisions of GDP growth. Faster GDP growth in the coming quarters will be supported by a rebound in investment growth resulting from further rise in the use of EU funds under the new financial framework. As some Council members noted, the number of contracts concerning projects co-financed from EU funds signed by local governments is rising, which should also help investment growth. Certain Council members pointed to relatively high capacity to co-finance EU projects using local government funds, resulting from their sound fiscal position. This notwithstanding, according to certain Council members, it cannot be excluded that investment growth will remain low in the coming quarters.

While analysing price developments in Poland, it was highlighted that annual consumer price growth had picked up over recent months. It was observed that, like in many other countries, price growth had resulted mainly from higher global commodity prices as compared with a year before. Attention was drawn to faster growth in energy prices resulting from higher energy commodity prices, and to an increase in prices of, especially unprocessed, food. It was argued, however, that domestic inflationary pressure was still contained by moderate growth in unit labour costs and negative output gap in the domestic economy. In this context, it was underlined that core inflation remained low.

The Council members stressed that short-term forecasts were indicating a substantial rise in inflation in the first few months of 2017. Yet, it was assessed that inflation would be still supported primarily by the effect of higher global commodity prices, yet it was emphasised that this effect would gradually dissipate. As a result, the impact of higher world fuel prices will stabilise or might even decline. While analysing the medium-term inflation outlook, it was underlined that economic growth, despite a slight acceleration in 2017, would not markedly exceed potential GDP growth, and thus would not cause excessive demand pressure. It was further highlighted that, notwithstanding the intensification of wage demands indicated by enterprises, wage growth remained moderate and did not significantly outpace labour productivity growth. Yet, certain Council members assessed that wage growth might pick up substantially in the coming quarters, amid a steady decline in the unemployment rate and a gradual rise in inflation expectations. In their opinion, demand pressure could rise faster than to date.

While discussing NBP's monetary policy, the Council assessed that the risk of persistently running above the target in the medium term was low. Such an assessment was justified by the external and most probably temporary nature of the factors behind the marked increase in price growth in early 2017, amid still weak domestic demand pressure. At the same time, the decline in real interest rates, related to higher inflation, will support the expected acceleration in economic growth. As a result, the Council confirmed its assessment that the stabilisation of nominal interest rates helped to keep the Polish economy on a sustainable growth path and maintain macroeconomic balance.

The Council members judged that in light of information available at the time of the meeting, stabilisation of the NBP interest rates was the most likely scenario also for the following quarters. Yet, certain Council members were of the opinion that should inflation turn out to be higher than current forecast, it might be justified to consider an increase in the NBP interest rates in the subsequent quarters. According to these Council members, the interest rate decisions ought to reflect the impact of real interest rates on savings in Poland. Yet, the majority of the Council members pointed out that, as the risk of the inflation persistently running above the target over the medium term was low, it was difficult to assess at the time of the meeting when it might be justified to consider an increase in the NBP interest rates. It was also stressed that an interest rate rise could adversely affect corporate investment growth.

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

Information from the meeting of the Monetary Policy Council held on 7-8 March 2017

Global economic growth remains moderate, with signs of economic recovery strengthening in many economies. In the euro area, economic growth is stable, accompanied by favourable sentiment in industry. In the United States, economic conditions are supported by improving labour market, reflected both in rising employment and wages. In China, GDP growth picked up slightly in 2016 Q4, while Russia has probably recovered from recession.

Over past few months, inflation has risen considerably in many countries, mainly on the back of an increase in global commodity prices, which has recently come to a halt. At the same time, low demand pressure in many economies, including in the euro area, contains the rise in inflation and keeps core inflation at a moderate level.

The European Central Bank keeps interest rates close to zero, including the deposit rate below zero. The ECB also continues its asset purchase programme. The Federal Reserve indicates a further rise in interest rates this year.

In Poland, economic growth in 2016 Q4 was slightly higher than a quarter earlier. Economic growth was mainly driven by increasing consumer demand, supported by a rise in employment and wages, very good consumer sentiment and child benefit payments. At the same time, the fall in investment narrowed due to higher absorption of EU funds. Recent economic data, including industrial output, retail sales and labour market point to ongoing recovery.

The annual growth in prices of consumer goods and services in Poland has picked up considerably over recent months, mainly due to higher global commodity prices, i.e. factors beyond the direct impact of domestic monetary policy. Core inflation remains close to zero, which points to still low demand pressure. Despite growing employment and wages, growth in unit labour costs remains moderate.

In the Council's opinion, following a considerable rise in the first months of the year, inflation will stabilise at a moderate level. The stabilisation of price growth in the coming quarters will result on the one hand from fading effects of the past increase in global commodity prices and on the other hand from only a gradual increase in domestic inflationary pressure stemming from improving domestic economic conditions. In consequence, the risk of inflation running persistently above the target in the medium term is limited.

Such an assessment is supported by the results of the March projection of inflation and GDP prepared by the Economic Institute under the assumption of unchanged NBP interest rates. In line with the March projection based on the NECMOD model – taking into account data available until 20 February 2017 –

there is a 50-percent probability that the annual price growth will be in the range of 1.6 – 2.5 % in 2017 (against 0.5 – 2.0% in the November projection), 0.9 – 2.9% in 2018 (as compared to 0.3 – 2.6%) and 1.2 – 3.5% in 2019. The annual GDP growth – according to this projection – will be with a 50-percent probability in the range of 3.4 – 4.0% in 2017 (against 2.6 – 4.5 % in the November projection), 2.4 – 4.5% in 2018 (as compared to 2.2 – 4.4%) and 2.3 – 4.4% in 2019.

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 – March 2017*.

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[51], 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 March projection based on the NECMOD model covers the period from 2017 Q1 to 2019 Q4. The starting point for the projection is 2016 Q4.

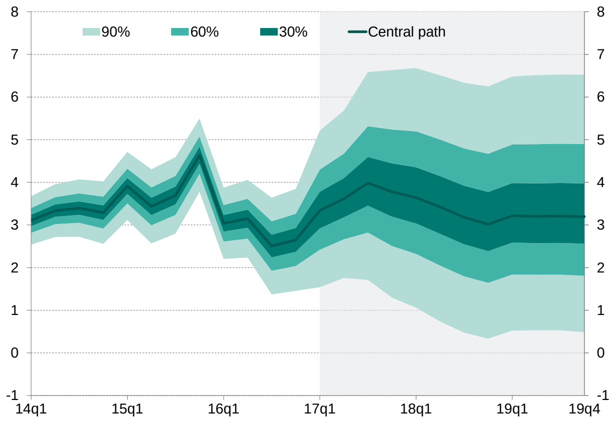
The projection was prepared under the assumption of the constant NBP interest rates taking into account the data available until 20 February 2017.

[51] 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

National accounts data for 2016 suggest that the slowdown in economic activity in the second half of 2016 was more pronounced than assumed in the November projection. The 2016 GDP growth was dragged down by the unexpectedly sharp decline in gross fixed capital formation, related to lower absorption of EU capital transfers than assumed in the projection, and heightened level of uncertainty in the global economy. In the opinion of the NBP Economic Institute, these factors are of a temporary character and have no material impact on forecasts of economic growth in the subsequent years. In 2017, GDP growth is anticipated to accelerate to 3.7%, and to subsequently return to the levels close to potential output growth.

Figure 4.1 GDP (y/y %)



Source: GUS data, NBP calculations.

Steeper output growth in 2017 will be driven by an increase in gross fixed capital formation, including both public and corporate investment, supported by the inflow of EU funds under the new 2014-2020 financial framework. The year 2017 will see private consumption grow more robustly, benefiting from rising household income. The rise in household income is underpinned by more robust labour market conditions and the implementation of the "Family 500 plus" programme. Another factor behind domestic demand growth is low level of interest rates in the projection horizon, which will curb the cost of borrowing. Yet the merely moderate scale of recovery in the euro area in 2017-19 will constrain GDP growth in Poland.

With regard to inflation, the CPI path has been revised upwards in the current projection round, which was driven by the increase in the prices of energy and agricultural commodities in the global markets. Despite the upward revision, consumer price growth will remain below the NBP inflation target until the end of 2019.

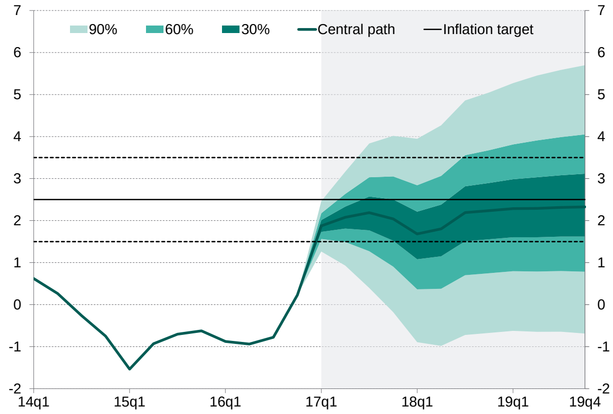
Domestic inflation growth will be constrained by persistently weak inflation in the euro area and the anticipated appreciation of the real effective zloty exchange rate, keeping import price growth at moderate levels. The forecast magnitude of the output gap, only slightly above zero in the projection horizon, warrants expectations of a merely moderate demand pressure, and hence a limited impact of the improved business climate on the rise in inflation rate. Also, the upward shift in inflation on the back of the rise in the global commodity prices is expected to be only temporary, with its peak impact on the domestic levels of energy and food prices to be seen in 2017.

Uncertainty about the findings of the current projection is associated mostly with trends in global economic conditions. Global business climate may improve should the expectations of increasing the expansionary fiscal stance by the new administration in the United States materialise. On the other hand, concerns about a slowdown in China's GDP growth are a source of uncertainty for growth in the external environment of the Polish economy. These concerns are associated with the mounting levels of corporate debt in the Chinese economy, as well as threats to the stability of the financial system and fears of the price bubble on the Chinese real estate market bursting in an uncontrolled manner.

Fluctuations in the prices of oil and other energy commodities in the global markets, which are highly dependent on hard-to-predict supply conditions, are another source of uncertainty for the central projection scenario.

The analysis of the above-mentioned factors points to a nearly symmetrical distribution of risks for CPI inflation and GDP growth, as reflected in relevant fan charts (Figure 4.1, Figure 4.2).

Figure 4.2 CPI inflation (y/y, %)



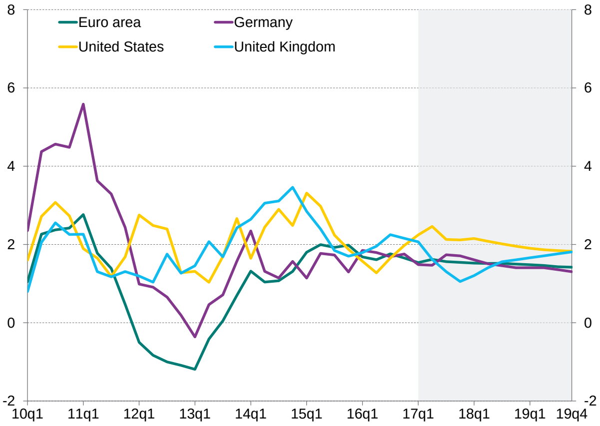
Source: GUS data, NBP calculations.

4.2 External environment

The current projection assumes that the moderate economic growth observed in Poland's main trading partners - the euro area, the United States and the United Kingdom - will continue (Figure 4.3). It also envisages further positive trends in the labour market, supporting consumption in these economies, and a continuation of an accommodative monetary policy in the euro area. On the other hand, economic growth in the global economy is hampered by slow labour productivity growth. Furthermore, there are unknown factors at play, including the shape of the agreement on *Brexit*, the outcome of the election in the Netherlands, France and Germany, and the new administration's economic policy in the United States.

In the projection horizon, domestic demand will still be the main source of economic growth in the euro area. Private consumption continues to be supported by stable employment growth and rising wage dynamics. Nevertheless, following the recent rise in energy prices, private consumption growth can be expected to slow down somewhat. Housing investment in the euro area will also benefit from rising household income, combined with low interest rates and increased credit availability. Weak external demand (reflected in the IMF forecasts of the global trade, revised downwards in January 2017) will, in turn, have a hampering influence on corporate investment growth. It will also adversely affect the forecasts of net exports contribution to GDP growth in the euro area, which will run at negative levels in the projection horizon. Having in mind all the above circumstances, GDP growth in the euro area will slow down somewhat against the last year's 1.7%. The slowdown will be mitigated by the ECB's accommodative monetary policy, involving, among others, keeping short-term interest rates at

Figure 4.3 GDP abroad (y/y, %)



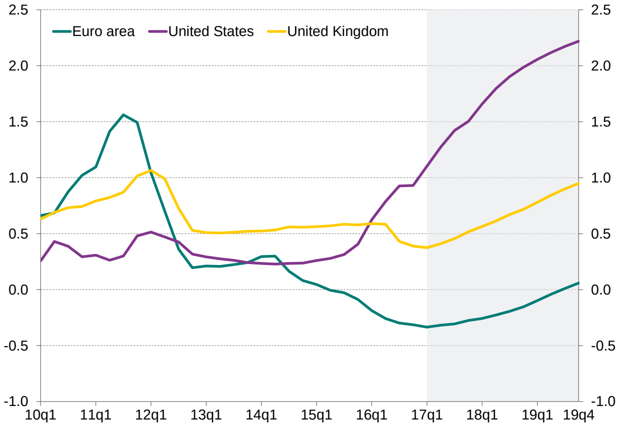
Source: Bloomberg, Eurostat data, NBP calculations.

negative levels until mid-2019 (Figure 4.4). This will have a downward effect on the cost of public debt service. It is however difficult to generate an effective fiscal stimulus in the face of high debt levels in some EU countries.

In the United States, like in the euro area, private consumption will continue to be the key component of economic growth. The increasing consumer expenditure can be financed thanks to robust labour market conditions, in particular accelerated wage growth. Consumer confidence is additionally boosted by the rising value of net household wealth, as a result of growing value of financial and non-financial assets, as well as the end of the deleveraging process. Growth will also be supported by private investment, which so far has been constrained by the appreciation of the dollar, and - in the mining sector - low oil prices. Despite the favourable outlook for domestic demand, GDP growth in the United States in the long term projection horizon may be dampened by sluggish labour productivity growth and the fact that the US economy is approaching full employment. The path of economic growth in the United States will depend, in a great measure, on the future shape of fiscal policy, which is difficult to determine at the moment. The pace of the US GDP growth, assumed in the projection at approximately 2% y/y, is based on the assumption that amid neutral fiscal policy, the Fed's policy rates will be maintained at a relatively low level (taking into account a limited scale of interest rate rises – Figure 4.4).

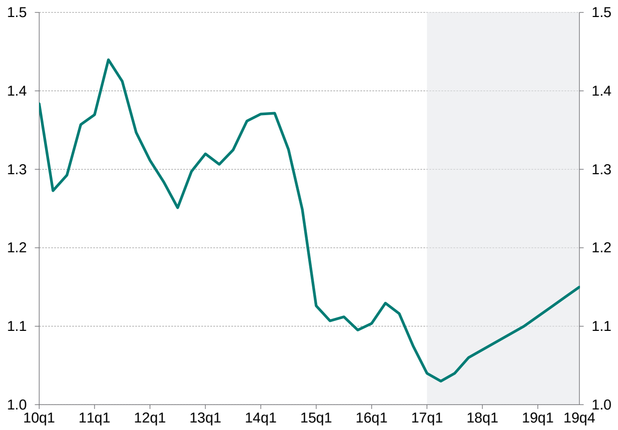
Economic activity forecasts for the United Kingdom, given the unknown shape of the agreement of the UK's exit from the European Union, are also subject to considerable uncertainty. Despite the favourable situation in the labour market, the depreciation of the sterling which boosts the competitiveness of the British economy and the accommodative monetary policy, the uncertainty about the outlook for the

Figure 4.4 Interest rate abroad (%)



Source: Bloomberg data, NBP calculations.

Figure 4.5 EUR/USD exchange rate



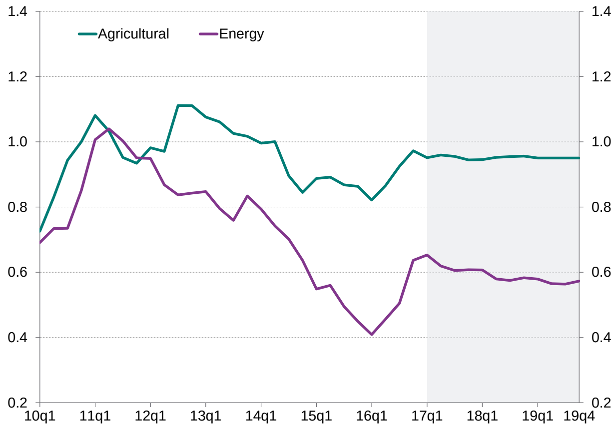
Source: Bloomberg data, NBP calculations.

British economy is expected to persist while the terms of *Brexit* are negotiated. Consequently, there may be a adverse impact on investment and consumer expenditure, which will contribute to GDP growth falling below the 2014-2016 level.

In recent months, energy commodity prices in the global markets have risen, running above the levels assumed in the previous projection. In the horizon of the current projection, oil and natural gas prices are expected to stabilise, while coal prices are anticipated to decrease. The aggregate index of energy commodity prices will thus decline gradually in the coming years, while remaining above the level assumed in the November round (Figure 4.6).

OPEC countries and some of non-OPEC countries agreed on 30 November 2016 that, as previously announced, their oil output will be trimmed in the first half of 2017. The decision prompted an acceleration in oil price growth in the global markets. Yet the projection does not assume oil prices to increase any further. Factors in favour of such a scenario include the record-high level of inventories and the absence of certainty that OPEC's supply policies will be continued beyond the term covered by the agreement. In addition, some OPEC countries were exempted from the agreed cap on oil output, while the United States recorded an increase in oil production in 2016 Q4 - for the first time in over a year. The relatively favourable supply conditions, combined with the moderately rising demand, warrant a stabilisation of oil prices in the projection horizon. Natural gas prices follow the same trend, which results from considerable co-movement of its prices with the prices of oil. In turn, following a marked rise in coal prices in 2016 Q4, caused by limited output in China, the projection expects a gradual decline in the prices of this commodity. It comes from sagging demand for coal as a result of the climate policy of developed economies, which assumes

Figure 4.6 Index of agricultural prices (EUR, 2011=1) and index of energy prices (USD, 2011=1) in the global markets



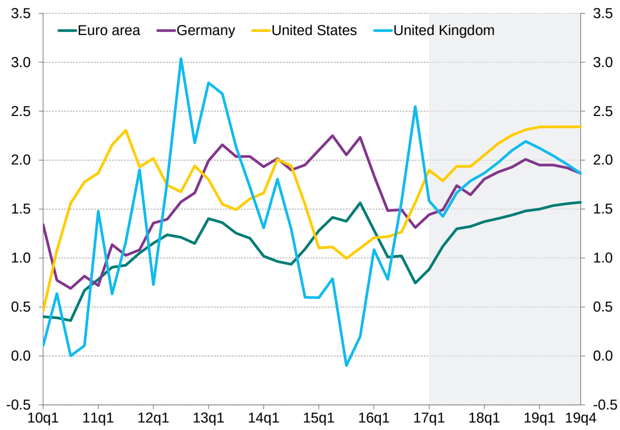
Source: Bloomberg data, NBP calculations.

a reduction in consumption of coal as a source of energy.

The value of the index of agricultural commodity prices rose last year, mostly on the back of the situation in the market of food products of animal origin (meat and dairy products). The increase was caused by the decline in the headcount of swine and cattle in the EU and rising demand, mainly from China. In January 2016, agricultural commodity prices stabilised and their level, elevated in comparison with the years 2014-2015, is expected to remain stable also in the following years.

The current forecast assumes that inflation in the external environment of the Polish economy will rise at a moderate pace, which will be supported by higher prices of energy and other commodities in the global markets. In the euro area, a slight rise in the value-added deflator in the coming quarters will be additionally driven by a gradual increase in corporate profit margins and profits which results from gradual incorporation of higher costs of imported goods into final good prices (Figure 4.7). From next year, as the unemployment rate is approaching the equilibrium point, higher inflation will be underpinned by the anticipated gradual pick-up in wage growth. In the United States, the labour market has neared full employment. The negative output gap is also closer to zero than in the euro area[52]. Those factors account for the fact that inflation forecasts for the United States are running relatively higher than those for the euro area. Stronger price growth in the United Kingdom is in turn related to the weakening pound sterling following the announcement of the planned exit from the EU (*Brexit*).

Figure 4.7 Inflation abroad (y/y, %)



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

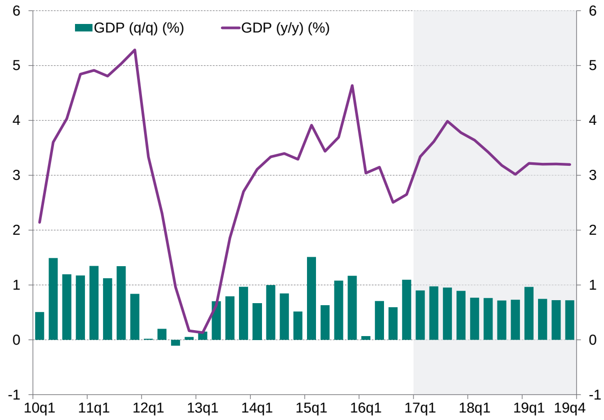
[52] Estimated output gap is highly heterogeneous in different countries of euro area – from strongly negative in countries like Greece, Spain and Italy to positive e.g. in Germany and Ireland.

4.3 Polish economy in 2017-2019

In line with the current projection, following a temporary slowdown in 2016, GDP growth will pick up to 3.7% in 2017 (Figure 4.8). Growth will be driven by rising gross fixed capital formation, both public and corporate, supported by the inflow of EU funds under the new 2014-2020 financial framework. It is also expected that as the elevated level of uncertainty expressed by entrepreneurs last year subsides, companies will be increasingly inclined to embark on new investments. Private consumption growth will also increase in 2017, financed by rising household income as a result of the improved situation in the labour market and the implementation of the "Family 500 plus" government scheme. In the following years, the outlook for investment and consumption growth will remain optimistic, yet the inflow of EU funds and the "Family 500 plus" programme will fuel domestic demand growth to a smaller extent. As a result, economic growth will slow down to nearly the level of potential output growth.

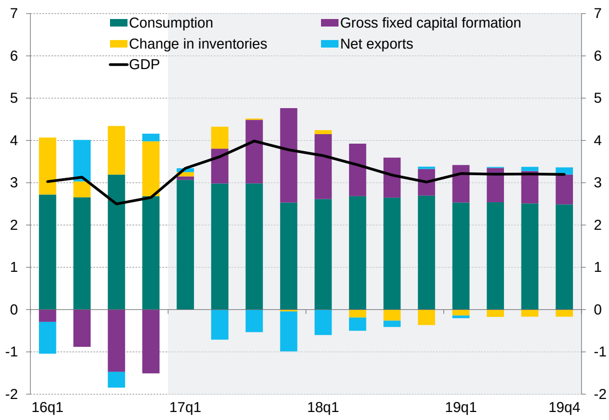
In short-term projection horizon, the CPI inflation path is affected by high energy and food price growth (Figure 4.10), driven by rising prices of agricultural and energy commodities in the global markets as well as the base effect related to the decline in commodity prices observed last year. Amid higher demand and cost pressure, core inflation will also pick up in 2017-19. The currently negative output gap is closing, as consumer and investment expenditure rises in the projection horizon, and subsequently remains at a marginally positive level. At the same time, mounting problems of companies with shortages of labour supply will translate into wage growth outpacing labour productivity growth. Domestic inflation growth is curbed by the persistently weak inflation in the euro area and the anticipated appreciation of the real effective zloty

Figure 4.8 Economic growth



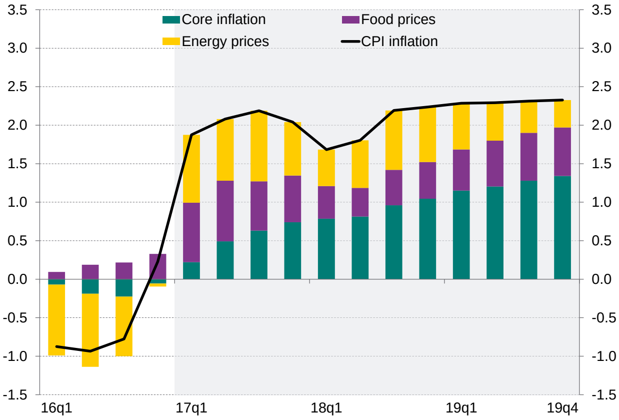
Source: GUS data, NBP calculations.

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.

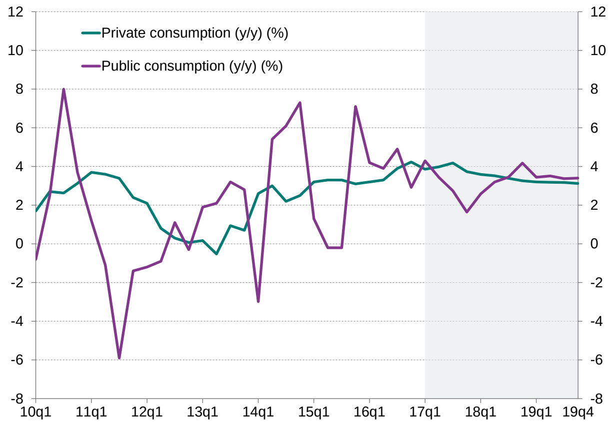
exchange rate. The persistently limited demand pressure and a merely moderate rise in cost pressure will keep consumer price growth below the NBP's inflation target until the end of 2019.

Domestic demand

In the projection horizon, private consumption growth (Figure 4.11) will be boosted by the favourable financial situation of households. Most of the increase in household's disposable income will be driven by rising income from employment, related to the improvement in the labour market. In particular, wage growth is expected to accelerate in 2017-2019, although households' purchasing power will be limited by rising inflation. The rise in household disposable income is also driven by the "Family 500 plus" programme, in place since April 2016. Due to the mechanism of intertemporal consumption smoothing, additional child benefits have only a lagged effect on household expenditure, and will thus boost consumption not only in 2016, but also in 2017. Private consumption will additionally be supported by the improving consumer sentiment. This is corroborated by GUS surveys, which show, among others, optimistic assessments of households concerning making major purchases and their subsiding fears of rise in unemployment.[53] In the projection horizon, consumption growth will also benefit from low interest rates, having a positive impact on the cost of financing consumer spending with credit. As a result of the above factors, household consumption will be on a steady rise in the coming years, with the fastest growth in 2017, when consumption growth will be boosted by the impact of the "Family 500 plus" programme.

In the projection horizon, enterprises' gross fixed capital formation growth will rise markedly on its 2016 level, when the prolonged transition period between the use of funds under the previous

Figure 4.11 Private and public consumption



Source: GUS data, NBP calculations.

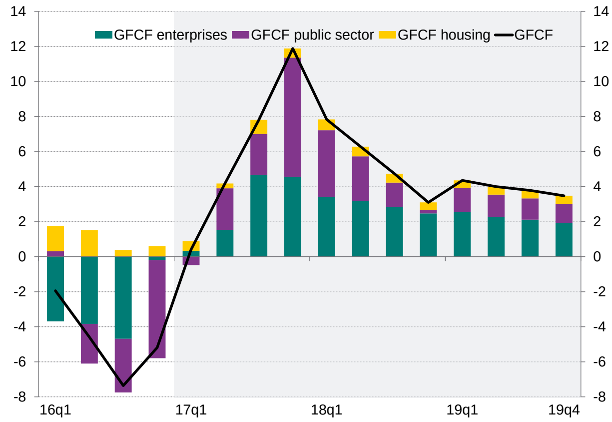
[53] *Koniunktura konsumencka. Styczeń 2017 r.*, GUS, January 2017 (available in Polish only).

financial frameworks (2007-2013) and the new (2014-2020) financial framework caused investment to decline significantly (Figure 4.12). Projects co-financed from the EU budget, which are slow to take off - like in other countries of the region - due to the need to adjust national regulations to the EU law and long procedures for their approval set by the European Commission[54], will be implemented in 2017, mainly by enterprises owned by the state or local government. This will concern, to the greatest extent, the energy sector.[55]

The level of public sector investment spending is even more closely related to the absorption of EU funds than corporate investment expenditure. This category of expenditure is expected to grow at its fastest in 2017, expected to bring also a considerable rise in the use of transfers under the new financial framework earmarked for capital spending of the general government sector (Figure 4.13). This is indicated by the data on agreements on the use of EU funds under individual operating programmes, and a significant rise in capital expenditure of local government units assumed for 2017 in their long-term financial plans.

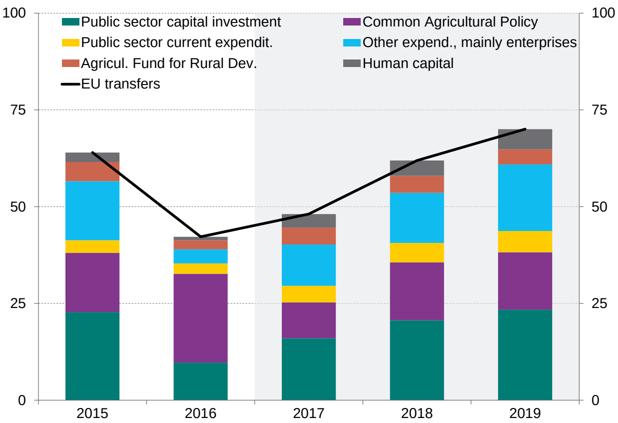
In the projection horizon, a marked rise is also expected in corporate capital expenditure financed with domestic funds. The NBP January 2017 surveys show, for the first time in almost two years, an increase in the share of enterprises planning new investment. The consistently strong financial situation of firms has a positive effect on their capacity to finance investment with their own funds. On the other hand, the absence of major changes in the interest on corporate loans and their granting criteria, together with high percentage of approved loan applications, point

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



Source: GUS data, NBP calculations.

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



Source: NBP calculations.

[54] *Sytuacja finansowa sektora przedsiębiorstw w III kw. 2016 r.*, NBP, December 2016 (available in Polish only).
[55] *NBP Quick Monitoring Survey. Economic climate in the enterprise sector in 2016 Q4 and forecasts for 2017 Q1*, NBP, January 2017.

to a limited adverse effect of the banking tax on corporate loan availability.

In the projection horizon, the favourable financial situation of households will also boost residential investment spending. Consumers' optimistic expectations increase their propensity to incur long-term debt, which is confirmed by the GUS survey of economic conditions[56] and developments in demand for mortgage loans.[57] Financing home purchases will also be facilitated by the government scheme "Housing for the Young", albeit its impact on investment has diminished since the programme has been extended to include transactions in the secondary market. On the other hand, the positive impact of rising household income on residential investment is reduced by the institutional changes, curbing loan availability. In particular, the amendment of Recommendation S of 2013 will result in a gradual tightening of the criteria for mortgage loan extension in 2014-2017.[58] Although these changes have a positive effect on stabilising the residential mortgage market, they cause the residential investment growth to decline in the projection horizon. However, supported by low interest rates, which reduce the cost of borrowing, residential investment growth will still be exceeding consumption growth.

Public consumption growth in 2017 will run a little below the expected GDP growth. The assumption of a moderate public consumption growth adopted in the projection results from the provisions of the Draft 2017 Budget Act, which envisages a relatively slow growth in current expenditure of budgetary units and in spending on targeted subsidies earmarked to finance current expenditure of other units of the sector. Due to the absence of detailed information on further measures aimed at limiting expenditure of

[56] *Koniunktura konsumencka. Styczeń 2017 r.*, GUS, January 2017 (available in Polish only).
[57] *Senior loan officer opinion survey on bank lending practices and credit conditions, 1st quarter 2017*, NBP, January 2017.
[58] https://www.knf.gov.pl/aktualnosci/2013/Najistotniejsze_zmiany_Rekomendacji_S.html (available in Polish only).

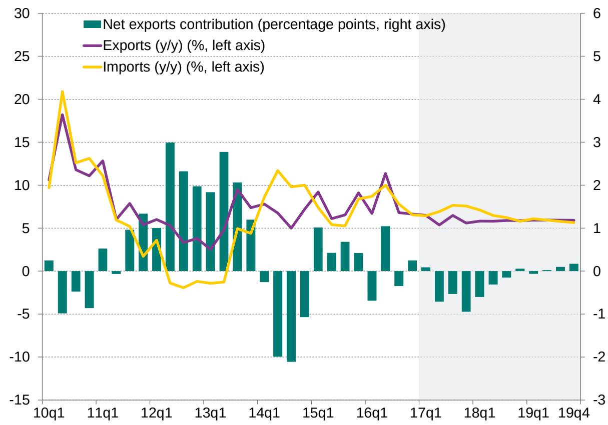
the general government sector in the following years, a neutral fiscal policy is assumed in the long-term projection horizon, which means a slight acceleration in public consumption growth in 2018-2019.

Current and capital account balance

Despite the economic conditions abroad weakening further and the sluggish growth in global trade, Polish exports rose robustly in 2016. This was supported by the depreciation of the zloty exchange rate, which boosted the price competitiveness of the Polish economy, and the relatively high demand from EU for Polish imports (including cars). However, Polish exports growth will drop off in the projection horizon. In particular, the future path of exports will be affected by the declining growth in global trade, relating to the less extensive process of outsourcing production to emerging countries. Export growth will also be dragged by the forecast slight decline in demand from the euro area and the anticipated appreciation of the real effective exchange rate of the zloty, curbing the currently high price competitiveness and the profitability of Polish exports. In light of the above circumstances, it will be difficult to maintain the current pace of export growth, and in the projection horizon growth in this category will run below the average for the period following the financial crisis (Figure 4.14).

In 2017, a relatively steep rise in imports is expected, owing to accelerated consumption and investment growth. As a result of assumed scenario, net exports, which were neutral for output growth in 2016, will reduce GDP growth in 2017. In turn, in 2018-2019, with domestic demand growth slowing down to near the level of potential output growth, import growth will decline, translating into a near-zero contribution of net exports to GDP growth.

Figure 4.14 Foreign trade



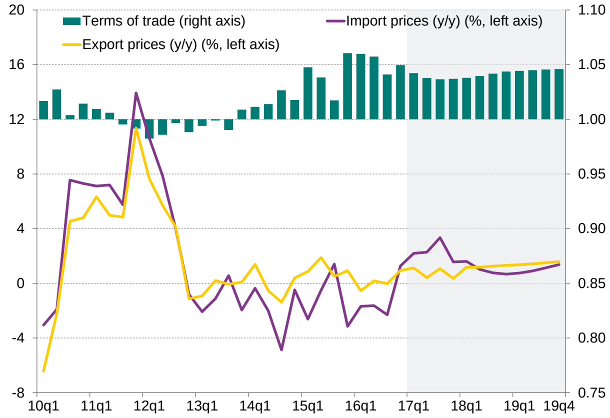
Source: GUS data, NBP calculations.

In 2016, the balance of the current and capital account of the balance of payments was positive, which was driven mainly by a surplus on the goods and services account. This resulted, among others, from a favourable change in the terms of external trade (Figure 4.15), related, to a great extent, to low prices of energy commodities. On the other hand, the surplus on the current and capital account was diminished by the high deficit on the primary income account. This deficit is the product of a markedly higher income of foreign investors relative to the income of Polish investments abroad, which results from both the value of the capital and its higher profitability in Poland. The balance of the primary income is also curbed by the rising income of immigrants performing short-term work assignments in Poland (mainly Ukrainians).

In 2017, following a decrease in the surplus on the trade account, the balance of the current and capital account is expected to follow suit, and drop to the level close to 0.0% of GDP. The lower trade surplus is in turn the effect of a rise in spending on imported goods and services, which is not only related to a stronger domestic demand, but also higher import prices. The impact of the deterioration in the trade account in 2016 will partly be offset by a higher inflow of funds assigned for investment, related to the implementation of projects under the new financial EU framework.

In the following years, a further inflow of those funds will take place. As the surplus on the trade account and the deficit on the primary income account are expected in 2018-2019 to remain close to their 2017 levels, this will translate in that period again into an improvement in the ratio of the balance of the current and capital account to GDP.

Figure 4.15 Export and import prices



Source: GUS data, NBP calculations.

Potential output

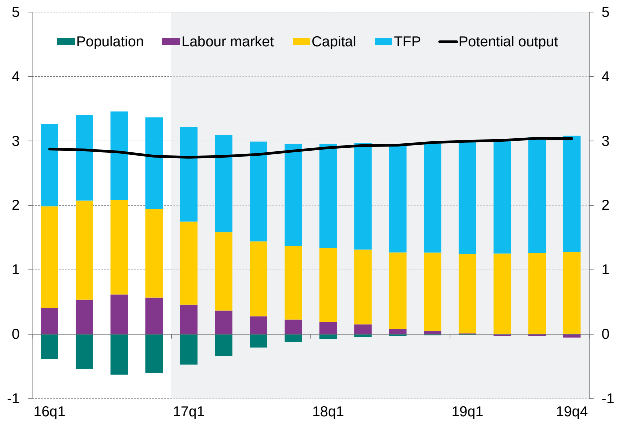
Potential output growth accelerates only slightly in the projection horizon, from 2.8% y/y to 3.0% y/y. The level of Poland's economic potential in the coming years will be affected positively by the following factors: growing total factor productivity (TFP), rising productive capital accumulation and the declining equilibrium unemployment rate NAWRU (Figure 4.16). The shrinking labour force will have an opposite effect. Thus, until the end of 2019, potential output growth will run below its long-term average, following a sharp drop caused by the global financial crisis.

According to Eurostat estimates, labour productivity in Poland had risen from 49% of the euro area average in 2000 to 69% in 2015. This results to a great extent from the rise in total factor productivity, which is the effect of the real convergence of the Polish economy. In the projection horizon, this process is expected to continue, with TFP following a moderately rising trend. Yet, total factor productivity growth will not return to its pre-crisis levels before the end of the projection horizon.

Potential output growth also comes from the increasing level of productive capital. However, due to the decrease in investment spending of the public and corporate sectors in 2016, which has a lagged impact on capital accumulation, its contribution to potential growth over the projection horizon is smaller than in previous years.

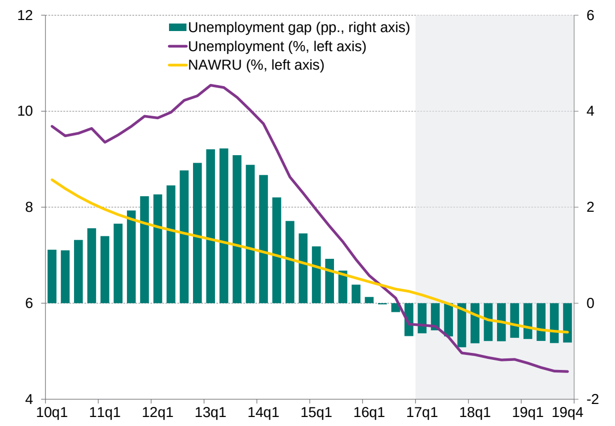
Potential output growth is also boosted by the steady decline in the NAWRU equilibrium unemployment rate, which will continue until the end of 2019 (Figure 4.17). The NAWRU rate is decreasing due to structural changes in the labour market, which are reflected in the lasting and significant lowering of the current unemployment

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



Source: NBP calculations.

Figure 4.17 Unemployment



Source: GUS data, NBP calculations.

rate, including a decline in the number of permanently unemployed. In recent years, a relatively sharper drop in the unemployment rate was observed in the younger cohorts, consisting of individuals without any work experience, as well as persons with weak educational background. One of the factors contributing to this situation is the tendency observed in 2014-2016, when a sharp rise in demand for labour was observed, towards higher demand for less qualified employees. This translated into employees' skills being matched more easily with employer's needs.[59] At the same time, the observed extension of the time needed to find a new employee results from the lower unemployment rate, and not from the lesser effectiveness of labour market operation. This is evidenced by the steadily rising number of vacancies, coupled with the declining number of the jobless (and thus the absence of signs of a shift in the so-called Beveridge curve).[60] Positive developments in the labour market benefit from the persistently low import prices of intermediate goods (despite the recent rise in commodity prices), which increase enterprises' capacity to hire new employees without much damage to their margins. At the same time, the decline in the NAWRU rate in the projection is smaller than that in the LFS unemployment rate, as a result of - besides the greater inertia of the former category - the rise in the minimum wage in 2017.

The rise in the potential output in the projection horizon is limited by shrinking labour force (Figure 4.16). The decline is due to the impact of the sustained downward demographic trends observed in Poland, i.e. the decrease in the size of the cohorts entering the labour market and the increased proportion of the people at post-

[59] *Kwartalny raport o rynku pracy – IV kw. 2015 r.*, NBP, March 2016 (available in Polish only).
[60] *Badanie ankietowe rynku pracy. Raport 2016*, NBP, December 2016 (available in Polish only).

production age.[61] At the same time, the labour participation rate in the latter of the two groups will probably decrease following the lowering of the statutory retirement age as of 1 October 2017. The impact of smaller supply of labour at post-production age on total labour supply may be partially offset by a rise in economic activity in other age groups, although in the case of persons at pre-retirement age, this possibility may be limited. This is because the downward shift in the age of statutory protection against dismissal may increase employers' concerns about employing people from this age group. The potentially negative impact of the above circumstances on labour supply is partially mitigated by the general increase in occupational activity, related to the strong conditions in the labour market.

The impact of the "Family 500 plus" programme on the labour market remains difficult to assess. On the one hand, there are concerns about a possible decline in economic activity of some currently active people as a result of the increased family benefits. Higher transfers raise the opportunity cost of taking up employment, in consequence discouraging lower income persons from seeking and undertaking employment. On the other hand, the continued upward trend in employment is supported by the higher consumer demand, which is boosted by transfers from the budget. The data for 2016 Q3, i.e. the first full quarter in which funds under "Family 500 plus" were disbursed, did not show any changes in occupational activity trends which might suggest adjustment to the higher level of family benefit payments.[62] In the assessment of NBP, it is more likely that the Q3 rise in the number of economically inactive persons is caused by

[61] The NECMOD model distinguishes four age groups. The term "persons at post-production age" refers to the oldest group, comprising women aged 60 or more and men older than 64. The boundaries for this age group do not follow the changes in the statutory retirement age.
[62] *Kwartalny raport o rynku pracy – III kw. 2016 r.*, NBP, December 2016 (available in Polish only).

the need to meet family obligations related to the growing number of persons above 80 years of age who require care of other family members.[63]

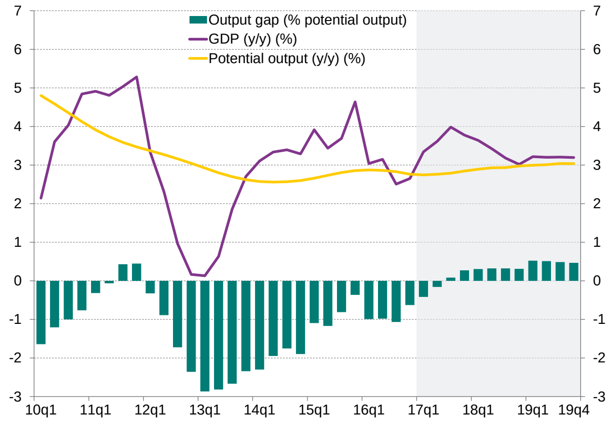
Output gap

In the short-term projection horizon, the currently negative output gap narrows and in 2018-19 stays in the positive territory, yet at the level not exceeding 0.5% of the potential output (Figure 4.18). Such development of the output gap results from the fiscal stimulus generated by the inflow of family benefits under the "Family 500 plus" scheme and increased investment in the economy driven by higher absorption of EU funds. The rise in production capacity will be observed with a lagged effect as compared to growth in demand in the economy. Potential output growth will run below GDP growth throughout the projection horizon. The output gap at a merely above zero level suggests that, on average, demand pressure in the economy will be only moderate in the coming years, and, consequently, the improving business conditions will affect the inflation rate to a limited extent only.

Labour market

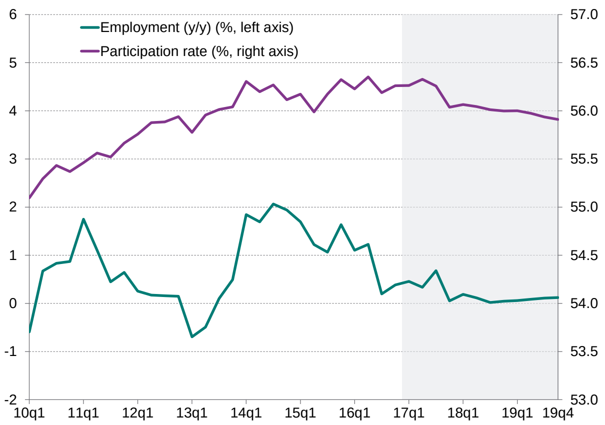
In the projection horizon, the increasingly slower growth in the number of employed is expected to continue (Figure 4.19). Although the determinants of demand for labour remain favourable, which is suggested, among other things, by forecasts of the employment level declared by enterprises, continuing well above the long-term average[64], given the record low unemployment rate, insufficient labour supply is increasingly curbing growth of the number of the employed. This is reflected in mounting problems with finding suitable employees, as reported by entrepreneurs[65] and the growing number of vacancies. The negative impact of demographic

Figure 4.18 Output gap



Source: GUS data, NBP calculations.

Figure 4.19 Employment and labour force participation



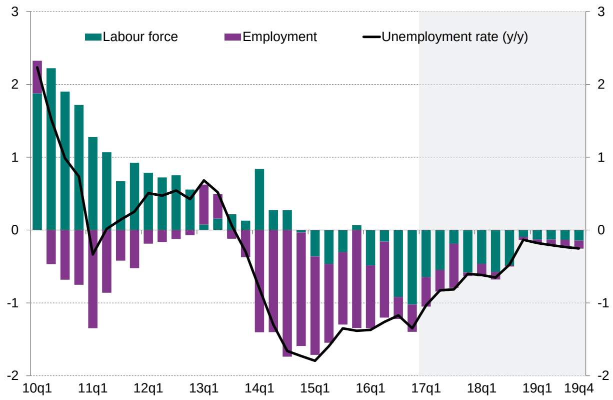
Source: GUS data, NBP calculations.

[63] *Kwartalny raport o rynku pracy – III kw. 2016 r.*, NBP, December 2016 (available in Polish only).
[64] *NBP Quick Monitoring Survey. Economic climate in the enterprise sector in 2016 Q4 forecasts for 2017 Q1*, NBP, January 2017.
[65] *NBP Quick Monitoring Survey. Economic climate in the enterprise sector in 2016 Q4 forecasts for 2017 Q1*, NBP, January 2017.

factors on labour supply will be further strengthened by the lowering of the statutory retirement age, which will reduce the number of employees at pre-retirement age and at post-retirement age. The projection scenario assumes, therefore, that demand and supply in the labour market will be matched primarily by increased labour intensity. This will be conducive to the projected acceleration in the growth of total factor productivity (TFP).

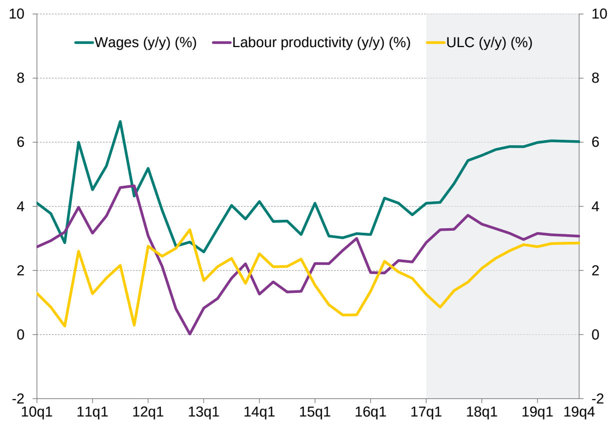
The LFS unemployment rate, which is already at the lowest level on record (Figure 4.17), will decline further in the projection horizon. However, while its decline observed up to now was driven by the relatively high growth rate of the number of the employed, in the coming years it will mainly result from reducing labour force resources (Figure 4.20). The falling unemployment, a large number of vacancies and the diminishing probability of losing a job will result in an accelerated wage growth, as indicated by the rapidly rising percentage of firms reporting an upward wage pressure in recent quarters (Figure 4.21).[66] Also increasing inflation and the rise in the minimum wage as of the beginning of 2017 will add to the wage growth. Other factors affecting the NAWRU equilibrium unemployment rate, leading to its decline over the projection horizon, will limit the growing wage pressure in the economy (Figure 4.17). Amid relatively stable labour productivity growth, steeper wage growth is translating into a gradual increase in unit labour costs, which will reach 2.8% y/y in the long-term projection horizon.

Figure 4.20 Change in unemployment rate - decomposition



Source: GUS data, NBP calculations.

Figure 4.21 Unit labour costs



Source: GUS data, NBP calculations.

Exchange rate

In 2016, the fluctuations of the exchange rate of the zloty were primarily driven by the changing global conditions and, to a lesser extent, domestic conditions, with factors behind the weakening of

[66] *NBP Quick Monitoring Survey. Economic climate in the enterprise sector in 2016 Q4 forecasts for 2017 Q1*, NBP, January 2017.

the Polish zloty against the US dollar and the euro and the strengthening of the British pound playing a major role. The exchange rate continues to run significantly below the level resulting from fundamental factors. This is suggested by the persistently high level, although lower than the 2015 record high, of the current and capital account balance. The projection horizon does not take into account additional, one-off factors which may affect the exchange rate. On the assumption that the situation in the financial markets gradually normalizes, it is expected that the effective exchange rate of the zloty will probably appreciate, bringing it closer to the equilibrium exchange rate. In particular, the appreciation of the exchange rate of the zloty will be driven by the continued process of real convergence of the Polish economy, reflected in a higher rate of growth of the domestic potential output as compared with potential GDP growth in countries being Poland’s main trading partners. The zloty strengthening will also be supported by the increased inflow of EU transfers conducive to maintaining a positive balance of the current and capital account. The declining interest rate disparity resulting from the absence of changes in NBP’s monetary policy parameters assumed in the projection, and gradual, albeit limited, interest rate hikes in the developed countries, will work in the opposite direction. At the same time, following the depreciation of the US dollar against the euro, as assumed in the projection, the Polish zloty will appreciate more against the US currency than against the common European currency.

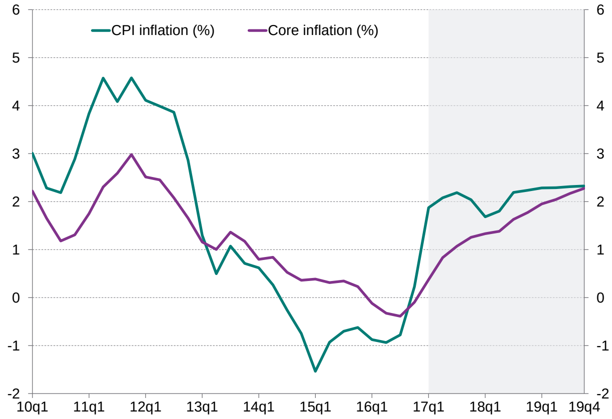
Components of CPI inflation

The path of CPI inflation in the current projection is determined by the high growth in energy and food prices in 2017, its decline in 2018-2019 and a merely slow and gradual rise in core inflation throughout the projection horizon.

In the recent years, cost and demand pressures in the Polish economy remained at a very low level. This was reflected in the negative output gap, falling import and PPI prices as well as low growth in unit labor costs. In the projection horizon, these phenomena will recede, and consequently, core inflation will gradually increase, moving from the negative territory up to 2.1% y/y in the long-term projection horizon (Figure 4.22). Such an increase is consistent with a marginally positive level of the output gap and close to the historical average growth rate of unit labor costs in the Polish economy (Figure 4.21). Besides the expected continuation of growth in demand for labour and given its limited supply, in the short term cost pressure is also boosted by growing import prices. It is associated with growing US-dollar-denominated prices of commodities (year-on-year terms) in the global markets and the weakening of the zloty against the dollar at the turn of 2016 and 2017, which in the short term boosts growth in commodity prices expressed in zloty. In the subsequent years, growth in prices of imported goods will stabilize at a relatively low level as a result of the forecasted low level of inflation in the euro area and the appreciation trend of the zloty assumed in the projection horizon.

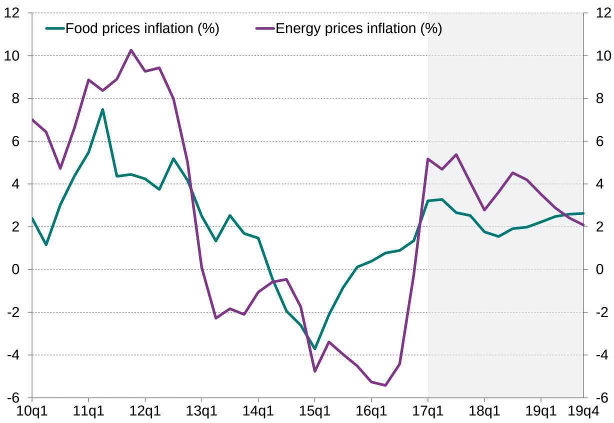
Following four years of declines, 2017 is expected to bring an increase in energy prices (Figure 4.23). Growth in oil prices observed in the recent months, along with the weakening of the zloty against the US dollar and combined with the low base in 2016, will translate in 2017 into a significant pick-up in the growth in fuel prices expressed in year-on-year terms. Also the price of electricity will rise, which, apart from higher prices of energy commodities and the impact of the base effect, will be driven by increases in electricity transmission and distribution fees and subsidies to renewable energy sources approved by the President of the Energy Regulatory Office

Figure 4.22 CPI and core inflation



Source: GUS data, NBP calculations.

Figure 4.23 Food and energy price inflation



Source: GUS data, NBP calculations.

on 15 December 2016. Reduced natural gas tariffs, implemented as of 18 February 2017, will have the opposite effect. Higher growth in energy prices will continue further in 2018. This forecast is based on the assumption that the rise in prices of energy commodities will affect those components of the national index of energy prices which react to this rise with a longer lag than fuel prices. As prices of energy commodities stabilize and the exchange rate of the Polish zloty appreciates, especially against the US dollar, the growth in energy prices in the long-term projection horizon will be reduced.

Apart from energy prices, food prices (Figure 4.23) will also post a high growth in 2017. This will be mainly due to rising wholesale prices of vegetables as a result of a significant decline in their imports from Spain and Italy, which is the consequence of particularly adverse weather conditions in those countries. Domestic food prices are also boosted by rising agricultural commodity prices in the global markets associated with growing demand from developing countries. In 2017 the relatively strong exchange rate of the euro against the zloty works in the same direction. The rise in food prices will be supported by the gradually increasing demand from households.

As a result of the stabilization of the price index of agricultural commodities in the global markets and the appreciation of the zloty against the euro, the years 2018-19 are expected to bring a slowdown in inflation. This is particularly apparent in 2018 when the food price growth in year-on-year terms is significantly diminished by the high base of 2017. In the entire projection horizon, the rise in food prices is limited by strong competition in this market.

4.4 Current versus previous projection

As compared with the November projection, the path of CPI inflation in the current forecasting round was revised upward without significant changes to the expected GDP growth (Table 4.1, Figure 4.24, Figure 4.26).

The higher level of CPI inflation is primarily due to rising prices of energy commodities in the global markets. An important factor conducive to higher consumer prices in 2017 is also an increase in agricultural commodity prices, particularly of fruit and vegetables, boosting domestic food prices.

The slight upward revision of the expected GDP growth in 2017 is largely a result of higher economic growth forecasts in countries being Poland's main trading partners.

Table 4.1 March projection versus November projection

	2017	2018	2019
GDP (y/y, %)			
March 2017	3.7	3.3	3.2
November 2016	3.6	3.3	-
CPI inflation (y/y, %)			
March 2017	2.0	2.0	2.3
November 2016	1.3	1.5	-

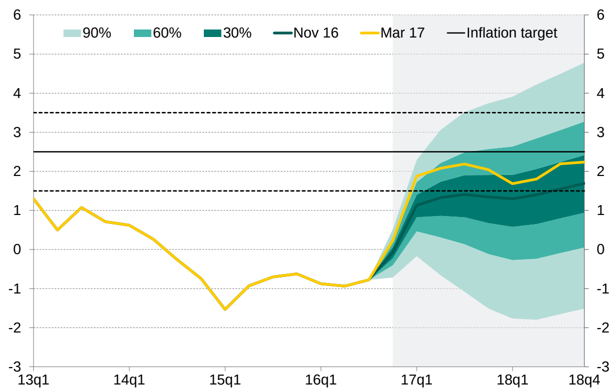
Source: NBP calculations.

Inflation

The information received after the November projection was completed has led to an upward revision of the inflation path by 0.7 percentage point in 2017 and by 0.5 percentage point in 2018 (Figure 4.25). All the major components of CPI contributed to this revision, although to varying degrees.

The revision of energy prices is largely driven by the higher than expected in the previous forecasting round prices of energy commodities in the global markets, accompanied by the weakening of the Polish zloty against the US dollar. The increase in crude oil prices and, indirectly, prices of other energy commodities was driven, in particular, by the OPEC agreement signed in November 2016 aimed to cut oil production as of the beginning of 2017. Domestic fuel prices were the first to respond to higher import prices of oil, leading to the upward revision of energy price inflation in 2017.

Figure 4.24 March projection versus November projection: CPI inflation (y/y, %)



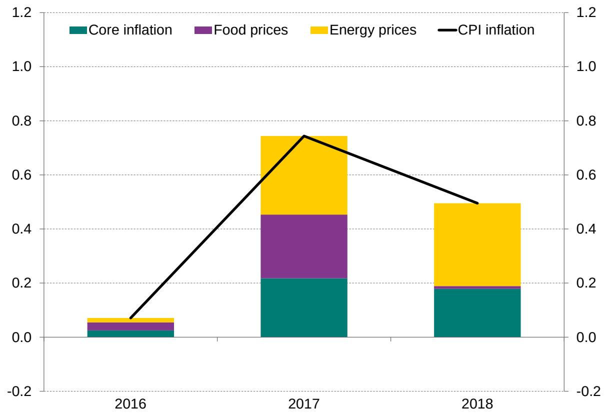
Source: GUS data, NBP calculations.

Energy prices in 2017 are also driven by heating fuel prices, which are affected by a significant increase in coal prices (due to the reduction in mining coupled with a simultaneous growth in demand in China), as well as low temperatures at the beginning of this year. The process of passing through of higher prices of energy commodities to most of other components of domestic energy prices is, however, more spread over time. Price changes in the global markets will thus push upward – as compared with the November round – energy price growth both in 2017 and 2018. Inflation in 2017 will be boosted not only by changes in commodity prices but also by increases in electricity transmission and distribution fees, approved by the Energy Regulatory Office in December 2016, and subsidies to renewable energy sources.

Another component that will increase CPI inflation in 2017 is faster growth in food prices. It will be driven by an increase in vegetable and fruit prices caused by adverse weather conditions in southern Europe. Growing agricultural commodity prices in the global markets, particularly prices of products of animal origin as a result of smaller livestock population in the EU and a rise in demand in China, will act in the same direction.

The upward revision of the CPI inflation path is also driven by the revision of core inflation, although the impact of this factor is relatively weaker than that of the other two. This adjustment resulted, on the one hand, from mounting cost pressure in the Polish economy due to increased transportation costs. On the other hand, higher core inflation results from growing demand pressure due to slightly stronger acceleration in GDP growth in 2017 and a downward revision of potential output. This revision is driven by slower rise in investment in 2016, affecting the level of productive capital, and

Figure 4.25 Decomposition of deviations between March and November projection: CPI inflation (percentage points)[67]



Source: NBP calculations.

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

– to a lesser extent – the decline in the labour force participation rate as a result of the lowering of the statutory retirement age in October 2017. As a result, the output gap, being a synthetic measure of demand pressures in the economy, remains at a slightly higher level in 2018-2019.

GDP

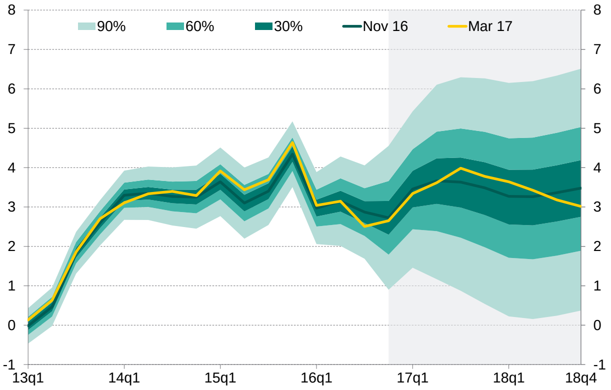
The slowdown in economic growth in the second half of 2016 was stronger than expected in the November forecasting round. The data released after the November projection was completed has led to a slight increase in the expected GDP growth in 2017 (Figure 4.27).

GDP growth rate in 2016 was negatively affected by a deeper than expected decline in gross fixed capital formation in the second half of the year. It resulted from stronger negative effects of lower absorption of capital transfers from the EU and a heightened level of uncertainty, both global and domestic. In the opinion of the Economic Institute of NBP, the domestic factors are of a temporary nature and their impact on the investment expenditures will abate over 2017. Given these assumptions and the impact of the low base effect, the forecasts of investment growth in 2017 remains close to the expectations of the previous forecasting round.

The upward revision of GDP growth in 2017 was driven by higher forecasts of economic growth in countries being Poland's major trading partners, and thus forecasts of demand for Polish exports. This effect is enhanced by the depreciation of the zloty, which improve price competitiveness of exports. Moreover, an increase in foreign demand will lead to cyclical adjustment of the level of corporate inventories.

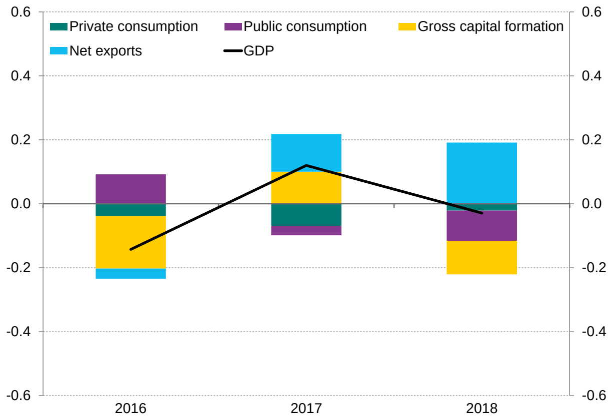
The impact of higher net exports and inventories on GDP growth in 2017 – as compared with the November round – will be partly offset by

Figure 4.26 March projection versus November projection: GDP growth (y/y, %)



Source: NBP calculations.

Figure 4.27 Decomposition of deviations between March and November projection: GDP growth (percentage points)[68]



Source: NBP calculations.

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

slightly lower growth in private consumption. The slowdown in consumer demand is due to lower growth in real disposable income, resulting from higher increase in prices of consumer goods and services, especially energy and food prices.

The GDP growth forecast for 2018 has not changed as compared with the November projection. However, the growth composition is expected to be slightly different. The negative impact of higher prices of energy commodities on consumption and gross capital formation will continue, yet it will be offset by a less negative contribution of net exports to GDP growth.

4.5 Forecast uncertainty sources

The central scenario of the March forecasting round, presenting the most likely macroeconomic developments in Poland, is associated with considerable uncertainty. The balance of its factors points to a nearly symmetrical distribution of risks for CPI inflation and GDP growth (Table 4.2). Under the assumption of a constant NBP reference rate, the probability of CPI inflation running in the range of allowable deviations from the NBP inflation target (1.5% - 3.5%), currently high, declines in the coming quarters, to subsequently level off at close to 42% (Table 4.2). The key sources of uncertainty to the March 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%)
17q1	0.16	0.96	1.00	0.51	0.84
17q2	0.21	0.75	0.98	0.51	0.78
17q3	0.27	0.64	0.91	0.52	0.63
17q4	0.36	0.67	0.89	0.53	0.53
18q1	0.48	0.74	0.91	0.53	0.43
18q2	0.46	0.70	0.88	0.53	0.42
18q3	0.36	0.59	0.80	0.52	0.44
18q4	0.34	0.57	0.77	0.51	0.43
19q1	0.32	0.54	0.75	0.49	0.42
19q2	0.32	0.53	0.73	0.48	0.41
19q3	0.31	0.51	0.71	0.47	0.40
19q4	0.31	0.51	0.70	0.47	0.39

Source: NBP calculations..

Improvement in global economic conditions

With the election of Donald Trump as President of the United States, there is a higher probability that the fiscal stance will become more expansionary as promised. In his campaign, the incumbent president pointed to a possibility of lowering and simplifying the system of personal income taxes, cutting corporate taxes, implementing an infrastructural investment scheme and increasing defence spending. Although no details of these changes or their timing are known as yet, they might boost economic activity in comparison with the path assumed in the central scenario already this year, and even more significantly next year. Given the United States' position in the global economy, the new administration's fiscal stimulus might contribute to higher economic activity and improved sentiment also in other parts of the world.

The combined effect of the fiscal expansion on the US output growth would depend not only on the type and extent of the implemented changes, but also on the hard-to-predict response of monetary authorities to those changes. In particular, should the Fed launch more pronounced interest rate rises than expected, they could dampen the scale of the recovery in investment and consumer demand, as well as contribute to an appreciation of the US dollar, with a downward effect on exports. On the other hand, fiscal expansion might have a stronger impact on consumer confidence if it was associated with a marked rise in consumers' net worth as a result of a rise in the prices of assets held by them. Given the above, the current rising trend in the savings rate related to household deleveraging would probably be reversed, driving up GDP growth in the US economy.

Fiscal easing is not unlikely in the European Union either, particularly as the European Commission has officially recommended increasing the role of fiscal policy in stimulating economic growth. These recommendations could be endorsed by countries where the stability of public finance is not at risk. In particular, such a scenario could be envisaged by the German economy, although its chances of materialisation are highly dependent on the outcome of the upcoming election. Accelerated GDP growth in the euro area could also result from the rise in gross fixed capital formation in enterprises, in particular with respect to investment in plant and machinery. Corporate investment growth might also benefit from the increase in capacity utilisation and the fact that euro area enterprises have been withholding decisions on modernization of their machinery for quite some time now. Factors working in favour of investment growth also include the likely weakening of the euro against the dollar, which would enhance the price competitiveness of exports from the countries of the currency union, and the sustained policy of quantitative easing in the euro area, facilitating access to corporate and consumer loans.

Business climate improvement in Poland's external environment would drive up demand for Polish exports, boosting growth of corporate investment and thus contributing to further revival in the labour market. The sound financial standing of households, combined with low policy interest rates, could contribute to a significant rise in consumption at the expense of the lower savings rate than assumed in the projection's baseline scenario. Higher demand pressure would in turn translate into an upward revision of the forecast inflation rate. Accelerated import price growth as a result of growing price levels in the global economy would add to the revision, although the likely zloty appreciation might curb this impact.

Deteriorating global growth outlook

The risk of growth in Poland turning out lower than assumed in the baseline projection scenario is associated primarily with potentially weaker conditions in the global economy. One of the main sources of uncertainty in this area are concerns about an economic slowdown in China, which persist despite the fact that business climate indicators for this country have stabilised in recent months. A potential threat continues to stem from the risks to the stability of the country’s financial system, resulting from corporate debt rising sharply due to overinvestment, particularly in the heavy industry sector. Problems faced by companies with debt repayment might translate into turmoil in the banking and shadow banking sector. In conjunction with weaker-than-expected impact of the government's expansionary measures, it could lead to a slump in foreign investors' confidence, a sharper outflow of capital and downward pressure on the yuan. The need to prevent the depreciation of the yuan would in turn tighten the room for manoeuvre for monetary policy, also in terms of ongoing stabilisation of the economy. Also, prices of dwellings in large cities, which have been rising sharply for over two years, may pose a risk to growth in the Chinese economy. On the other hand, concerns about an uncontrolled bursting of the speculative bubble in the Chinese housing market have decreased recently as price growth decelerated substantially following the introduction of quantitative restrictions and tighter criteria for mortgage loan extension by municipal authorities at the end of last year.

The more pronounced slowdown in China, one of the key trading partners of the United States, would result in a significant decline in the US economy, especially in a situation of the strengthening of the USD exchange rate. Declines in oil prices in the global markets in response to the limited demand from China would additionally diminish investment and activity in the US mining sector. Should economic conditions deteriorate in China and the United States, significant disturbances may be expected to arise in the financial markets, leading to growth weakening in the global economy, both via the trade channel and as a result of a sentiment slip among consumers and the business community.

To date, the United Kingdom's decision about leaving the European Union (*Brexit*) has only had a limited impact on household and corporate confidence in the European Union, amid a moderate response of the financial markets. Brexit continues to act as an important source of risk for the current projection. The extending period during which the shape of the agreement finalising the UK's exit from the Union may undermine companies' willingness to enter into long-term trade commitments. In addition, uncertainty concerning growth outlook in the euro area is related to the stability of the financial system. The prolonged period of very low interest rates is having a negative impact on the profitability of European banks and other financial institutions. This may urge them to limit lending and, consequently, cause a decrease in corporate investment spending.

The risk of lower global economic growth than assumed in the central scenario, particularly in the longer term, is also related to the slacking labour productivity growth observed in many economies. Should this process continue, and productivity growth remain permanently depressed, it would pose an additional hurdle to the return of the global economy on the path of growth at pre-crisis levels.

The considerable weakening of growth in the external environment of the Polish economy would have adverse consequences for domestic economic growth, particularly growth in gross fixed capital formation. The decline in external demand would be accompanied by a weakening of Polish exports, and, consequently, cuts in investment spending and employment by domestic exporters. Adverse external conditions would also have an indirect effect on capital expenditure, as companies' sentiment about future growth weakens. The decline in sentiment would also affect the household sector, translating into lower consumer spending. The slowdown in activity at home and abroad would contribute to the easing of demand pressure, which, in combination with the fall in agricultural and energy commodity prices in the global markets would render a slower consumer price growth in the projection horizon.

Oil prices in the global markets

Another source of uncertainty for the central scenario are fluctuations in the prices of oil and other energy commodities in the global markets, which are highly dependent on hard-to-predict supply conditions. Oil prices rose significantly after OPEC countries announced their decision to reduce oil output. Although at the moment the signatories of the agreement comply with its provisions, yet any sign of the agreed quotas being exceeded might result in a renewed decline in oil prices. In addition, the shape of OPEC's supply policy after the agreement terminates, as well as the scale of the future growth in the number of drilling sites and oil output in the United States are unknown.

Demand factors related to the prospects of growth in the global economy, in particular in the emerging Asian economies, also add to the uncertainty associated with the path of oil prices assumed in the baseline scenario.

Table 4.3 Central path of inflation and GDP projection

	2015	2016	2017	2018	2019
Consumer Price Index CPI (% y/y)	-0.9	-0.6	2.0	2.0	2.3
Core inflation net of food and energy prices (% y/y)	0.3	-0.2	0.9	1.5	2.1
Food prices (% y/y)	-1.6	0.8	2.9	1.8	2.5
Energy prices (% y/y)	-4.2	-3.8	4.8	3.8	2.7
GDP (% y/y)	3.9	2.8	3.7	3.3	3.2
Domestic demand (% y/y)	3.4	2.8	4.3	3.6	3.2
Private consumption (% y/y)	3.2	3.6	3.9	3.4	3.2
Public consumption (% y/y)	2.3	3.9	3.0	3.4	3.4
Gross fixed capital formation (% y/y)	6.1	-5.5	6.0	5.4	3.9
Contribution of net exports (percentage points y/y)	0.6	0.1	-0.5	-0.2	0.1
Exports (% y/y)	7.7	7.9	6.0	5.8	5.9
Imports (% y/y)	6.6	8.2	7.2	6.4	5.9
Gross wages (% y/y)	3.3	3.8	4.6	5.8	6.0
Total employment (% y/y)	1.4	0.7	0.4	0.1	0.1
Unemployment rate (%)	7.4	6.1	5.3	4.9	4.6
NAWRU (%)	6.6	6.3	6.0	5.6	5.4
Labour force participation rate (% y/y)	56.2	56.3	56.2	56.0	56.0
Labour productivity (% y/y)	2.5	2.1	3.3	3.2	3.1
Unit labour cost (% y/y)	0.9	1.8	1.3	2.5	2.8
Potential output (% y/y)	2.8	2.8	2.8	2.9	3.0
Output gap (% potential GDP)	-0.9	-0.9	-0.1	0.3	0.5
Index of agricultural commodity prices (EUR; 2011=1.0)	0.88	0.90	0.95	0.95	0.95
Index of energy commodity prices (USD; 2011=1.0)	0.51	0.50	0.62	0.59	0.57
Inflation abroad (% y/y)	1.3	1.1	1.3	1.5	1.6
GDP abroad (% y/y)	2.0	1.7	1.6	1.6	1.5
Current and capital account balance (% GDP)	1.7	0.6	0.0	0.1	0.6
WIBOR 3M (%)	1.75	1.70	1.73	1.73	1.73

Source: Bloomberg, Eurostat, GUS, NBP calculations. LFS data on total employment, labour force participation rate and unemployment rate. Index of agricultural prices is based on futures quoted mainly on European stock exchanges. Index includes prices of wheat, oilseed, pork, potatoes, sugar, cocoa, coffee, skimmed milk powder, butter and frozen concentrated orange juice allowing for weights reflecting the consumption structure of Polish households. The index of the prices of energy commodities includes the prices of crude oil, coal and natural gas allowing for the consumption structure of these commodities in Poland.

5 The voting of the Monetary Policy Council members in October 2016 – February 2017

■ Date: 20 December 2016

Subject matter of motion or resolution:
Resolution No. 6/2016 of 20 December 2016 on approving the Financial Plan of the National Bank of Poland for 2017.

Voting of the MPC members:

For:	A. Glapiński	**Against:**	E. J. Osiatyński
	G. M. Ancyparowicz		K. Zubelewicz
	E. Gatnar		
	Ł. J. Hardt		
	E. M. Łon		
	R. Sura		
	J. Żyżyński		

J. J. Kropiwnicki was absent.

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