NBP Narodowy Bank Polski

Monetary Policy Council

March 2016

Inflation Report

The Inflation Report presents the Monetary Policy Council's assessment of the macroeconomic developments influencing inflation. The projection of inflation and GDP presented in Chapter 4 was prepared at the Economic Institute of Narodowy Bank Polski. In terms of the contents, works on the projection were supervised by Andrzej Sławiński, General Director of the Economic Institute. The projection was prepared with the use of the NECMOD macroeconomic model. The NBP Management Board approved the submission of the projection to the Monetary Policy Council. The inflation projection is one of the inputs to the Monetary Policy Council's decision-making process.

The time frame of the analysis presented in the Report is conditioned by the availability of macroeconomic data. In turn, the periodisation of the analysis (breakdown into sub-periods) is conditioned by the development of particular variables. The cut-off date for the data in this Report was 1 March 2016.

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

Contents

Summary

Economic growth in Poland's major trading partners remains moderate, while uncertainty about the global economic outlook has recently increased. In the euro area, economic recovery has been ongoing for over two years, driven primarily by rising consumer demand amid improving labour market conditions. A factor containing the scale of recovery in the euro area and increasing concerns about its outlook is weaker economic activity in some of the emerging economies. In the United States, growth continues to outpace that in the euro area, yet it slowed in 2015 H2. In the emerging economies being Poland's major trading partners, weak economic conditions continue. Russia and Ukraine remain in recession, and growth in economic activity in China continues to decelerate gradually.

Deteriorating economic conditions in the emerging economies dragged on demand for many commodities. This – given high supply of some of them – has led to a sharp fall in prices in global commodity markets. The fall in commodity prices amid relatively weak global economic growth supports the sustained very low inflation in the immediate environment of the Polish economy. In particular, in the euro area, price growth has been close to zero, and in Central and Eastern Europe it remains negative. In the United States, inflation has risen significantly above zero in recent months, and core inflation has been close to 2% for over a year. At the same time, in some developing countries – including Russia – inflation continues at a very high level.

Against this background, monetary policies of the major central banks remain accommodative, albeit to a varying degree. The European Central Bank (ECB) lowered the interest rates in March and increased the scale of quantitative easing. In contrast, the Federal Reserve (Fed) in December 2015 raised its interest rates by 0.25 percentage points. Further interest rate increases by the Fed are still possible, although uncertainty about the future course of the US monetary policy has increased of late. In the recent period, monetary policy has been further eased by the Bank of Japan which, among others, has lowered one of its interest rates below zero, and by the People's Bank of China which has amplified liquidity provision to the financial sector.

The Fed's interest rate increase and a renewed rise in concerns about the global growth outlook boosted uncertainty in international financial markets. Mounting concerns of investors were reflected in growing yields on government bonds of the emerging economies and declining yields on government bonds issued by the major economies, traditionally perceived as safe assets. This was accompanied by falling stock market indices worldwide.

In Poland, deflation continues, although at present its pace is slower than in the previous quarters. The decline in prices is mainly driven by external factors, primarily falls in global commodity prices and low price growth in Poland's external environment. The deflation is also supported by the absence of demand and cost pressures at home. Continued stable economic growth and robust labour market are likely to lead to a gradual rise in prices. As a result, in 2016 inflation should be higher than in 2015, while still being curbed by the negative impact of the previous falls in commodity prices.

The Polish economy continues to grow at a stable pace, which even accelerated slightly in 2015 H2. Growing consumer demand, supported by rising employment and wages as well as positive households'

sentiment, continues to be the main driver of economic growth. GDP growth is also fuelled by higher corporate investment expenditure, a marked rise in household spending on housing and export growth. In turn, decline in investment expenditure by local governments, related to lower scale of UE-financed projects, has a dragging effect on GDP growth.

Robust labour market and favourable financial position of the enterprise sector, amid lower interest on loans than in the previous years, support steady growth in lending in the economy.

The Monetary Policy Council has been keeping the NBP interest rates unchanged. Yet, market participants' expectations point to the possibility of interest rate cut in 2016. This notwithstanding, yields on Polish government bonds have recently increased. Higher bond yields, the accompanying decline in stock prices on the Warsaw Stock Exchange and the zloty depreciation – all were largely driven by external factors, mainly heightened uncertainty in the international financial markets. Yet, domestic factors also had a negative impact on the prices of Polish financial assets.

High price competitiveness of the Polish economy, coupled with economic recovery in the euro area, have been conducive to a rise in Polish exports. At the same time, sound economic conditions in Poland are supportive of import growth and translate into high income of foreign direct investors. As a result, 2016 H2 posted a slight deficit in the combined current and capital account. Nevertheless, the majority of external imbalance indicators remain favourable, and the current account to GDP ratio has reached its record high since 1995.

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 2015 – February 2016, together with the *Information from the meeting of the Monetary Policy Council* in March 2016 are presented in Chapter 3. *Minutes* of the MPC meeting held in November will be published on 17 March 2016 and so will be included in the next *Report*. The MPC voting records in meetings held in October 2015 – January 2016 can be found in Chapter 5. This *Report* also includes three boxes: *Impact of monetary policy tightening in the United States on the emerging markets, Long-term interest rates in Poland and the term-premium* and *The impact of changes in oil prices on the revision to the inflation projection.*

Chapter 4 of the *Report* presents the projection of inflation and GDP based on the NECMOD model, which is one of the inputs into the Council's decision-making process on the NBP interest rates. In line with the March projection – prepared under the assumption of unchanged NBP interest rates and taking into account data available until 23 February 2016 – there is a 50-per cent probability that the annual price growth will be in the range of -0.9 – 0.2% in 2016 (compared to 0.4 – 1.8% in November 2015 projection), 0.2– 2.3% in 2017 (as against 0.4 – 2.5%) and 0.4 – 2.8% in 2018. At the same time, the annual GDP growth – in line with this projection – will be, with a 50-per cent probability, in the range of 3.0 – 4.5% in 2016 (as compared to 2.3 – 4.3% in the November 2015 projection), 2.6 – 4.8% in 2017 (as against 2.4 – 4.6%) and 2.1 – 4.4% in 2018.

1 External developments

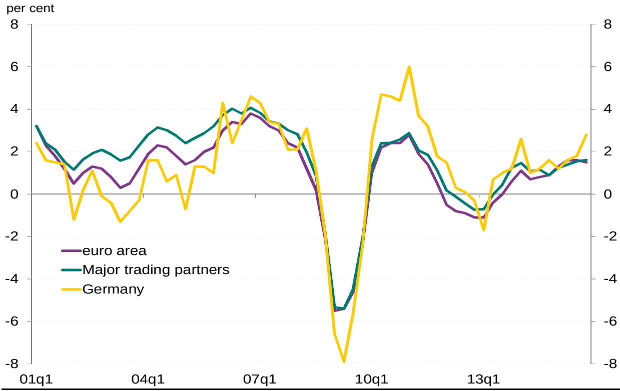
1.1 Economic activity abroad

Economic growth in Poland's major trading partners remains moderate (Figure 1.1). In addition, uncertainty about the global economic outlook has increased of late, mainly due to a weaker activity in the largest emerging market economies.

In the euro area, economic recovery has been ongoing for over two years, driven primarily by improving labour market conditions and good consumer sentiment, which translate into higher consumer demand. GDP growth is also supported by a gradual increase in investment and consumption expenditure of the general government. Both are bolstered by an increase in credit availability and lower government bond yields resulting from expansionary monetary policy of the EBC, including the asset purchases conducted since 2015 Q1 (Figure 1.2). Despite the moderate economic recovery in the euro area, GDP returned to its pre-crisis level only in 2015 H2 (Figure 1.3).

Activity in the euro area is still constrained by private and public debt, which remains high in many euro area member states. As a result, growth in investment and government expenditure remains relatively low in these countries. Since mid-2015, investment growth in the euro area has additionally been limited by an increase in uncertainty about the outlook for the largest emerging market economies. Deteriorating economic conditions in the major emerging market economies affect also euro area's exports, both to these economies and to some Central and Eastern European countries which are linked with the euro area export sector through global supply chains. In

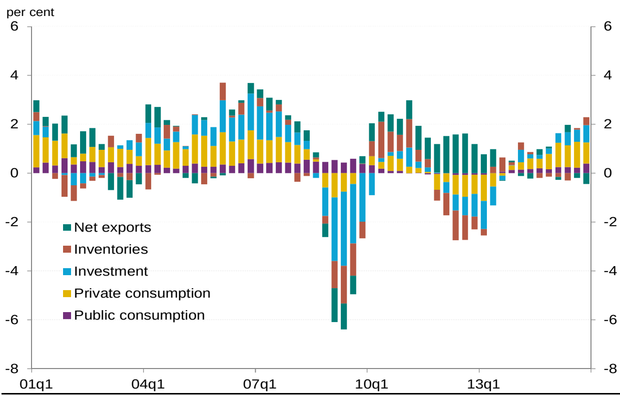
Figure 1.1 GDP growth in Poland's major trading partners (y/y)



Source: NBP compilation based on data provided by national statistical offices and Eurostat.

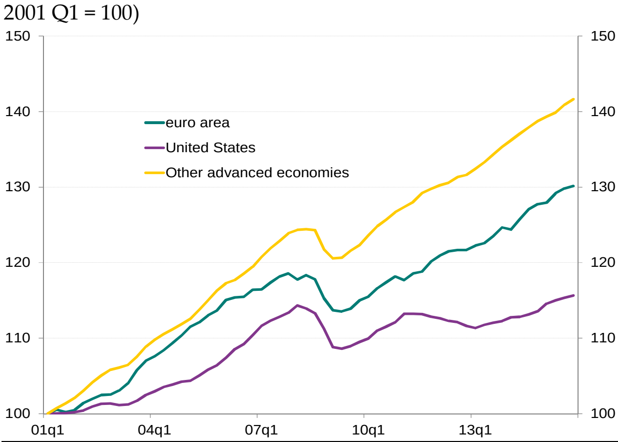
Average annual GDP growth in Poland's major trading partners, which comprise 80% of Polish exports (euro area, United Kingdom, Czech Republic, Russia, Sweden, Hungary, United States, Ukraine, Turkey and Romania), weighed by share in Polish exports in the first 11 months of 2015.

Figure 1.2 Components of GDP growth in the euro area (y/y)



Source: Eurostat data.

Figure 1.3 Chained volume GDP in advanced economies (index, 2001 Q1 = 100)



Source: NBP compilation based on data provided by national statistical offices, Bloomberg, IMF and Eurostat.

Other advanced economies – economies comprising 80% of advanced economies' GDP, excluding the United States and the euro area (Australia, Canada, Korea, Sweden, Switzerland and United Kingdom), GDP-weighted average.

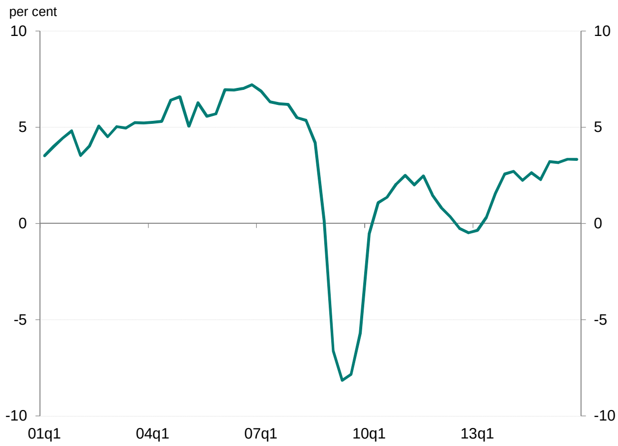
2015 H2, export growth in the euro area slowed down, most markedly in Germany. Nonetheless, economic growth in this country continued to accelerate due to rising domestic demand.

The gradual economic recovery in the euro area, particularly in Germany, contributed to a further increase in GDP growth in Central and Eastern European countries (Figure 1.4). This notwithstanding, the main driver of economic growth in this region was a further increase in consumer demand. In some Central and Eastern European countries, GDP growth was also supported by an acceleration in investment expenditure growth related to a higher use of EU funds.

In the United States, economic growth slowed down in 2015 H2, but it remains higher than in the euro area. GDP growth was contained by lower investment in the mining sector and – to a lesser extent – by weaker industrial activity, particularly of exporters, which was partly associated with a strong appreciation of the United States dollar in 2015. However, GDP growth in the United States is still supported by improving labour market conditions, good consumer sentiment and real estate prices remaining at the highest level since 2007. Another important factor behind the growth in economic activity, especially investment, is still low cost of credit for enterprises and households, as the Federal Reserve's monetary policy remains accommodative despite an increase in its interest rates (see chapter *1.4 Monetary policy abroad*).

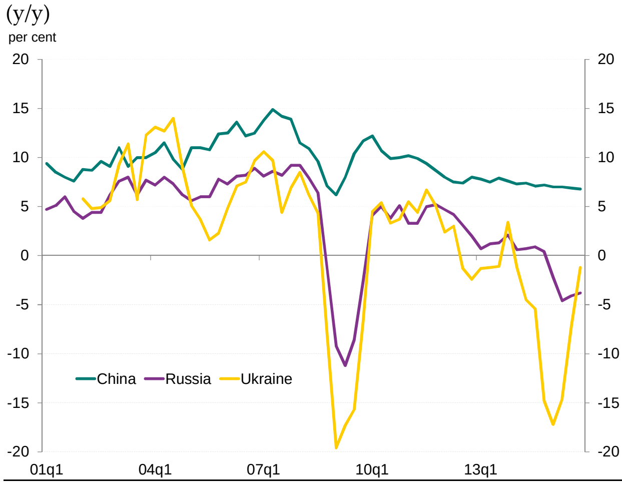
In the emerging market economies that are important trading partners of Poland, economic conditions remain weak (Figure 1.5). Russia and Ukraine are in recession. In turn, in China economic growth continues to slow down gradually. In 2015 it reached the lowest level in 25 years, yet still higher than in many other emerging market economies. The primary cause of the decline in GDP growth in China is lower

Figure 1.4 GDP growth the CEE countries (y/y)



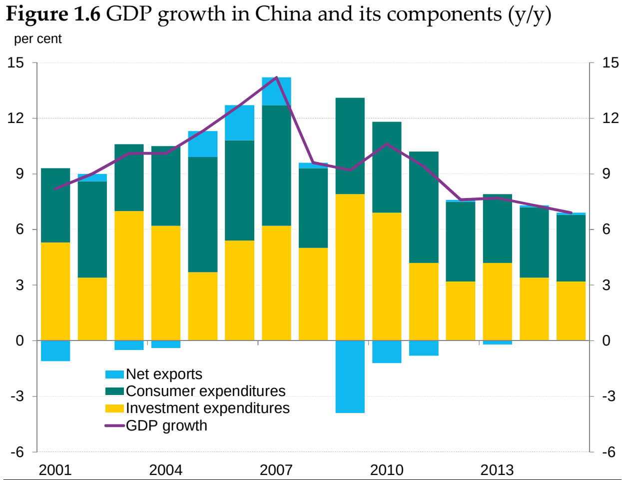
Source: Eurostat data, NBP calculations.
GDP-weighted annual growth in Bulgaria, Croatia, Czech Republic, Estonia, Lithuania, Latvia, Romania, Slovakia, Slovenia and Hungary.

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



Source: Bloomberg data.

Figure 1.6 GDP growth in China and its components (y/y)



Source: NBP compilation based on data provided by the Chinese national statistical office.

investment growth, resulting mainly from substantial oversupply in the real estate market and relatively high private debt. Therefore, economic growth can hardly be stimulated with further expansion of corporate debt. This adds to a gradual decline in export growth, which has been an important factor behind the slowdown in China for several years. Weaker export growth can be explained with falling cost competitiveness of China and relatively low economic growth abroad following the global financial crisis. In addition, the options to prop up economic growth in China by means of higher fiscal expansion are limited, given a rise in public debt in recent years (Figure 1.6, Figure 1.7).

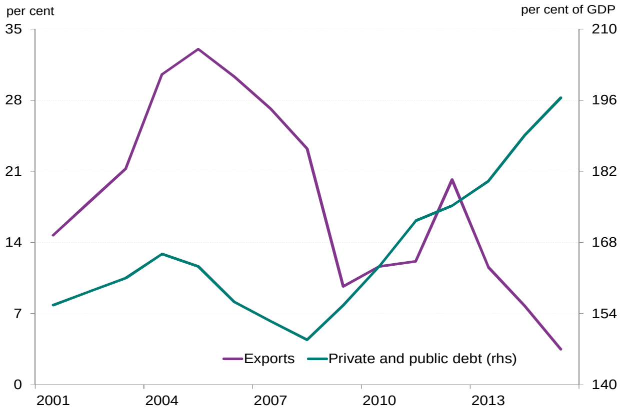
1.2 Inflation developments abroad

Inflation in the environment of the Polish economy is very low. In recent months it has declined further, dragged down by falling commodity prices (see chapter 1.3 *Global commodity markets*) and relatively weak global economic growth (see chapter *1.1 Economic activity abroad*). As a result of the latter, core inflation remains below the long-term average in many countries (Figure 1.8).

In the euro area, inflation has been close to zero since 2014 H2, due to a fall in energy prices and low food price growth. In addition, core inflation in the euro area remains close to its record lows, in spite of a gradual recovery in this economy. Very low inflation in the euro area reduces price growth in other European countries, including in Central and Eastern Europe, where it has been negative for over a year (Figure 1.9).

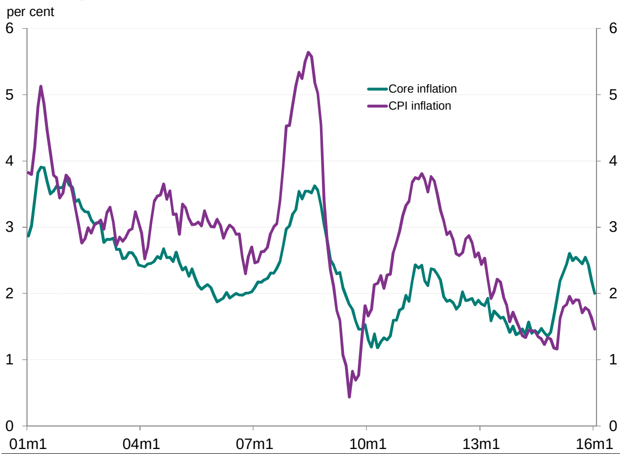
In the United States, in turn, headline inflation has increased significantly above zero in recent months, while core inflation has been around 2% for almost one year. Relatively high inflation in this economy is supported by high economic growth

Figure 1.7 Growth in Chinese exports (y/y), private and public debt in China in relation to GDP (3-year average)



Source: NBP compilation based on Bloomberg, IMF and the World Bank data.

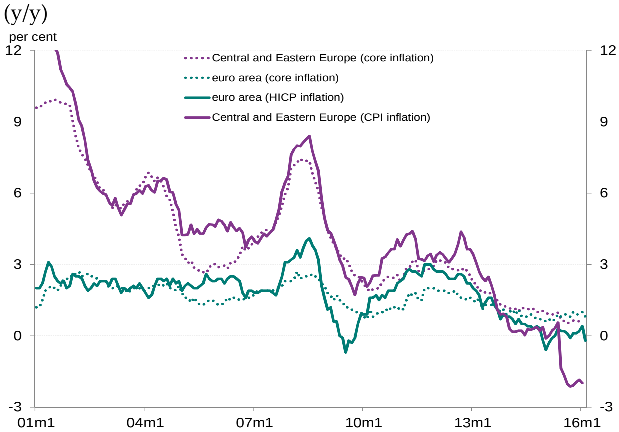
Figure 1.8 CPI inflation and CPI core inflation in Poland's major trading partners (y/y)



Source: Bloomberg data, NBP calculations.

Average inflation in Poland's major trading partners, i.e. economies that comprise 80% of Polish imports (euro area, China, Russia, Czech Republic, Great Britain and Sweden), weighted by share of these economies in Polish imports in 2015. Core inflation in European economies defined as HICP inflation ex energy and unprocessed food, in China – CPI inflation ex food and in Russia – CPI inflation ex food and energy.

Figure 1.9 CPI inflation and CPI excluding unprocessed food and energy in the euro area and Central and Eastern Europe (y/y)



Source: Bloomberg data, NBP calculations.

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

compared to other major economies, the slowdown in 2015 H2 notwithstanding (Figure 1.10).

In China, the annual inflation rate is slightly below the long-term average. The price growth is constrained by economic slowdown in this country, low food price growth and a fall in fuel prices. By contrast, in some emerging market economies inflation remains very high, which can be mainly attributed to a sharp depreciation of their currencies over the past year. This depreciation resulted from expected monetary policy tightening by the Fed and – in the case of commodity exporters' currencies – was further amplified by the fall in commodity prices. This concerns particularly Russia, whose currency in recent months fell to its historical lows.

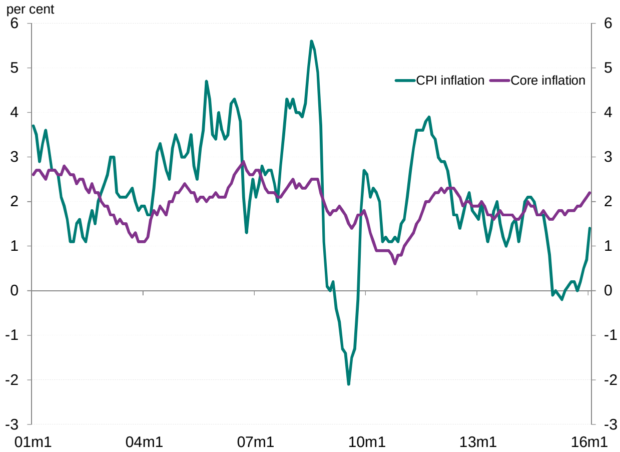
1.3 Global commodity markets

Prices of most commodities in world markets fell sharply in recent quarters, which was mainly due to their high supply and weakening demand in the global economy.

In particular, there were sharp falls in oil prices, whose global production continues to increase fast alongside the merely moderate growth in demand for oil. As a result, oil prices currently stand at around USD 30 per barrel, i.e. close to the average level in 2003-2004. In coming quarters the imbalance between supply and demand for oil will most likely continue due to the lifting of sanctions on the export of oil by Iran and the announced maintenance of high levels of oil production in Saudi Arabia and Russia as well as the declining demand for oil on the part of China.

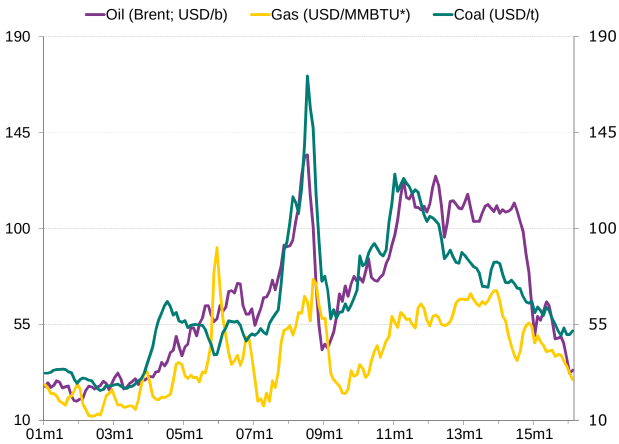
There were also sharp falls in the prices of coal and gas, i.e. energy commodities which are – like oil – important for inflation developments in Poland. The prices of these commodities were negatively affected mainly by demand factors. The fall in demand for coal is a result of the declining demand in China and other developing countries,

Figure 1.10 CPI inflation and CPI inflation excluding food and energy prices in the United States (y/y)



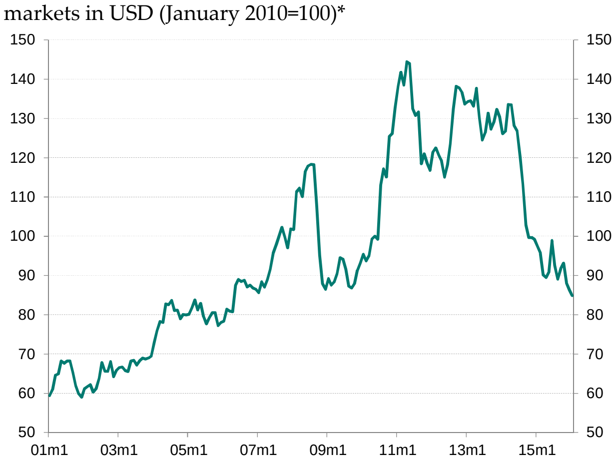
Source: Bloomberg data.

Figure 1.11 Energy commodity prices



Source: Bloomberg data, NBP calculations.
* The amount of energy needed to raise the temperature of 1 lb of water by 1F.

Figure 1.12 Index of agricultural commodity prices in the global markets in USD (January 2010=100)*



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

the restrictive climate policy and the fall in the prices of alternative energy sources. In turn, the fall in demand for natural gas is driven by its limited use for heating purposes due to the relatively warm winter in Europe (Figure 1.11).

Agricultural commodity prices also remain relatively low, although in recent months their decline was weaker and not all commodities were affected. In particular – amid continuing high supply – there were falls in the prices of meat, dairy products and wheat.

1.4 Monetary policy abroad

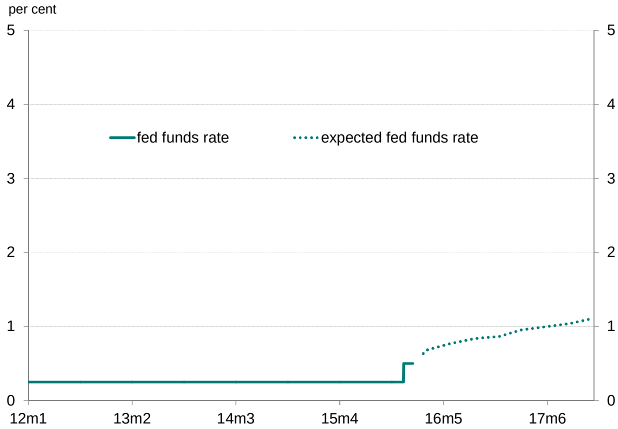
The monetary policy of the major central banks remains accommodative, albeit to a varying degree (Figure 1.13, Figure 1.14).

In December 2015, the Federal Reserve (the Fed) increased the interest rates after keeping them close to zero for seven years. The fluctuation band for the fed funds rate rose by 0.25 percentage points to 0.25-0.50%. The interest rates in the United States might be raised further, although uncertainty about monetary policy outlook in this country has significantly increased of late (Figure 1.15). This is due to signs of weaker economic activity in the United States and a slowdown in global economic growth (see chapter *1.1 Economic activity abroad*).

The European Central Bank (ECB) in turn has recently loosened monetary conditions in the euro area. Most notably, the ECB decreased the interest rates, with the main refinancing rate being lowered to zero and the deposit rate to -0.4%. The ECB has also increased the scale of its asset purchase programme from 60 to 80 bn euro a month and included non-bank corporate bonds. It was also decided that the programme would continue at least until March 2017.

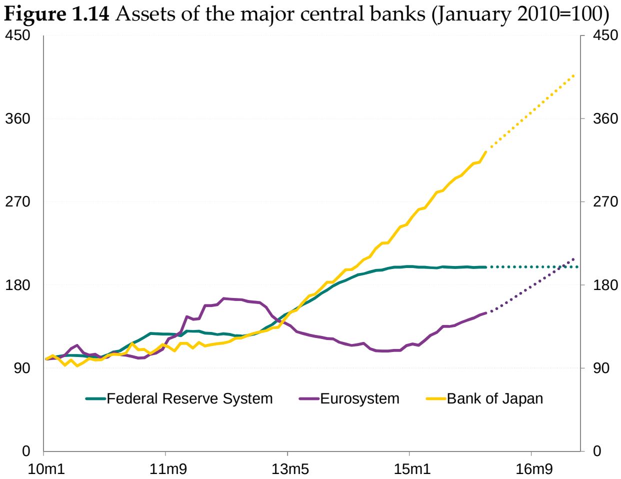
Also the Bank of Japan has recently expanded its monetary policy. In particular, it lowered one of its

Figure 1.13 Current and expected fed funds rate



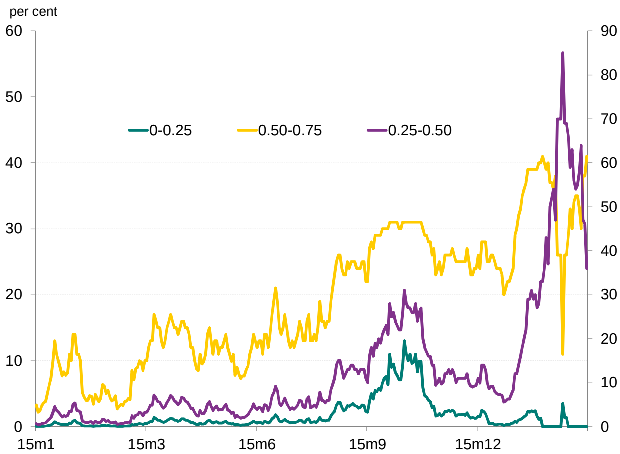
Source: Bloomberg data.
Expected fed funds rate based on three-month interest rate options.

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



Source: Bloomberg data, NBP calculations.
Forecasts prepared under an assumption of constant Fed's assets, the Eurosystem's assets growing by 60 bn euro in March 2016 and 80 bn euro a month onwards, and Bank of Japan's assets growing by around 7 tn JPY a month.

Figure 1.15 Probability of fed funds rate in a given range in late 2016



Source: Bloomberg data.
Probability implied from fed funds futures.

interest rates below zero (to -0.10%), increased the range of purchased assets and extended their average maturity.

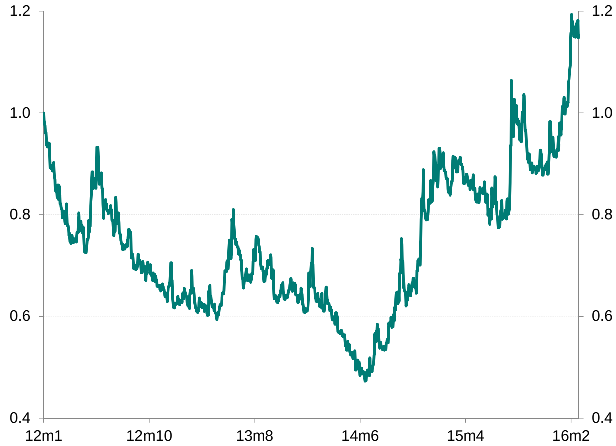
Monetary policy easing continued also in China, where the central bank increased the liquidity provision to the financial sector and cut the reserve requirement ratio again. In addition, the Chinese central bank is modifying the yuan's currency regime, allowing for greater fluctuations of its currency against the US dollar, due to significant costs of currency interventions. In the last two years, the level of Chinese foreign exchange reserves fell by around 20%. The change in the yuan's currency regime was also encouraged by the IMF in the recommendations issued prior to the decision to include this currency in the SDR basket.

Monetary policy of other central banks was increasingly divergent in recent months. This reflected – on the one hand – differences in the degree of monetary policy accommodation in the core economies and – on the other hand – the resilience of individual countries in the face of these differences, as well as growing risk aversion in the international financial markets and falling commodity prices. In some countries, mainly in Latin America, central banks have tightened their monetary policy. In turn, in Europe and Asia interest rates have been lowered or kept at historical lows. In a majority of European economies, interest rates are close to zero. In addition, some central banks in Europe resort to unconventional monetary policy. For instance, the Riksbank is purchasing government bonds, while the Czech National Bank is keeping an exchange rate floor.

1.5 International financial markets

In the recent period, the uncertainty in the international financial markets has risen markedly.

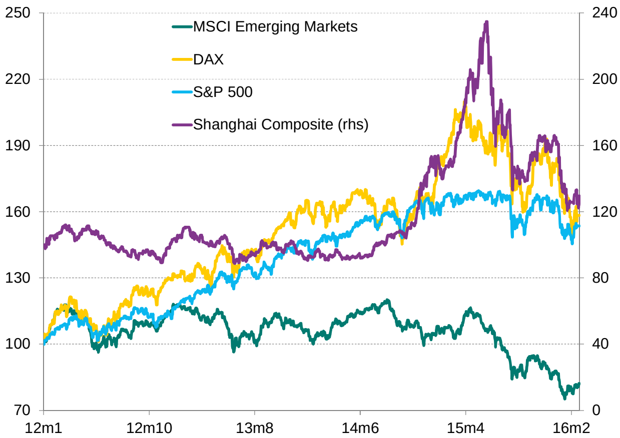
Figure 1.16 Uncertainty in global financial markets



Source: Bloomberg data.

Average of volatility measures in the crude oil market, G7 and emerging market currencies and stock market options (VIX), as well as spreads between corporate bond yields of the lowest and the highest investment grade and government bond yields of the United States and emerging market economies.

Figure 1.17 Global stock indices (January 2012=100)



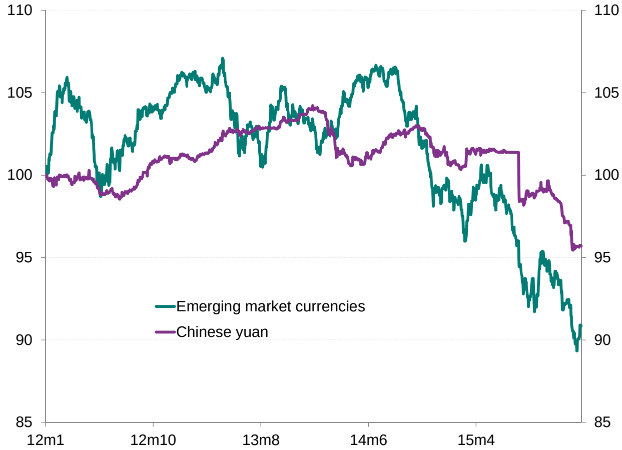
Source: Bloomberg data, NBP calculations.

Initially, this was due to monetary policy tightening in the United States (see *Box 1: Impact of the monetary policy tightening in the United States on emerging markets*). The uncertainty in global financial markets was further amplified by growing concerns about the economic outlook, particularly in China and net commodity exporters, but also in the United States. In the case of China, an additional source of uncertainty was future economic policy, particularly about modification of the currency regime.

Elevated concerns were reflected in a rise in emerging market government bond yields and a fall in world stock market indices, both in advanced and emerging market economies (Figure 1.16, Figure 1.17, Figure 1.18). In Europe, another factor behind the sharp decline in stock indices was smaller than expected scale of monetary easing by the ECB in December 2015.

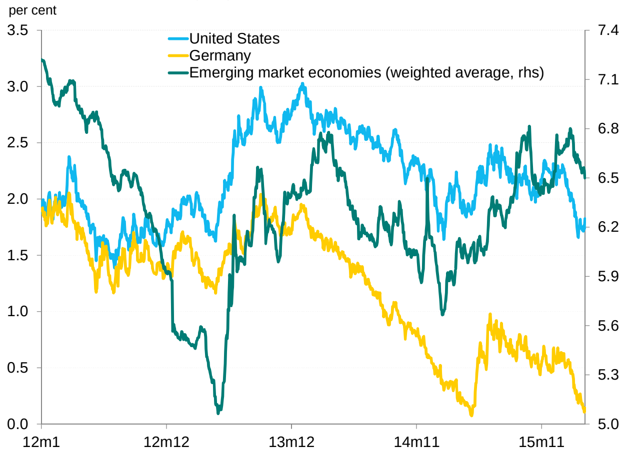
An increase in volatility in the international financial markets as well as heightened uncertainty about the global economic outlook and low global inflation are reflected in falling yields on government bonds of major economies, which are perceived as safe assets.

Figure 1.18 Selected emerging market exchange rates in relation to the United States dollar (January 2012=100, rise indicates depreciation)



Source: Bloomberg data, NBP calculations.

Figure 1.19 10-year government bond yields in selected advanced and emerging market economies



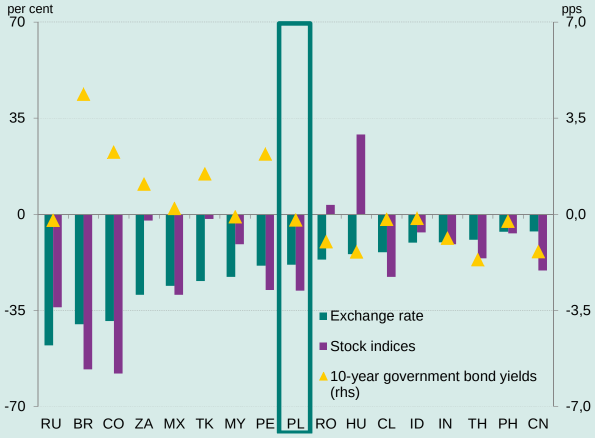
Source: Bloomberg data.

For emerging market economies – GDP-weighted average of 10-year government bond yields of Brazil, Russia, India, China, South Africa, Indonesia, Malaysia, Philippines, Mexico, Peru, Colombia, Chile, Hungary, Romania and Turkey.

Box 1: Impact of the monetary policy tightening in the United States on emerging markets

In December 2015, the Fed increased its interest rates for the first time since 2006. The decision followed a prolonged period of highly expansionary monetary policy in the United States, which for six years included also financial asset purchases. As the Fed indicated a willingness to conclude the asset purchase programme (QE taper tantrum) and – following that – pointed to likely interest rate increases, risk premia in international financial markets rose sharply. The rise was particularly pronounced in emerging market economies, which experienced the most remarkable capital outflows on record. Consequently, most emerging market currencies weakened substantially against the US dollar, which resulted in a significant rise in inflation in these countries. Moreover, prices of their financial assets, including equities as well as government and corporate bonds, declined significantly (Figure B.1.1, Figure B.1.3).

Figure B.1.1 Changes in emerging markets since the announcement of the policy normalisation principles and plans by the Fed (17 September 2014)



Source: NBP calculations based on Bloomberg data.

BR = Brazil, CL = Chile, CN = China, CO = Columbia, HU = Hungary, IN = India, ID = Indonesia, MY = Malaysia, MX = Mexico, PE = Peru, PH = the Philippines, PL = Poland, RO = Romania, RU = Russia, TH = Thailand, TR = Turkey, ZA = South Africa; countries are ordered according to the magnitude of exchange rate depreciation.

Shortly after the Fed's December decision to raise the interest rates, financial market sentiment stabilised for a while, helped by an announcement that the pace of interest rate increases would be relatively slow. Yet in the following weeks volatility in the financial markets rebounded, also in emerging markets. The renewed spike in volatility resulted from concerns about economic outlook in emerging market economies. This notwithstanding the uncertainty prevails over future monetary policy in the United States and its impact on emerging market economies (see Chapter 1.4 *Monetary policy abroad*). This Box presents the key challenges for emerging market economies resulting from monetary policy tightening in the United States.

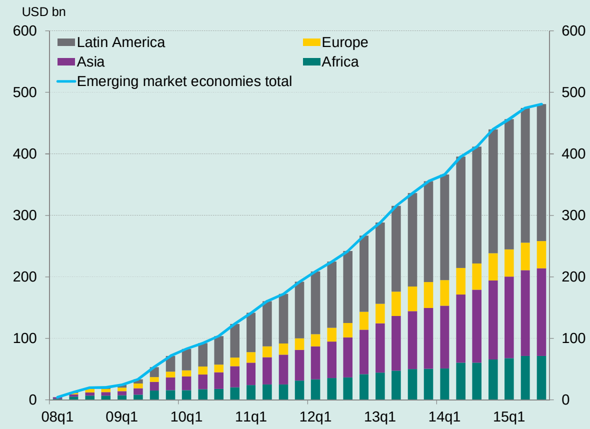
Fed's interest rate increases and indebtedness in the emerging market economies

The outlook for higher Fed interest rates results in a rise in long-term interest rates in the United States, appreciation of the US dollar and a downward pressure on prices of US financial assets, particularly equities. At the same time, as the US dollar is the leading global currency and the US government bonds are widely perceived as global risk-free assets, a rise in US government bond yields pushes up long-term interest rates in emerging market economies worldwide, particularly in countries closely linked to the United States. The rise in long-term interest rates in these countries may weigh on their economic conditions due to higher debt service costs, both in terms of private and public debt. However, the impact of monetary policy tightening in the United States on debt service costs in individual economies does not depend exclusively on the scale of increase in government bond yields, but also on the level of public and private debt, including corporate debt.

A rise in public debt service costs was notable for instance in Brazil, where public debt is equivalent to approx. 70% of GDP and the yields have risen by roughly 500 bps since September 2014. The cost of public debt service in this country amounted to 8% of GDP in 2015. Public debt in emerging market economies has risen by 10 percentage points of GDP on average, with particularly sharp increases in Russia, Malaysia and some Latin American countries. The adverse impact of monetary policy tightening in the United States on emerging market economies is exacerbated by a steep rise in private sector debt – especially corporate debt – observed in recent years. In 2008-14, the average corporate debt in emerging market economies rose from 50% to 75% of GDP.

Although bank credit accounts for a vast majority of corporate debt in emerging market economies (approx. 84% of total corporate debt), recent years have also seen a sharp rise in corporate bond issuances, particularly denominated in foreign currencies. Their share in total corporate debt in emerging market economies doubled to 16% between 2008 and 2014. The net issuance of corporate bonds denominated in the US dollar increased by 480 USD bn, predominantly in Latin America (Figure B.1.2), to reach – together with corporate bonds denominated in other major currencies – about 55% of total corporate bonds in emerging market economies in 2014. Moreover, a part of the sharp rise in foreign currency corporate debt was due to increased borrowing from foreign banks. In some countries, particularly in Latin America, more than 60% of all companies have short positions in foreign currencies. Large share of foreign currency corporate debt makes enterprises in many emerging market economies more sensitive to the monetary policy tightening in the United States. This is because the rise in debt service costs stemming from higher interest rates might be exacerbated by a sharp appreciation of the US dollar that may occur over the course of monetary policy tightening in the United States.

Figure B.1.2 USD corporate bond issuance since 2008



Source: NBP calculations based on BIS data.

Figure B.1.3 Public and private debt in selected emerging market economies

Source: NBP compilation based on World Bank and IMF data.
Average ratios of public and private debt to GDP in Brazil, Chile, China, Columbia, Hungary, India, Indonesia, Malaysia, Mexico, Peru, the Philippines, Poland, Romania, Russia, South Africa, Thailand, and Turkey, weighted by GDP..

To conclude, monetary policy tightening in the United States might prove a challenge to corporate sector and pose a threat to the financial stability in these emerging market economies where corporate debt, most notably foreign debt, particularly denominated in foreign currencies, is high.[1] Yet the degree of this challenge varies across individual countries. The rise in corporate debt after the global financial crisis was concentrated in larger emerging market economies (China, Brazil, India, Turkey), Asia (Thailand and Korea) and Latin America (Chile, Peru, Mexico, Columbia), while in Central and Eastern Europe, also in Poland, corporate debt was stable in relation to GDP.

The risk map of emerging market economies

Experience shows that the scale of capital outflows and of change in asset prices in periods of monetary policy tightening by the Fed and QE taper talk differed significantly across countries. Some countries experienced sharper depreciation in the domestic currency, steeper increase in yields and larger declines in stock indices than others. These countries either have weaker economic fundamentals, higher public or private debt, or greater dependence on the portfolio capital inflows. The most important risk factors that determine the magnitude of capital outflows from a particular economy during monetary policy tightening episodes in the United States are presented in Table B.1.1.

Against the background of other emerging market economies, Poland has relatively sound macroeconomic fundamentals, including stable macroeconomic growth and narrow external imbalances. Furthermore, more than a half of Poland's current account deficit is financed by direct investment and other stable sources, including equity and retained profits (for more, see *Box 2: Assessment of macroeconomic imbalances: Poland vs. other European Union countries* in the *Inflation Report – July 2015).* At present, public and private debt in Poland is not excessive, which is a material risk factor in many emerging market economies. The general government deficit has fallen steadily since its peak shortly after the global financial crisis (from 7.5% of GDP in 2010 to 3% of GDP in 2015), and the share of foreign currency government debt is relatively small compared to other emerging market economies (31% versus 70% on average). Issuance of corporate debt, also denominated in foreign currencies, has increased since the global financial crisis, yet has remained relatively low compared with other emerging market economies (Figure B.1.4), and so is the total private debt level (63.2% against 114.5% of GDP). Corporate foreign currency denominated debt remains close to the average in emerging market economies (21.2% versus 22.2% of GDP).

[1] In addition, the increase in corporate debt was concentrated in mining and construction, i.e. in the sectors whose profitability has recently fallen, and whose outlook – given the expected tightening of global monetary conditions – remains unfavourable.

Table B.1.1 Risk factors relating to the impact of interest rate increases in the United States on emerging market economies

	BRIC				Latin America				Asia				EMEA				
	BR	RU	IN	CN	CL	CO	PE	MX	ID	MY	PH	TH	HU	PL	RO	ZA	TR
Current account balance to GDP (%)	-4.4	3.2	-1.3	2.1	-1.2	-5.2	-4.0	-2.0	-3.0	4.3	4.4	3.3	4.0	-2.0	-0.4	-5.4	-5.8
Foreign-exchange reserves to GDP (%)	15.5	20.8	15.9	37.7	15.7	12.4	30.9	15.1	12.6	34.3	28.0	38.8	30.4	18.4	21.7	14.0	16.0
Economic growth revision (pp.)	-4.4	-2.7	1.9	-0.1	-0.7	-1.2	-2.0	-0.9	-0.7	-0.4	-0.4	-1.3	0.4	0.2	0.6	-1.1	-0.2
Economic growth (%)	-2.6	-2.6	7.1	7.0	2.1	3.1	2.2	2.5	4.8	6.0	5.9	2.7	3.0	3.5	3.5	1.5	3.3
Annual inflation rate (%)	9.0	15.6	4.9	1.4	4.3	5.0	3.5	2.7	6.4	3.1	1.4	-0.9	-0.1	-0.9	-0.6	4.6	7.7
Public deficit to GDP (%)	-6.2	-1.2	-7.0	-1.2	-1.5	-1.8	-0.3	-4.6	-2.1	-3.6	0.9	-0.8	-2.6	-3.0	-1.9	-3.8	-1.0
Loans to GDP (%)	69.1	59.3	51.2	63.4	109.4	52.7	34.0	31.1	36.5	120.6	39.2	146.7	43.5	52.2	31.2	151.5	74.6
Corporate bonds in USD to GDP (%)	5.6	4.8	3.3	0.4	19.4	10.9	15.9	14.0	3.1	11.0	14.7	1.7	13.9	3.2	n/a	6.7	12.0
Public debt in USD to foreign debt (%)	89.0	91.9	83.1	1.3	74.2	85.1	90.4	25.8	91.4	91.1	86.2	87.3	62.2	26.8	38.2	37.5	61.6
Non-residents in government bond market (%)	18.4	29.9	3.7	8.5	19.0	16.0	38.0	36.0	38.0	46.0	n/a	15.2	26.6	38.9	18.0	33.7	20.3

Economic growth revision – change in 2015 GDP forecast in the course of 2015 according to Bloomberg's median BR = Brazil, CL = Chile, CN = China, CO = Columbia, HU = Hungary, IN = India, ID = Indonesia, MY = Malaysia, MX = Mexico, PE = Peru, PH = the Philippines, PL = Poland, RO = Romania, RU = Russia, TH = Thailand, TR = Turkey, ZA = South Africa.

Source: NBP compilation based on data from Bloomberg, World Bank, BIS, IMF, statistical offices, central banks, institutions in charge of debt management, monetary policy tightening risk factors according to Escolano et al. (2014) and Mishra et al. (2014).

At the same time, Poland's budget and current account deficits are financed, to a material degree, by non-residents. The share of their portfolio in Polish government debt market is slightly larger than in other emerging market economies (37% against 23% on average). Yet the foreign investor base is highly diversified and to a significant degree consists of investors with a long-term investment horizon, such as central banks.

Although further interest rate increases in the United States seem to be less likely than a couple of months ago, a possibility of monetary policy tightening in this country will remain a material risk to economic conditions in emerging market economies and the stability of their financial systems, hence continue to pose global risk. Thus, it may continue to exert a substantial impact on the exchange rate of the zloty and on Polish financial asset prices, as well as economic conditions in Poland. The impact of the probable monetary tightening in the United States on the Polish financial markets may, however, be mitigated by sound macroeconomic fundamentals of Polish economy (including low private and public debt), and by the simultaneous increase in the scale of monetary expansion in the euro area, Poland's main trading and financial partner.

2 Domestic economy

2.1 Consumer prices

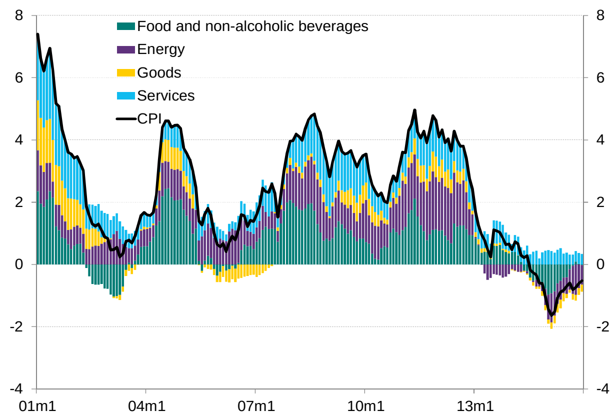
Deflation continues in Poland, although at present its pace is slower than in the previous quarters (Figure 2.1).[2]

The negative price growth is primarily driven by external factors, mainly falls in global commodity prices and the resulting lower energy prices. In recent months, despite a renewed decline in oil prices in international markets, energy prices in Poland have been falling less steeply. This, together with a rise in food prices – driven by a reduced supply of certain products due to the summer 2015 drought – contributed to weakening deflation.

The decline in consumer prices was also contained by growing import prices resulting from a markedly weaker than a year before exchange rate of the zloty to US dollar (Figure 2.2). At the same time, price growth in the environment of the Polish economy remained very low. In particular, Poland's main trading partners see a merely moderate recovery in economic activity, which – amid low commodity prices – translates into the absence of inflationary pressure.

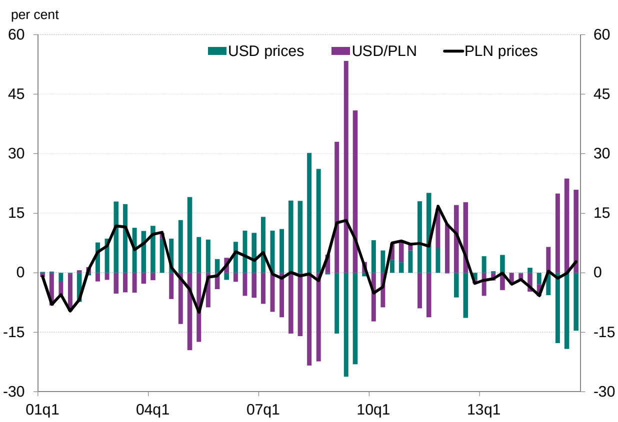
Apart from low price growth in the environment of the Polish economy, deflation in Poland is also supported by lack of demand pressure, as reflected in low core inflation measures (Figure 2.3), as well as the absence of cost pressure, evidenced by falling producer prices in industry (Figure 2.4).

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



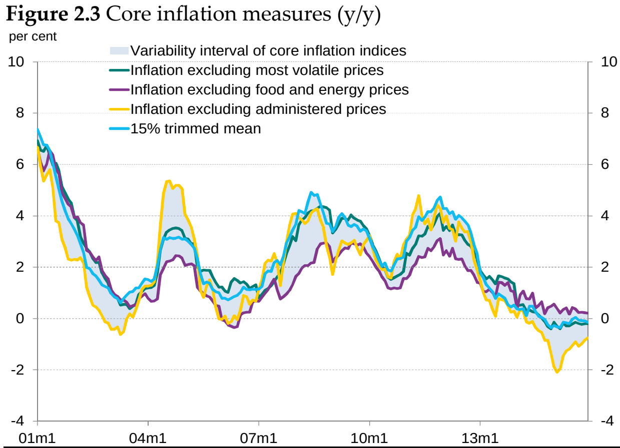
Source: GUS data, NBP calculations.

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



Source: GUS data, NBP calculations.

Figure 2.3 Core inflation measures (y/y)

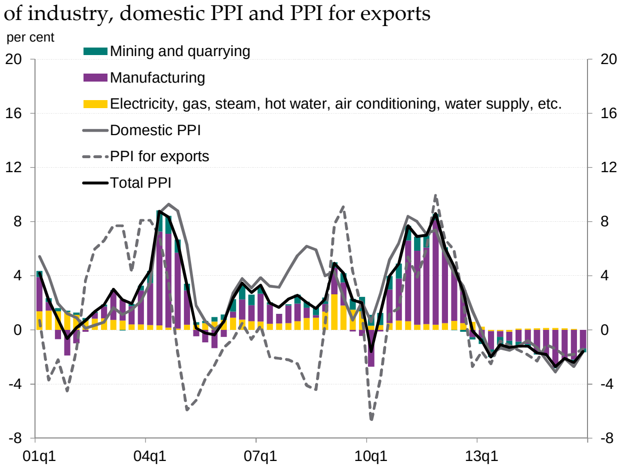


Source: GUS data, NBP calculations.

[2] In January 2016, according to the preliminary GUS (Central Statistical Office) data, inflation declined to -0.7%% y/y. However, the data on inflation in January 2016 may be revised as a result of changes in the structure of the CPI basket introduced by GUS at the beginning of each year. Due to the preliminary nature of the data, GUS did not publish information on changes in all components of the CPI basket. Therefore, a more in-depth analysis of the January price changes in particular groups will be presented in the subsequent *Report*.

Yet the continued stable economic growth and the robust labour market will lead to a gradual increase in prices. As a result, in 2016 inflation should be higher than in 2015, although it will continue to be curbed by the negative impact of the previous falls in commodity prices. Forecasts of the financial sector analysts and the surveyed economists also indicate a gradual rise in inflation (Table 2.1).

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



Source: GUS, Eurostat data.

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

	2015			2016	
	Oct	Nov	Dec	Jan	Feb
CPI inflation expected in 12 months					
Consumers*	0.2	0.2	0.2	0.2	0.2
Enterprises	0.2**	-	0.2	-	-
Expected average annual CPI inflation					
Bank analysts					
- in 2016	-	1.1	1.1	0.6	0.1
- in 2017	-	2.1	2.0	1.6	1.7
- in 2018	-	-	-	2.3	2.0
NBP Survey of Professional Forecasters					
- in 2016	1.3**	-	0.9	-	-
- in 2017	1.9**	-	1.8	-	-

Source: GUS, NBP, Thomson Reuters data.

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

**Data from the September 2015 survey.

2.2 Demand and output

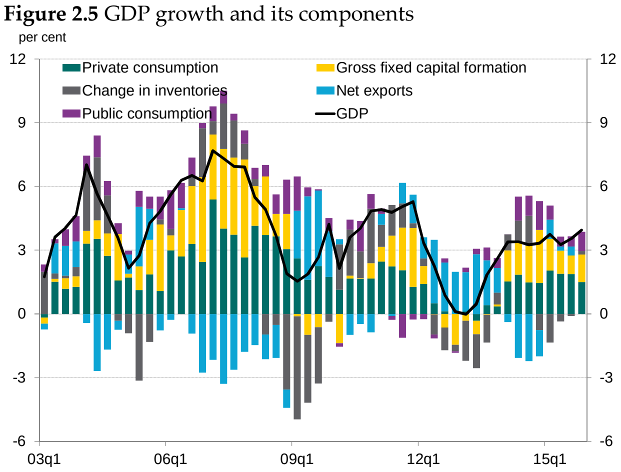
The Polish economy continues to grow at a stable pace. According to GUS data, GDP growth slightly accelerated in 2015 H2, remaining close to that of potential output.

Rising consumer demand continues to be a primary driver of economic growth (Figure 2.5). A substantial contribution to GDP growth – albeit smaller than in 2015 H1 – comes from increasing investment. Also a rise in exports supports economic growth.

2.2.1 Consumption

Over the past few quarters, consumer demand growth has been stable at close to 3% (Figure 2.6). The sustained consumption growth is underpinned by high employment and declining unemployment rate (see Chapter 2.4 *Labour market*), as well as further rise in wages, which, together with the persistent deflation, increases households' real disposable income. Consumer demand is also supported by positive consumer sentiment, encouraging greater propensity to purchase (Figure 2.7). Stable growth in consumer credit also contributes to rising consumption (see Chapter 2.6 *Credit and money*).

Figure 2.5 GDP growth and its components



Source: GUS data.

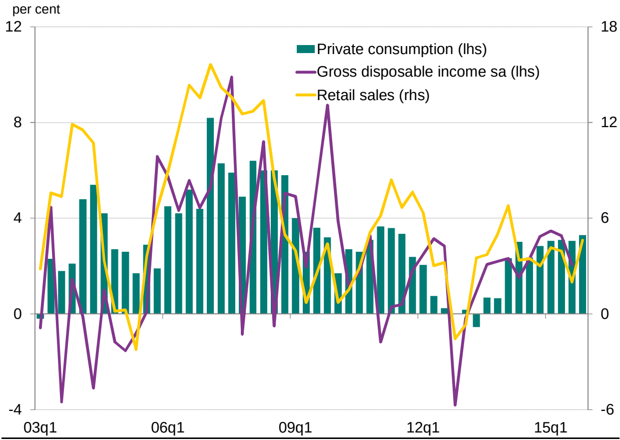
2.2.2 Investment

Investment growth in the economy remains moderate. In 2015 H2, the pace of investment decreased compared to the first half year. This was mainly due to a decline in local governments' investment related to lower co-financing of the EU projects (Figure 2.8).

Corporate investment continues to be the primary driver of the overall investment growth. Although the pace of corporate investment slowed down somewhat in 2015 H2, it remained above the long-term average. The rise in corporate gross fixed capital formation can be attributed to firms' expectations of increasing demand for their output, as well as high capacity utilisation (Figure 2.9). Moreover, investment activity in the enterprise sector has been supported by firms' sound financial performance – which enables them to finance projects with their own funds – coupled with high availability and low interest rates on loans. These factors should continue to fuel investment growth into the subsequent quarters. Nonetheless, at the beginning of this year, the pace of corporate investment may decelerate slightly – probably only temporarily – due to heightened uncertainty about global economic outlook.[3]

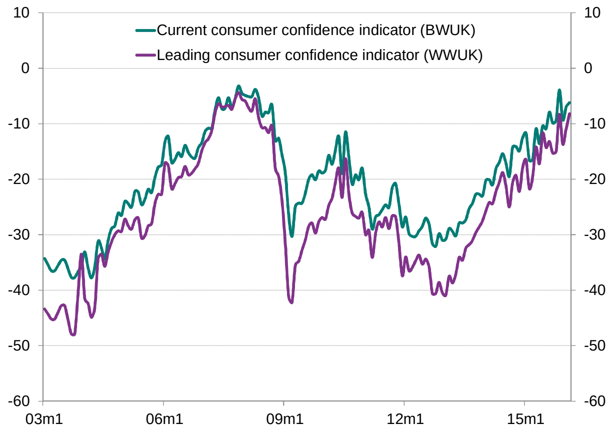
Housing investment, whose growth picked up in 2015 H2, also continues to make a significant contribution to overall investment growth. The recovery in housing investment is driven by steady rises in employment and real wages, increasing both households' capacity to finance home purchases with their own funds and the affordability of mortgage lending. Additional factors improving affordability of mortgages include lower interest rates on these loans compared to previous years and the extension, from September 2015, of the government scheme

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



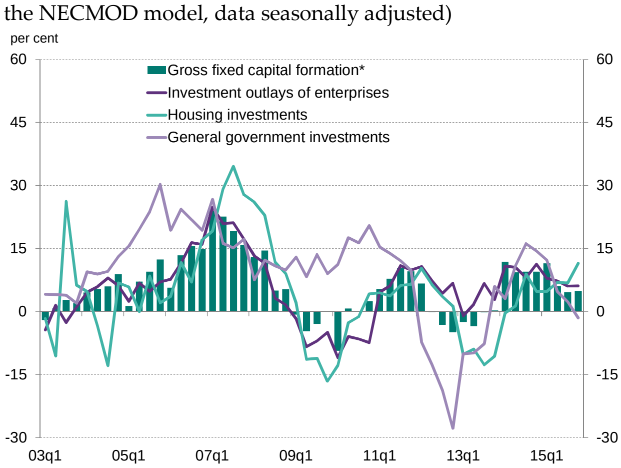
Source: GUS data, NBP calculations.

Figure 2.7 Consumer confidence indicators



Source: GUS data.

Figure 2.8 Investment in the economy (y/y, NBP estimates for the NECMOD model, data seasonally adjusted)



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

[3] *NBP Quick Monitoring Survey. Economic climate in the enterprise sector in 2015 Q4 and the forecast for 2016 Q1*, NBP, January 2016.

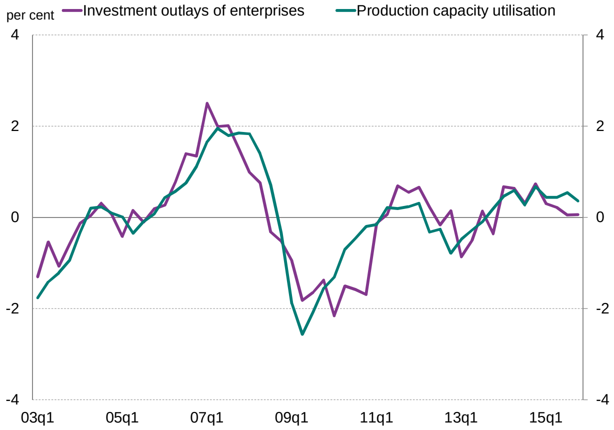
"Flat for the Young".[4] At the same time, home sales are being boosted by relatively high return on housing investment, significantly exceeding those on long-term government bonds and time deposits in commercial banks.[5]

2.2.3 Public finance

In 2015, performance of the general government sector continued to improve. Like in 2014, a reduction in the sector deficit was primarily due to higher revenue from social insurance contributions, following changes in the retirement system[6], and a decline in debt servicing costs. The deficit narrowing was also supported by relatively slow growth in the expenditure of the general government sector, related to – among others – continued wage freeze of the central government sub-sector employees and teachers, as well as a fall in capital expenditure of local governments due to the wind-up of the 2007-2013 EU financial framework. As a consequence, taking into account a decrease in the price level, real expenditure growth was close to potential GDP growth, which means that there was no fiscal tightening on the expenditure side. Since, at the same time, the restrictiveness of fiscal policy on the income side did not change, its overall impact on aggregate demand in 2015 was close to neutral.[7]

In 2016, fiscal policy will probably have a positive impact on aggregate demand. Economic activity will be stimulated mainly by a rise in social expenditure related to the planned introduction of a new child benefit (under the "Family 500+"

Figure 2.9 Investment outlays of enterprises and production capacity utilisation*



Source: GUS data, NBP calculations.

*Deviations of annual investment and production capacity utilisation growth from long-term averages (divided by standard deviations)

[4] In September 2015, the amendment to the *Act on State Aid in the Purchase of a First Home for Young People* came into effect, resulting, among others, in the extension of the "Flat for the Young" scheme to include the purchases in secondary home market.

[5] *Information on home prices and the situation in the residential and commercial real estate market in Poland in 2015 Q3*, NBP, December 2015.

[6] Higher budget revenue from social insurance contributions was due to limitations in transfer of contributions to the Open Pension Funds (OFE), as of July 2014. At present, the OFEs receive solely the contributions of those members who submitted applications for further transferring them to OFE's account (approx. 18% of members).

[7] The improvement in the financial position of the entire general government sector in 2015 occurred despite substantial widening in central budget deficit (from PLN 29 bn in 2014 to below PLN 44 bn in 2015). The deterioration in the central budget balance resulted primarily from one-off expenditure (settlement of the purchase of the F-16 multi-purpose aircrafts) and an increase in the subsidies to other sub-sectors (Social Insurance Fund, FUS), i.e. factors which do not affect the general government balance (in ESA-2010 terms).

programme). The increase is, however, to be partially offset by the imposition of new taxes – on certain financial institutions and on retailers.[8] Alongside that, growth in both current expenditure of the general government units and public investment expenditure will remain moderate, in line with the 2016 Budget Act.[9]

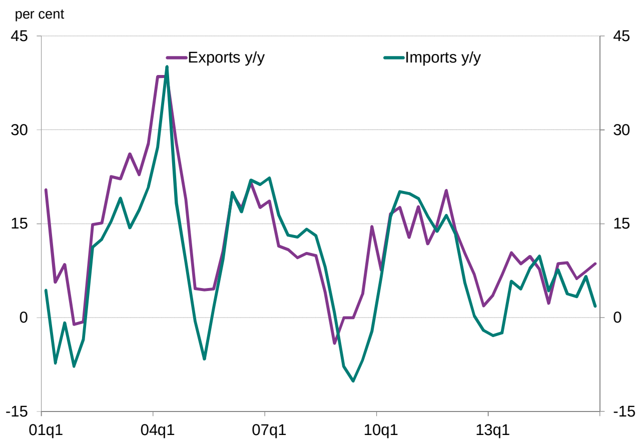
2.2.4 External trade

Foreign trade turnover is growing at a moderate rate, with export growth picking up slightly in 2015 H2, while import growth – after a temporary increase in 2015 Q3 – weakened in 2015 Q4 (Figure 2.10).[10]

Poland's export growth increased in 2015 H2 despite a concurrent fall in the value of global trade.[11] A factor strengthening the resilience of Polish exports to the fall in the value of world trade is the significant share of consumer goods. As a result, export sales to the euro area – due to the ongoing economic recovery in this economy based mainly on consumer demand growth – continued to rise and were the main source of Polish export growth (Figure 2.11).[12] At the same time, weakening in international trade contained the growth of Polish exports of other goods to euro area countries and the remaining EU countries, particularly affecting goods produced under global supply chains.

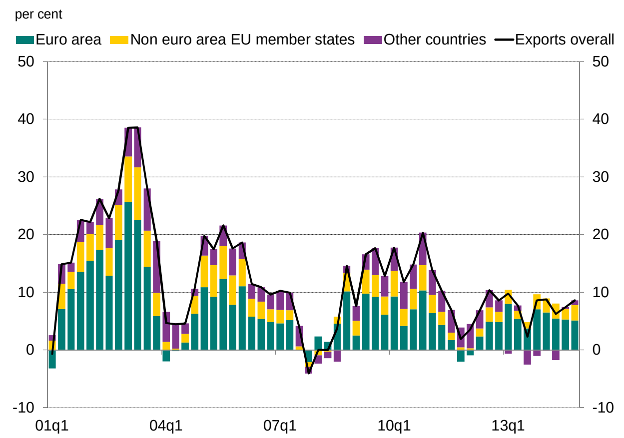
Moreover, the rise in exports in 2015 H2 was supported by the depreciation of the zloty against

Figure 2.10 Polish exports and imports growth



Source: GUS data.

Figure 2.11 Polish export growth by destination



Source: GUS data, NBP calculations.

[8] According to the 2016 Budget Act, expenditure under the *Family 500+* programme will amount to approx. 0.9% of GDP, while revenue from the new taxes will amount to approx. 0.4% of GDP.
[9] The deficit of the general government sector in 2016 should remain under 3% of GDP, which will be supported by, among others, one-off budget revenue from the sale of telecommunication frequencies.
[10] The growth in trade in services continued at a relatively rapid pace in 2015 H2. According to NBP data, the annual growth of exports of services was 8.9% in 2015 H2 (on the basis of data for 2015 Q3 and monthly data from October - December) compared to 8.6% in 2015 Q2, while growth of imports of services in 2015 H2 was 5.7% y/y (compared to 5.9% y/y in 2015 Q2). In this chapter data on services is not widely discussed as there is no detailed breakdown of the data that would allow geographical decomposition or decomposition by groups of goods. The more detailed GUS data only cover trade in goods, which is analysed in this chapter.
[11] In 2015 H2, the growth in the volume of world trade slowed down to 2.1% y/y compared to 2.4% y/y in 2015 Q2, while prices in international trade fell by 13.8% y/y compared to a fall of 14.0% y/y (on the basis of CPB Netherlands Bureau for Economic Policy Analysis).
[12] In 2015 H2, the growth of Polish exports was also driven by a slight rise – after a year of declines – in sales to countries outside the EU. The increase in export growth to this group of countries was partly a result of the increase in export growth to countries of the former Soviet Union, which was due to the statistical base effect associated with the fall in these exports in 2014 H2.

the currencies of many Poland's trade partners, including against the euro (Figure 2.12), which contributed to maintenance of high profitability of Polish exports (Figure 2.13).[13] At the same time, the share of export revenues in total revenues of exporters has remained stable for a long time, which may suggest that prices have limited effect on the volume of foreign sales of Polish enterprises.

The depreciation of the zloty was also conducive to higher prices of imported products, which amid stable economic growth in Poland and accelerating exports triggered a rise in the value of imports in 2015 H2.[14] At the same time, the growth in the value of imports was limited by falling prices of many commodities in global markets.

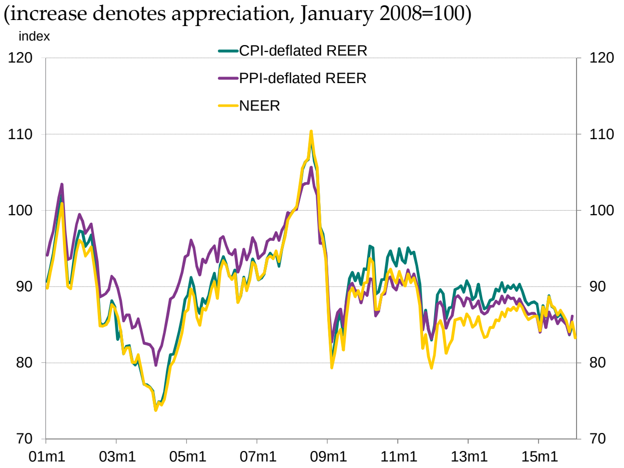
2.2.5 Output

Decomposition of the GDP growth by sectors of the economy indicates that the main driver of economic growth is rising activity in both industry and services, while the contribution from construction sector remains low (Figure 2.14).

Industrial output data confirm a further growth in activity in industry – visible in the national accounts data – including its acceleration in 2015 Q4.[15] At the same time, the steadily increasing orders and business sentiment indicators may signal that the moderate output growth will continue into the coming quarters (Figure 2.15).

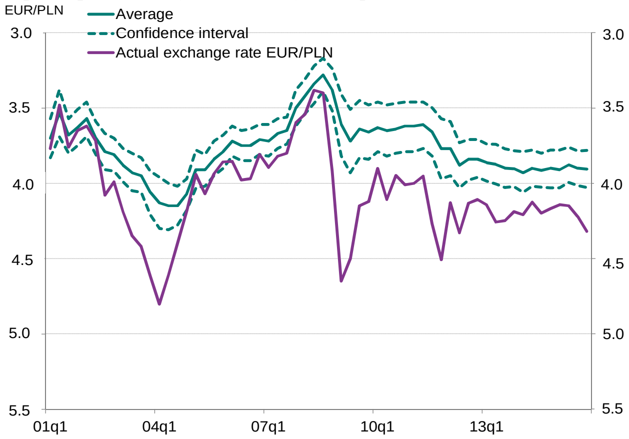
The increased activity in services is largely fuelled by a rise in retail sales turnover in 2015 H1, which was driven mainly by a further improvement in labour market conditions, supporting growth in household consumption. These factors should also

Figure 2.12 Zloty real and nominal effective exchange rate (increase denotes appreciation, January 2008=100)



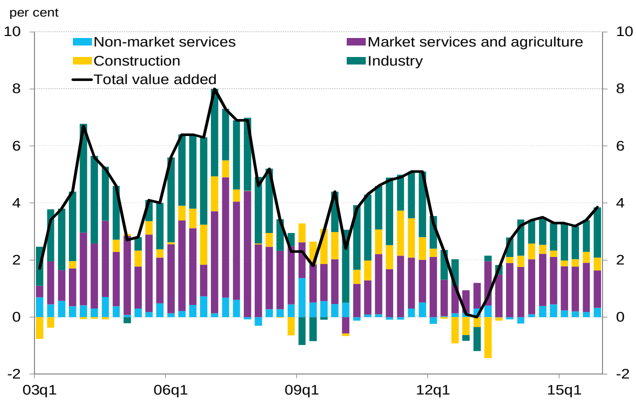
Source: NBP, European Commission data, NBP calculations.

Figure 2.13 Average threshold exchange rate (EUR/PLN) of exports profitability declared by enterprises



Source: NBP data and calculations.

Figure 2.14 Sector contribution to gross value added y/y growth



Source: GUS data, NBP calculations.

[13] The high profitability of Polish exports is indicated by the low share of companies declaring their exports to be unprofitable and the high share of export revenues in total revenues of exporters. *NBP Quick Monitoring Survey. Economic climate in the enterprise sector in 2015 Q4 and forecasts for 2016 Q1*, NBP, January 2016.
[14] The positive influence of the depreciation of the zloty on the value of imports is due to the limited possibility to substitute the imported goods with domestic goods in the short term.
[15] In January 2016, industrial output growth slowed down (to 1.4% y/y from 6.8% y/y in December 2015), which was due to seasonal and one-off factors.

contribute towards the maintenance of good economic conditions in services at the beginning of 2016. A further improvement in corporate sentiment in this sector is also indicative of the continued rise in the sector's activity.

In turn, the negative growth of construction and assembly output as well as orders in this sector point that business climate in construction will most likely remain unfavourable, despite relatively good conditions in part of this sector, i.e. housing construction (Figure 2.16).

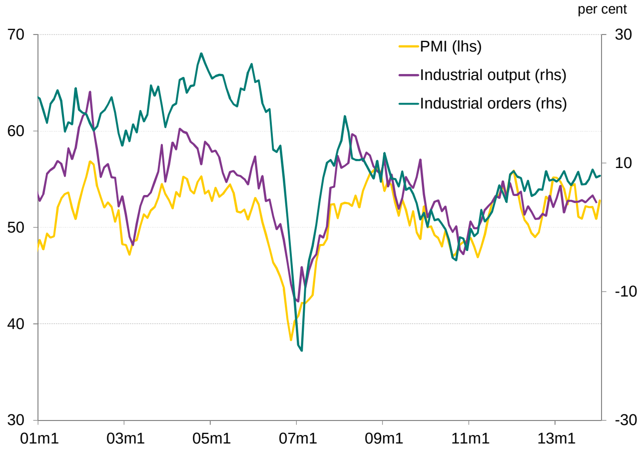
2.3 Financial situation in the enterprise sector

Despite deflation persisting for several quarters, the financial and liquidity positions of the enterprise sector are sound in the latest data release (i.e. data covering 2015 Q3). The percentage of profitable companies remains high, while the percentage of companies with high profitability is growing (Table 2.2).

Although the gross financial result of the enterprise sector in 2015 Q3 clearly declined, this was mainly due to one-off factors affecting only individual companies and does not indicate a deterioration in the situation of the whole sector (Figure 2.17).

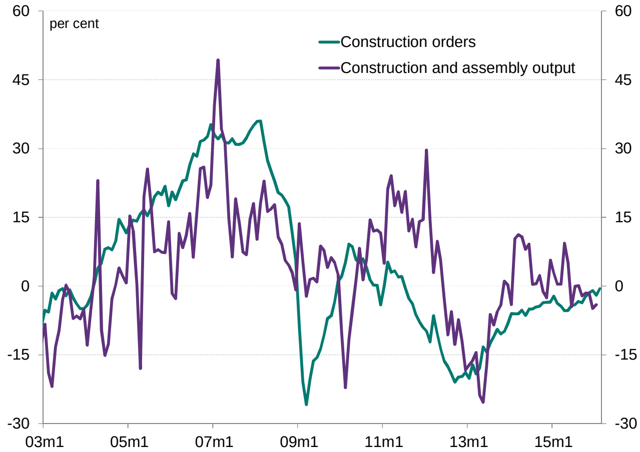
Corporate profits from sales declined due to a significant increase in sales costs resulting from the depreciation allowance made by one of the power companies.[16] Yet after eliminating the impact of this factor, corporate profits from sales improved compared to the corresponding period of the previous year.[17] This improvement was supported by an increase in domestic and foreign demand amid falling commodity prices and moderate wage growth.

Figure 2.15 PMI and annual growth of sold production of industry and of industrial orders



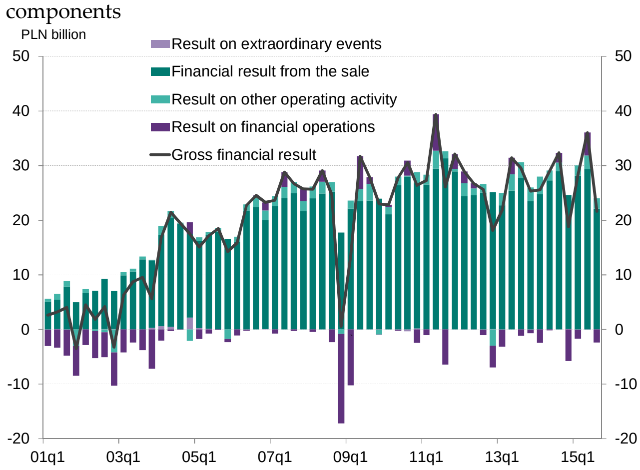
Source: GUS, Markit data (seasonally adjusted), NBP calculations.

Figure 2.16 Annual growth of construction and assembly output and construction orders



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

Figure 2.17 Gross financial result of enterprises and its components



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

[16] The company recorded a fall in the value of fixed assets, which was shown as a depreciation allowance and included in sales costs.
[17] After eliminating the effect of increased depreciation costs, corporate profits from sales increased in 2015 Q3 by 6.8% y/y.

At the same time, the enterprise sector recorded a loss on other activities (i.e. financial and other operational activities). However, the deterioration of this result was largely driven by a fall in dividend income in one enterprise.[18]

Table 2.2 Selected financial efficiency ratios in the enterprise sector

	2011	2012	2013	2014 q1	2014 q2	2014 q3	2014 q4	2015 q1	2015 q2	2015 q3
Period average data (per cent)										
Sales profitability ratio	5.3	4.3	4.3	4.5	4.7	4.8	3.9	4.9	4.9	3.6
Net turnover profitability ratio	4.5	3.4	3.8	3.8	4.1	4.5	2.4	3.9	5.0	2.9
Percentage of profitable enterprises (sa)	70.8	69.7	72.6	75.6	75.0	74.9	74.7	76.6	76.1	75.9
Percentage of highly profitable enterprises (sa)*	31.4	29.7	32.7	34.7	35.3	35.5	35.0	36.2	36.4	37.0
End of period data										
Liquidity ratio of the first degree	0.38	0.34	0.35	0.34	0.35	0.36	0.39	0.38	0.36	0.37

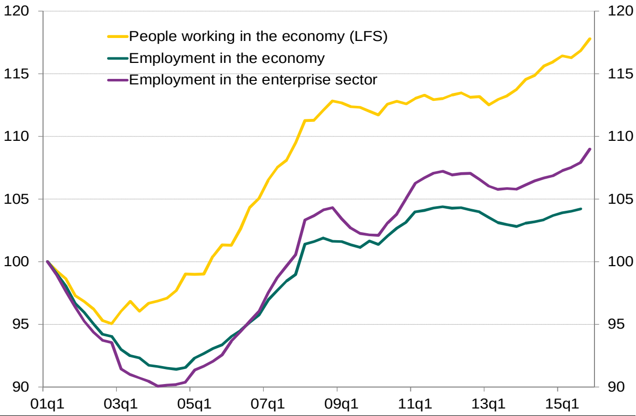
Source: GUS data.

*/Companies with high profitability are defined as companies with a net turnover profitability ratio exceeding 5%.

2.4 Labour market

Labour market conditions continue to improve. For the last few quarters, employment in the economy has been rising, to reach a record high (Figure 2.18). The present moderate rise in employment amidst steeply increasing demand for labour – as reflected in the fast growth in the number of job offers – could mean that for employers it became more and more difficult to find appropriate employees. While this problem is indicated by an increasing number of firms, the share of businesses pointing it out as a barrier to their growth remains low.[19]

Figure 2.18 Employment growth in the economy (2007 Q1=100)



Source: GUS data, NBP calculations.

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

The expanding number of employees in the economy translates into a further decline in unemployment rate, which is approaching the level observed at the end of 2008 (Figure 2.19).[20] According to the LFS data, the 2015 Q4 fall in the unemployment rate occurred despite a rise in economic activity of people in the pre-retirement age.

The relatively low unemployment, combined with high demand for labour, help to further strengthen the bargaining position of employees and jobseekers in wage negotiations. Despite this, the NBP survey points to still relatively weak wage pressure on the part of employees. This pressure may be mitigated by sustained decline in consumer

[18] The fall in dividend income in this company was a statistical base effect driven by a significant increase in its dividend income in 2014 Q3, when the shares received from a related company were posted as dividend.

[19] *NBP Quick Monitoring Survey. Economic climate in the enterprise sector in 2015 Q4 and forecasts for 2016 Q1*, NBP, January 2016.

[20] The seasonally adjusted unemployment rate, according to the Labour Force Survey, fell to 7.5% in 2015 Q3 from 7.6% in the previous quarter. Labour office data also point to a decrease in the seasonally adjusted unemployment rate in 2015 Q3 and Q4, from 10.6% in June to 9.7% in December.

prices, which increases disposable income in real terms. At the same time, employers' willingness to raise wages also remains low, which can be attributed to sustained PPI deflation reducing the profitability of some firms. As a result, nominal wage growth in the economy – including the corporate sector – remains moderate (Figure 2.20).[21] Over much of the previous year, flat nominal wage growth was accompanied by a rise in productivity growth in the economy. Consequently, unit labour cost growth has been relatively low, curbing the cost pressure generated by the labour market (Figure 2.21).

However, the NBP surveys signal a possible acceleration in wage growth in the coming quarters. This is in particular indicated by the rising share of firms which have registered mounting wage pressure and of those planning pay rises.[22]

2.5 Asset markets

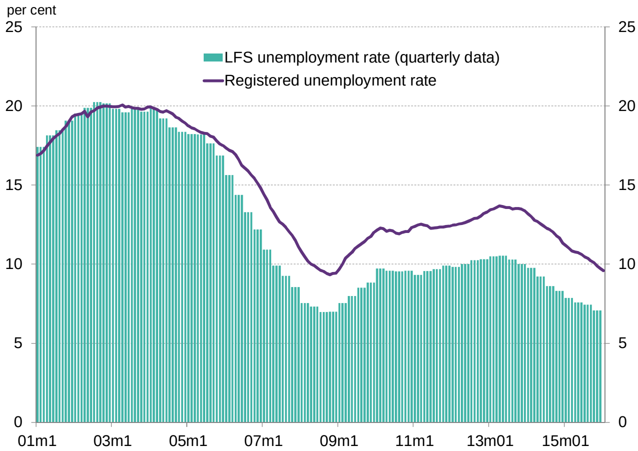
Asset prices are influenced by both domestic factors – such as the monetary policy of the NBP – and external ones.

The Monetary Policy Council has been keeping the NBP interest rates unchanged since March 2015. Market participants' expectations regarding future decisions of the NBP have varied in recent months. Currently, they point to the possibility of interest rate cut in 2016 (Figure 2.22).

2.5.1 Financial market

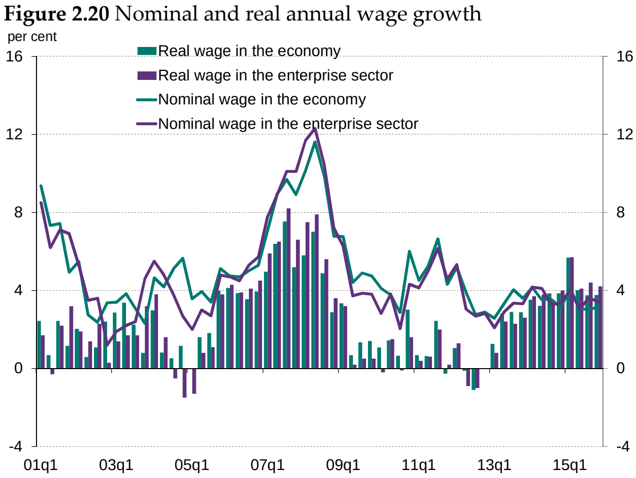
Over the recent months, uncertainty has increased in the international financial markets (see Chapter 1.5 *International financial markets*), contributing to deterioration in investors' sentiment towards the emerging markets, including Poland. In effect, the valuation of Polish financial assets has decreased.

Figure 2.19 Unemployment rates in Poland



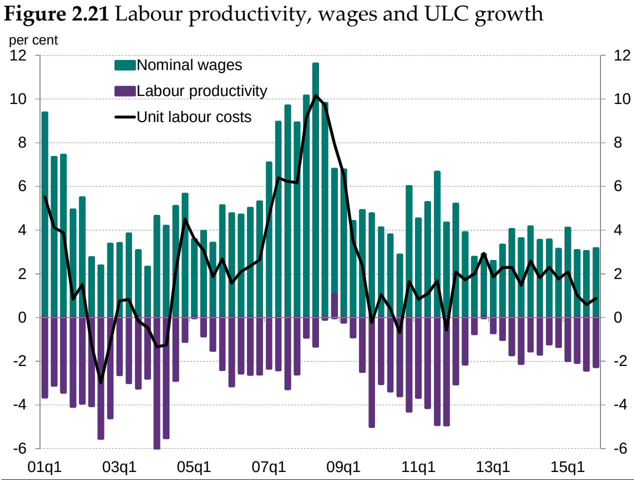
Source: GUS data (seasonally adjusted).
There are two reasons for the differences between the registered unemployment rate and the LFS unemployment rate: (1) the definition of an unemployed person is different, (2) the definition of population to which the number of unemployed persons is referred is different.

Figure 2.20 Nominal and real annual wage growth



Source: GUS data.

Figure 2.21 Labour productivity, wages and ULC growth



Source: GUS data, NBP calculations.

[21] Nominal wage growth, according to the Labour Force Survey, amounted to 3.1% y/y in 2015 H2, as compared with 3.1% y/y in 2015 Q2. In the corporate sector, these figures were 3.5% y/y and 3.0% y/y, respectively.
[22] *NBP Quick Monitoring Survey. Economic climate in the enterprise sector in 2015 Q4 and forecasts for 2016 Q1*, NBP, January 2016.

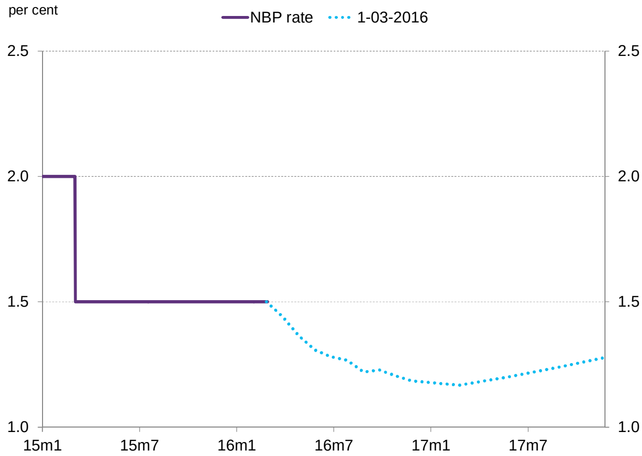
Apart from the negative impact of global factors, prices of Polish assets were also adversely affected by country-specific factors, including an unexpected downgrading of Poland's sovereign credit rating by a rating agency.

Under these conditions, yields on Polish government bonds have recently varied considerably (Figure 2.23). In particular, yields on bonds with long maturities have risen, as the term premium they include makes them relatively more vulnerable to changes in investors' risk perception (see Box 2: *Long-term interest rates in Poland and the term premium).*[23] At the same time, market measures of credit risk remain significantly lower than in countries with similar credit ratings. Currently, yields on short-term bonds are close to the NBP reference rate, while yields on long-term bonds are twice as high.

Deteriorating sentiment in the international financial markets has also led to further declines in share prices on the Warsaw Stock Exchange (see Chapter 1.5 *International financial markets*, Figure 2.24). In addition, a renewed drop in the prices of oil and other energy commodities in the international markets (see Chapter 1.3 *Global commodity markets*) added to the fall in the stock prices of the energy and extractive sectors. Share prices on the Warsaw Stock Exchange were also negatively affected by domestic factors, including the downgrading of Poland's credit rating and the introduction of the bank tax, as well as concerns about the impact of other possible regulatory changes in the banking sector on banks' performance.

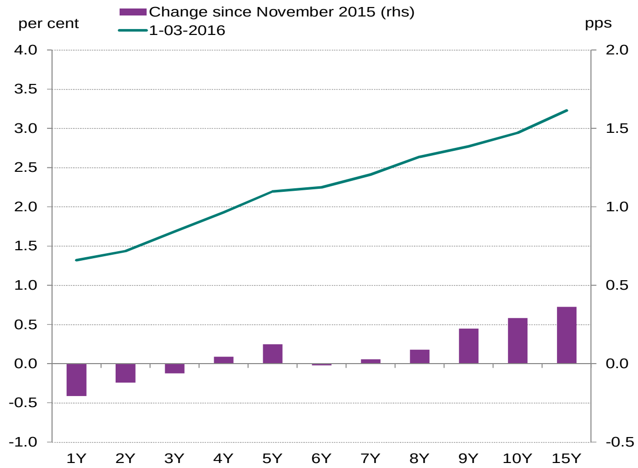
Global factors, including uncertainty about the economic outlook for China, have also triggered the weakening of the currencies of emerging economies, including – recently – the zloty (see

Figure 2.22 NBP reference rate and FRA-implied 3M interest rate



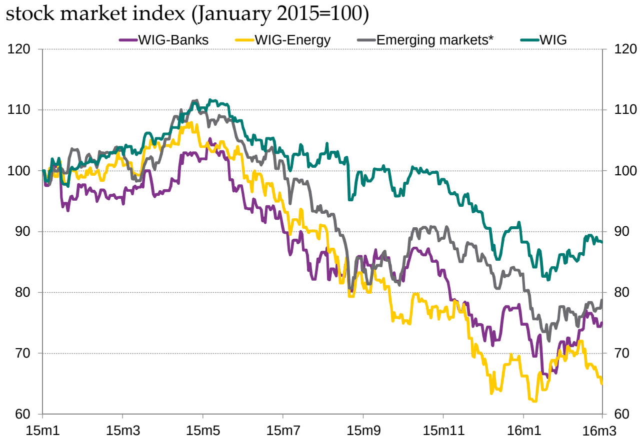
Source: NBP, Bloomberg data, NBP calculations.

Figure 2.23 Polish government bonds yield curve and its change since November 2015



Source: Bloomberg data.

Figure 2.24 WIG index, its subindices and emerging economies stock market index (January 2015=100)



Source: Bloomberg data.
*/ MSCI Emerging Market Index

[23] Deterioration of sentiment in the international financial markets – including the downgrade of Polish credit rating – contributed to a significant decrease in non-residents' holdings in the government bond market in Poland in January 2016. According to Ministry of Finance data, the non-residents' share in this market declined to 38.4% in January (compared to 40.3% in previous month).

Chapter 1.5 *International financial markets*, Figure 2.25). The depreciation of the zloty was driven by domestic factors as well. Consequently, the nominal effective exchange rate of the zloty has now fallen to its lowest level since 2012.

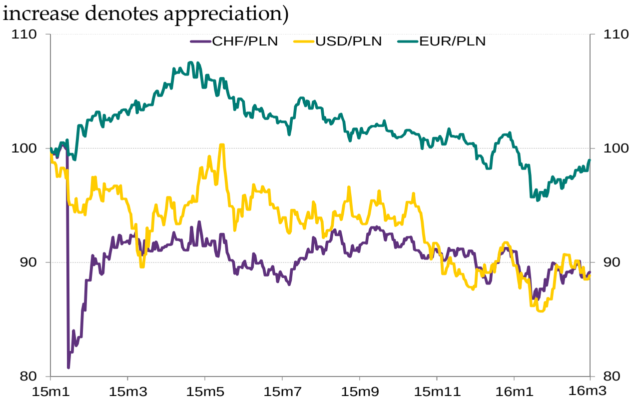
2.5.2 Residential real estate prices[24]

The housing market in Poland continues to recover, as reflected in further increase in the number of dwellings sold (Figure 2.27). Yet, no marked growth in residential real estate prices is accompanying this upward trend so far.

High housing demand is fuelled by continuously favourable labour market conditions (Chapter 2.4 *Labour market*). Together with lower interest rates on mortgage loans than in the previous years, and the extended government-subsidized programme "Flat for the Young" it improves affordability of mortgages.[25] Also the relatively high profitability of rental housing as compared to the interest rate level has a positive effect on residential property sales.[26]

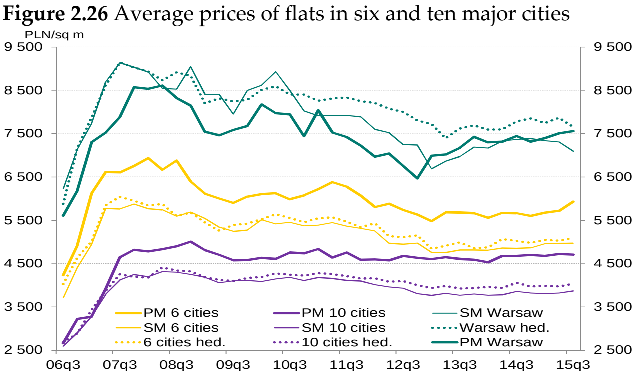
The rise in home sales in the primary market, amid persistently low construction costs, encourages real estate developers to launch new investment. This is reflected in the increasing number of homes under construction and building permits issued (Figure 2.27).[27] As a result, growing housing demand is accompanied by a rise in current and future housing supply, which has a stabilizing effect on house prices (Figure 2.26).[28] Therefore, prices of dwellings in most cities in Poland remain stable.[29]

Figure 2.25 Exchange rate of the Polish zloty (January 2015 = 100, increase denotes appreciation)



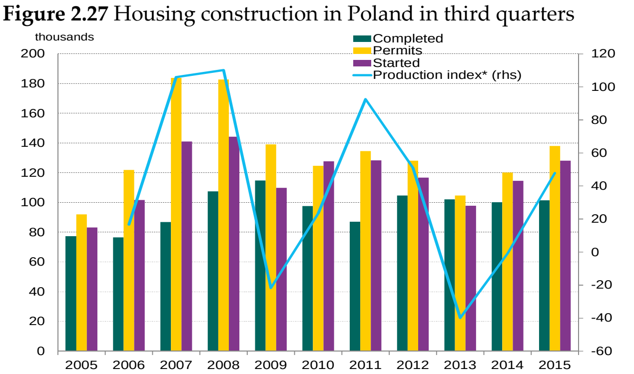
Source: Bloomberg data.

Figure 2.26 Average prices of flats in six and ten major cities



Source: NBP calculations based on the NBP survey

Figure 2.27 Housing construction in Poland in third quarters



Source: GUS data, NBP calculations.

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

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

[25] The Act of 25 June 2015 on the amendment to the Act on state aid in the purchase of a first home for young people came into force in September 2015 (Journal of Laws of 17.08.2015, item 1194). As a result, the government housing scheme "Flat for the Young" was extended to include secondary market housing.

[26] The profitability of home rental exceeds almost threefold the interest rate on 10-year Treasury 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 2015 Q3*, NBP, December 2015.

[27] In 2015 Q3 the number of building permits issued rose by 14.8% y/y, whereas the number of dwellings under construction picked up by 11.8% y/y.

[28] 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:

Box 2: Long-term interest rates in Poland and the term premium

Over the past few years, long-term interest rates in Poland have been more volatile than short-term ones. Moreover, long- and short-term interest rates have not always moved in the same direction. In particular, when NBP was lowering its policy rates at the beginning of 2013, yields on 10-year government bonds were rising substantially. Likewise, a 50 bp cut in the NBP reference rate in 2015 was followed by a 100 bp rise in the yield on 10-year Treasury bonds, amid its elevated volatility. In order to gain more insight into the factors responsible for the level and volatility of long-term interest rates, it is helpful to decompose such a rate into two elements: one which reflects average expected short-term interest rate and the other reflecting the term premium.

In accordance with economic theory, a long-term interest rate – such as the yield on a 10-year government bond – consists of the expected average short-term interest rate over the next 10 years and the term premium. The first of these elements captures the central bank interest rates together with investors' expectations about their future levels, i.e. about future monetary policy of the central bank under expected developments in the given economy and its external environment. The term premium, in turn, is the investors' reward for the risk they bear when investing in long-term bonds – in particular, the risk that the future short-term interest rates may differ from those currently expected. Amidst the present day's globalised financial markets, a term premium thus defined may be significantly affected by the conditions prevailing in those markets, as well as the monetary policy of major central banks.

The term premium is not directly observable. Therefore, it is usually estimated with econometric models that decompose the long-term interest rate into the average expected short-term interest rate and the term premium. In this Box, the method currently used by the Fed, the Bank of England and the IMF[30] is applied, and the historical data on Polish government bond yields in the years 2004-2016 is used. The resulting decomposition of long-term interest rates in Poland is presented in Figure B.2.1. It shows that changes in the term premium have significantly affected long-term interest rates in Poland. At the same time, the NBP reference rate has been closely correlated with short-term interest rate as expected by investors, and its 1 percentage point change has translated into a 0.3 percentage point change in the expected average short-term interest rate in a 10-year horizon. (Figure B.2.2).[31]

In 2004-2015, the term premium in Poland amounted to 94 bps on average, while the yield on 10-year US government bonds averaged 5.1%. In the period of fast economic growth between 2004 and 2008 (following Poland's accession to the European Union), the term premium was slightly higher than the average (120 bps) and in 2009-2011 it rose (to 150 bps) amidst mounting tension in financial markets related, primarily, to the sovereign debt crisis in the euro area. In the following years, the term premium dropped significantly and even turned negative in early 2015 (falling to -80 bps), which meant that government bond yields were lower than the expected average short-term interest rate. At the same time, changes in the term premium exerted a strong impact on the level and volatility of long-term interest rates. In particular, a 200 bp decline in yields in 2014 was spurred by a 67 bp decrease in the average expected short-term interest rate and a drop in the term premium double that size. Similarly, a rise in government bonds yields between October 2015 and January 2016 was almost entirely driven by an increase in the term premium.

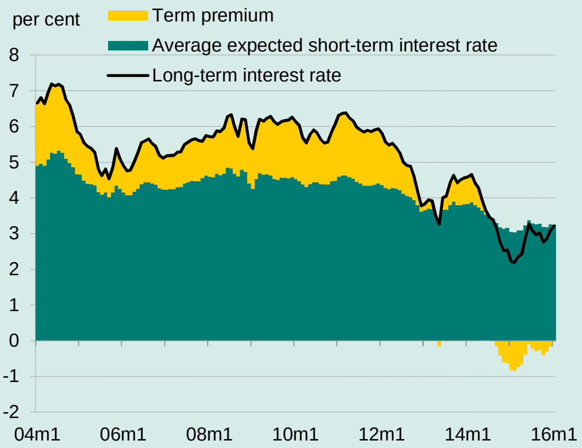
Gdańsk, Gdynia, Kraków, Łódź, Poznań and Wrocław, and the index for ten cities – Białystok, Bydgoszcz, Katowice, Kielce, Lublin, Olsztyn, Opole, Rzeszów, Szczecin, and Zielona Góra.

[29] The slight increase in transaction prices in the primary markets of Warsaw and the six largest cities in 2015 Q3 was the result of the sale of a bigger number of more expensive, mainly better located dwellings

[30] Adrian T., Crump R. K., Moench E., "Pricing the term structure with linear regressions", *Journal of Financial Economics* 110, 2013.

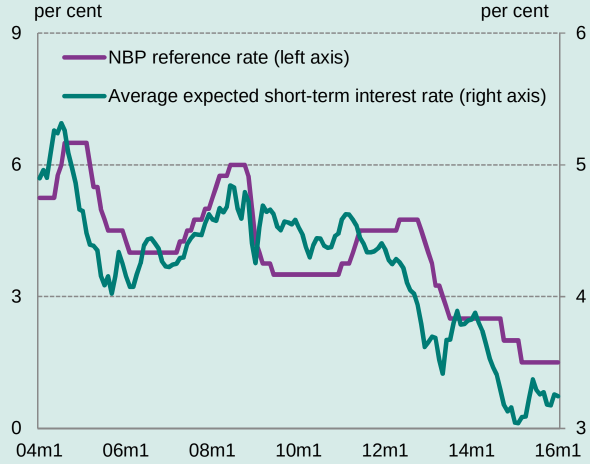
[31] The average future short-term interest rate is determined as the difference between the yield on 10-year government bond and a model-estimated term premium. Hence, it reflects the expectations and preferences of investors embedded in the market prices of government securities. For this reason, it should not be interpreted as the NBP forecast of the average future reference rate.

Figure B.2.1. Decomposition of the long-term interest rate in Poland (yields on 10-year government bonds) into average expected short-term interest rates and the term premium



Source: NBP calculations based on Bloomberg data.

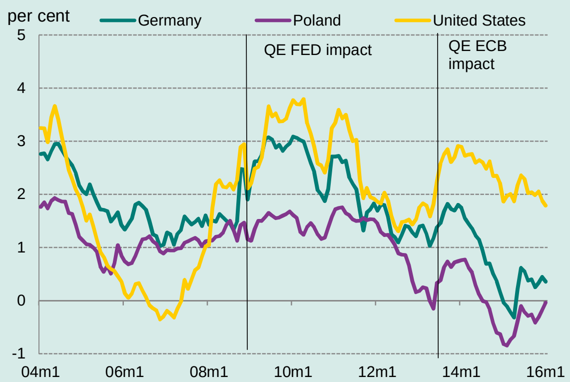
Figure B.2.2. Average expected short-term interest rate over a 10-year horizon (determined by the estimated model) and the NBP reference rate



Source: NBP calculations based on Bloomberg data.

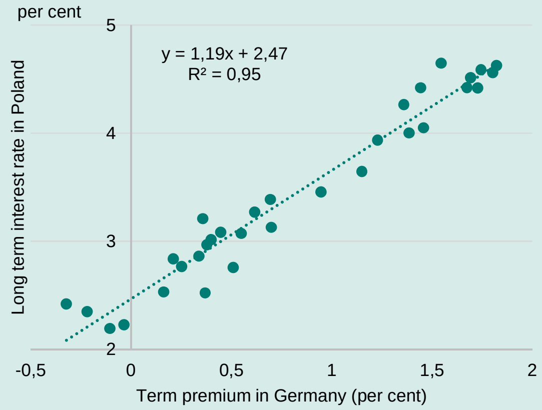
In recent years, the term premium has been mainly determined by global factors, including monetary conditions in the core markets, i.e. the euro area and the United States. This testifies to a significant co-movement between the term premia embedded in the Polish versus the corresponding German and US yields (Figure B.2.3.). At the same time, the strength of the relationship between the respective term premia (the term premium in Poland vs that in the United States and in Poland vs Germany) has been changing over time. This can be put down to the shifting monetary policy bias of the Fed and the ECB as well as the outlook for this bias.

Figure B.2.3 Term premium embedded in Polish, German, and US 10-year government bonds



Source: NBP calculations.

Figure B.2.4. Relationship between the term premium on German 10-year bonds and yields on Polish 10-year bonds between June 2013 and January 2016



Source: NBP calculations.

Initially, from mid-2009 to mid-2013, term premium movements in Poland and Germany were heavily influenced by changes in the term premium in the United States. At that time the Fed, having brought interest rates down to nearly zero, went ahead with the quantitative easing programme involving the purchase of debt securities. Meanwhile, the ECB launched only minor interventions in the government bond market, which did not have any substantial impact on bond prices or level of long-term interest rates.

The literature indicates that asset purchase programmes – supported by appropriate central bank communication – reduce the risk arising from interest rate volatility. As a result, they decrease the term premium factored in by investors in financial asset prices. In turn, integration of global financial markets and free flow of speculative capital facilitate the transmission of term premium across countries.

The strong impact of changes in the term premium embedded in yields on US government bonds on the term premia in other countries' bond markets has weakened since mid-2013. At that time, the Fed started signalling the end of the asset purchase programme and its intention to gradually increase policy rates. Concurrently, the significance of the ECB policy for the term premia in Poland increased, after the ECB announced its OMT programme in summer 2012, which was the predecessor of the ECB's QE, ultimately launched in early 2015. Under these conditions, term premia in the Polish government bond market became more dependent on the changes in term premia in the German market. Since mid-2013, the term premium in Germany has accounted for 95% of the volatility of long-term interest rates in Poland (Figure B.2.4).

To conclude, long-term interest rates are affected by expectations of market participants regarding the future path of short-term rates and the term premium, which is the investor's reward for the risk that the future short-term interest rates may differ from those currently expected. In Poland, the average expected interest rate has been falling steadily in recent years, while term premium fluctuations were the key drivers of periodic rises in long-term interest rates. The developments in the term premia, in turn, have been heavily influenced by the changing conditions in the US and – since 2013 – primarily in the European government bond market. As a consequence, apart from the impact of the NBP decisions, the long-term interest rates in Poland have been affected by the decisions of key central banks, including the ECB, and by investors' risk perception?

2.6 Lending and money supply

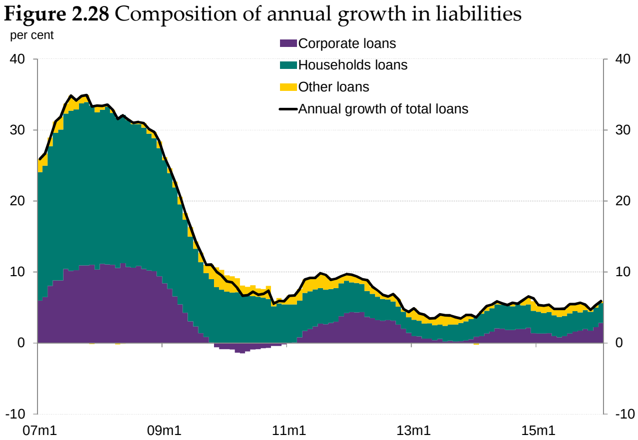
Lending activity continues to rise at a stable pace, supported by the sustained economic growth and favourable labour market conditions, amid lower interest rates on loans than in previous years (Figure 2.28, Figure 2.31).[32]

Total annual lending growth to the non-financial sector amounted to 5.1% in 2015 Q4 (compared with 5.6% in the previous quarter), and was close to nominal GDP growth.

Loans to households remain the main driver of total lending growth, with housing and consumer loans rising fairly evenly (Figure 2.29).

The overall annual growth in housing loans again slowed down slightly, to 2.6% y/y in 2015 Q4 (compared with 2.8% y/y in 2015 Q3 and 3.1% y/y in 2015 Q2), but this is to a large extent the effect of

Figure 2.28 Composition of annual growth in liabilities



Source: NBP data.

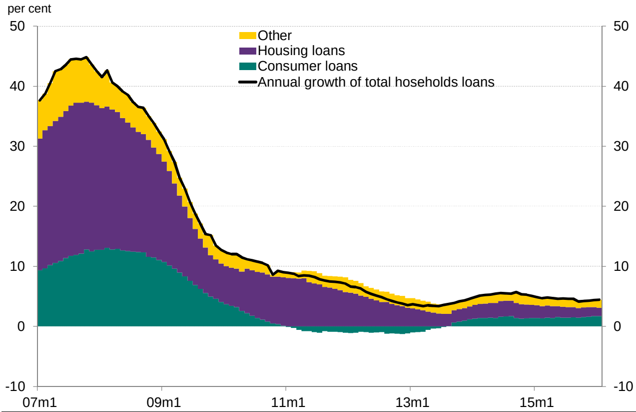
[32] In the present chapter, growth in lending to a given sector of the economy is defined as the growth in receivables of monetary financial institutions from this sector.

steadily declining stock of foreign currency housing loans. Their share in banks' portfolios is diminishing, which reduces risk related to this credit category. Alongside that, zloty-denominated housing loans are growing at a stable pace.[33] The number and overall value of the newly granted loans in 2015 were close to their 2012-2014 averages, despite the tightening of credit policy by banks, including the annual reduction in the maximum loan to property value ratio (Figure 2.29).[34] Stable rise in housing loans is underpinned by good labour market conditions, households' positive sentiment and lower interest charged on these loans than in previous years.

A material contribution to household lending growth is also made by consumer loans, whose stock has been increasing steadily since mid-2014 (with growth rate amounting to 6.9% y/y in 2015 Q4). Yet, according to the Credit Information Bureau (BIK) data, the rise in the stock of loans is not accompanied by higher number of loans granted. This means that the share of higher-value loans in banks' portfolios is increasing, while that of lower-value loans is falling.[35]

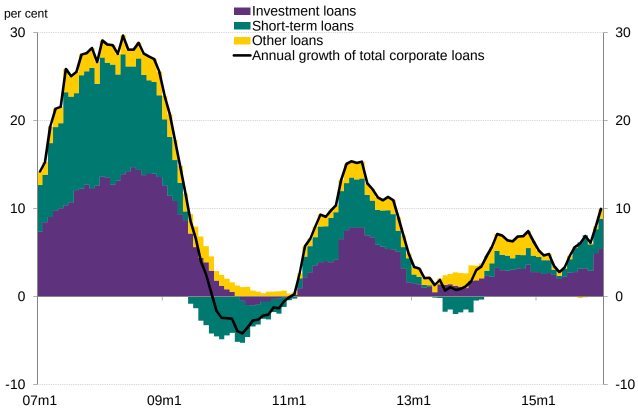
In the corporate sector, lending picked up again, fuelled by the accelerated pace of growth in both short-term and investment loans (Figure 2.30). Lending to this segment is supported by solid financial performance of the corporate sector, amid lower interest rates than in previous years, as well as the government's Portfolio Guarantee Line *de minimis*[36] and the new guarantees to micro, small and medium-sized enterprises available from November 2015 under the COSME programme.[37] However, despite a high affordability of loans, the rising debt in the corporate sector is accompanied

Figure 2.29 Composition of annual growth in loans to households



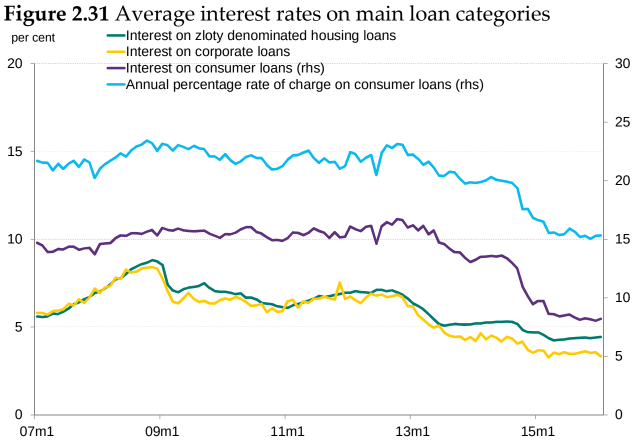
Source: NBP data.

Figure 2.30 Composition of annual growth in loans to companies



Source: NBP data.

Figure 2.31 Average interest rates on main loan categories



Source: NBP data.

[33] Annual growth of this credit category amounted to 10% in 2015 Q4, compared to 10.2% in 2015 Q3 and 10.7% in 2015 Q2.
[34] See: *AMRON-SARFiN 2/2015. Nationwide report on housing loans and property transaction prices*, Polish Bank Association, November 2015.
[35] See: *Kredyt trendy. Raport Biura Informacji Kredytowej*, BIK, September 2015. (available only in Polish)
[36] By the end of January 2016, within the framework of the programme banks had granted loans amounting to a total of PLN 46.5 bn, while the total volume of receivables from the corporate sector increased by PLN 51.2 bn.
[37] The COSME programme enables micro, small and medium-sized enterprises to obtain a guarantee of the BGK bank as a collateral for short-term or investment loans. Further details on this subject can be found on the site (available only in Polish): https://www.bgk.pl/przedsiebiorstwa/poreczenia-i-gwarancje/gwarancja-bgk-z-regwarancja-efi-w-ramach-programu-cosme-plg-cosme/.

by a decreasing share of companies seeking credit.[38] Thus, the accelerated lending growth might have reflected larger amounts of newly incurred loans than before.[39]

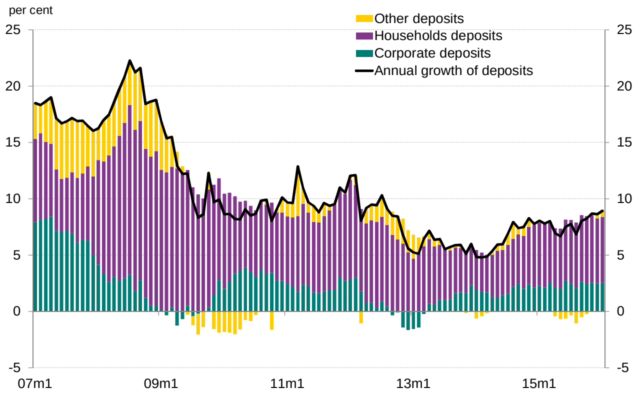
A significant source of uncertainty for lending activity growth in successive quarters is the changing regulatory environment in the banking sector.[40] Increased financial burdens imposed on the sector may encourage banks to raise the cost of credit in order to compensate for the adverse impact of additional burdens on their financial performance.[41]

The growth in lending is accompanied by stable rise of both household and corporate deposits, supported by sustained favourable conditions in these sectors (Figure 2.32). At the same time, amidst lower interest rates than in previous years – the structure of term deposits continues to change (Figure 2.33). A slowdown in term deposits is accompanied by a rise in current deposits and a stable growth in cash in circulation. In addition, sharp falls in share prices on the Warsaw Stock Exchange in recent months and increased volatility in financial markets encourage households to reduce their exposure to risky assets (see chapter. 2.5.1 *Financial markets*). Consequently, the proportion of shares in households' assets is steadily declining.

2.7 Balance of payments

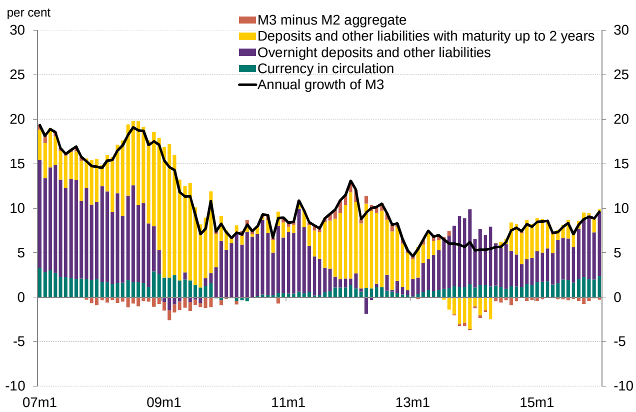
Sound developments observed in the balance of payments in recent years continue. After a temporary deterioration in the capital and current account balance in 2015 Q3, in 2015 Q4 it improved significantly and was close to zero.[42]

Figure 2.32 Composition of annual growth in bank deposits



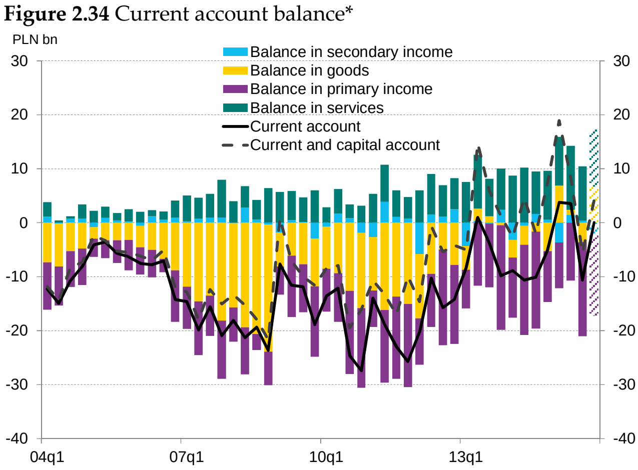
Source: NBP data.

Figure 2.33 Composition of annual growth in M3



Source: NBP data.

Figure 2.34 Current account balance*



Source: NBP data.

* 2015 Q4 was described on the basis of monthly data from October-December.

[38] In 2015 Q4, the percentage of firms seeking a loan was 18%. At the same time, merely 13% of the submitted loan applications were rejected, which proves a high availability of bank credit in the corporate sector. *NBP Quick Monitoring Survey. Economic climate in the enterprise sector in 2015 Q4 and the forecast for 2016 Q1*, NBP, January 2016.

[39] *NBP Quick Monitoring Survey. Economic climate in the enterprise sector in 2015 Q4 and the forecast for 2016 Q1*, NBP, January 2016.

[40] These changes include an introduction of a tax on certain financial institutions and the proposals to restructure foreign currency denominated housing loans and to liquidate bank enforcement title. See *Financial Stability Report*, NBP, February 2016

[41] See: Box 8 "The impact of introduction of a tax on assets on the situation of the banking sector" in: *Financial Stability Report*, NBP, February 2016.

[42] In this chapter, 2015 Q4 was described on the basis of monthly data from October-December.

The sharp changes in the current account balance in the last two quarters of 2015 were mainly due to fluctuations in the balance of trade in goods: temporary acceleration in import growth in 2015 Q3, accompanied by stable growth in exports throughout 2015 H2 (see chapter 2.2.5 *Exports and imports*). At the same time, a significant surplus in trade in services continues.

Export growth is supported by a still high price competitiveness of Polish products in foreign markets and the ongoing economic recovery in the euro area. Alongside that, Poland's good economic conditions continue to translate into high income of foreign direct investors, leading to a deficit in the primary income balance.

In 2015 H2, the capital account balance was positive, although markedly lower than in the corresponding period of the previous year. The narrowing of this balance was caused by a significant slowdown in the inflow of EU funds related to the wind-up of the 2007-2013 UE financial framework. The decline in transfers particularly affected the European Regional Development Fund.

There was a deficit in the combined capital and current account balance in 2015 H2, which led to an increase in Poland's net liabilities. They were boosted by a rise in liabilities to foreign direct investors in Poland, mainly related to the reinvestment of profits achieved in Poland. In addition, Polish foreign direct investment abroad declined. Yet the increase in foreign portfolio investments of Polish entities and the reduction in net liabilities of monetary financial institutions to foreign parties acted in opposite direction.

As a consequence of these developments, a four-quarter moving average of the capital and current account balance to GDP ratio declined slightly, although it continued positive (Table 2.3). At the same time, the majority of Poland's external

Table 2.3 Selected external stability indicators

	2010	2011	2012	2013	2014	2015			
						q1	q2	q3	q4
Current account balance/ GDP	-5.4	-5.2	-3.7	-1.3	-2.0	-1.3	-0.5	-0.5	-0.2
Current and capital account balance/ GDP	-3.6	-3.2	-1.5	1.0	0.4	1.7	1.9	1.7	1.5
Trade balance/GDP	-3.0	-3.5	-2.1	-0.1	-0.8	-0.2	0.1	-0.1	0.6
Official reserve assets (in monthly imports of goods and services)	5.5	5.7	5.5	5.2	5.3	5.5	5.8	5.6	5.4
Foreign debt/GDP	66	71	70	70	72	73	74	74	N/A
Net international investment position /GDP	-65	-62	-65	-69	-68	-67	-66	-65	N/A
Official reserve assets/foreign debt (up to 1Y) plus estimated CAB (per cent)**	76	80	100	85	108	99	100	98	N/A
Official reserve assets/foreign debt (up to 1Y) (per cent)**	98	93	106	94	111	104	108	108	N/A

Source: NBP, Ministry of Finance data.

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

imbalance indicators remained favourable, and the ratio of the current account balance to GDP is the highest since 1995.

3 Monetary policy in November 2015 – March 2016

At the meetings between November 2015 and March 2016 the Council kept the NBP interest rates unchanged at the following levels: reference rate 1.50%, lombard rate 2.50%, deposit rate 0.50%, rediscount rate 1.75%.

What follows in the next part of the chapter are the previously published *Minutes of the Monetary Policy Council decision-making meetings* held between November 2015 and February 2016 as well as the *Information from the meeting of the Monetary Policy Council* in March 2016. *Minutes of the Monetary Policy Council decision-making meeting* in March 2016 will be published on 17 March, and thus included in the next *Report*.

Minutes of the Monetary Policy Council decision-making meeting held on 4 November 2015

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.

When discussing economic activity abroad, the Council members underlined that the continued recovery in developed countries had been accompanied by a slowdown in GDP growth in the largest emerging economies, and even recession in some of them. They pointed out that in the United States – despite the sustained recovery – recent incoming data had been somewhat weaker. In this context, Council members highlighted the decline in GDP growth rate in 2015 Q3, slower improvement in the labour market, lower growth of industrial output and deterioration of business sentiment. However, it was judged that the slowdown in economic activity growth in the United States had been most likely temporary.

Council members underlined that in the euro area economic growth continued at a stable, although moderate, rate. Economic growth had been supported by improving consumer demand and growing exports, partly related to the previously observed weakening of the euro exchange rate. At the same time it was pointed out, that investment growth had remained low. Some Council members judged that economic activity in the euro area was supported by the expansionary monetary policy of the European Central Bank. However, certain Council members were of the opinion that the main factor behind the growth in demand in the euro area economy was the sharp fall in commodity prices, which increased real disposable income, while the impact of the ECB's monetary policy on the economic activity was negligible.

While discussing the economic outlook in the euro area, some Council members pointed out that the slowdown in growth in the emerging economies, including China and Russia, was a risk factor for the euro area economy. This slowdown had already translated into a fall in euro area exports to these economies. However, some Council members emphasised that in the recent period the risk of a sharp slowdown in economic growth in China had declined, which was indicated by the better than expected GDP data. Moreover, they pointed out that the economic slowdown observed so far in China had not had strong negative impact on economic activity in the euro area. Certain of these members also argued that – despite the slowdown – growth in China would remain markedly higher than in the developed economies, therefore it would not significantly limit GDP growth in the euro area. Moreover, certain Council members pointed out that the influx of immigrants could support economic activity through higher consumption and housing investment. Growth in the euro area could be also supported by investment financed by the European Fund for Strategic Investments.

Referring to monetary policy of the major central banks, Council members emphasised that uncertainty about its outlook persisted. It was pointed out that despite the somewhat worse data in the United States, the Federal Reserve announced interest rate hike in the coming months. On the other hand, the ECB was signalling further monetary policy easing due to the persistence of very low price growth in the euro area.

Council members emphasised that expectations of the ECB's monetary easing and better than expected data from China had contributed to an improvement in sentiment in the financial markets. However, some Council members judged that volatility in the financial markets could once again increase along with the beginning of Fed's monetary policy tightening, particularly in the context of continued risks to the economic situation in the emerging economies, including China.

Referring to the economic situation in Poland, Council members pointed out that economic activity continued to expand steadily and that domestic demand remained the main driver of growth. It was emphasised that the situation in the labour market further improved, and employment in enterprises – like the number of job vacancies – was relatively high. At the same time, the unemployment rate was close to the pre-crisis level. Moreover, some Council members pointed to the acceleration in wage growth in enterprises in the recent month. Council members underlined that the robust labour market and the increase in the wage fund supported stable consumption growth. However, some Council members judged that consumption growth remained relatively low, which could be due to the sustained increase in the household saving rate, observed despite the low nominal NBP interest rates.

When addressing the business conditions in Poland, Council members pointed to the stable growth in industrial output and the continued good situation of enterprises as indicated by business sentiment surveys. It was emphasised that these surveys suggested that despite the economic slowdown in China, Polish enterprises had not so far experienced considerable fall in sales. However, some Council members argued that despite the good economic situation, many enterprises were refraining from investments. They judged that this could be due to the continued uncertainty about the situation in the global economy or the lack of conviction as to the sustainability of the recovery in demand in Poland.

While analysing the situation on the credit market, Council members pointed to the stable growth in lending in the economy, with a slight deceleration in lending to households and an increase in corporate lending growth. Certain Council members stressed that corporate demand for credit remained low due to the significant share of companies' own funds in financing investments. It was also underlined that in the housing credit market there were no signs of growing imbalances.

While discussing inflation developments in the economy, Council members emphasised that consumer price growth remained negative. It was pointed out that in October price growth was once again lower than its forecast. However, it was judged that low price growth remained to be a global phenomenon and resulted mainly from the sharp fall in commodity prices in the global markets. At the same time, Council members emphasised that low price growth was accompanied by stable GDP growth and improving labour market conditions.

Certain Council members pointed out that the fall in prices – largely driven by low commodity prices – supported real incomes of consumers and limited production costs of enterprises.

While discussing the November projection, it was pointed out that the coming quarters were expected to see further stable GDP growth, supported by domestic demand. At the same time, it was emphasised that the contribution of net exports to growth would remain negative. Despite this, Council members pointed to the lack of significant risk to the external balance of the economy. Some Council members judged that – in line with the projection – GDP growth in 2016 could temporarily decrease. This fall, however, would be associated with a temporarily lower inflow of EU funds due to the beginning of absorption of funds from the new budgetary perspective. However, certain Council members emphasised that the GDP growth forecast for the coming years was slightly lower than in the previous projection, which partly resulted from a downward revision of forecast for corporate investments.

While analysing the results of the projection, Council members pointed out that due to stable GDP growth continuing above the potential rate, the output gap would gradually close. However, certain Council members expressed the view that so far observed and projected investment growth, would raise the potential output. As a result, growth of potential GDP could be faster than in the projection, which along with the forecast growth of actual GDP might not lead to the closure of the output gap in the projection horizon. At the same time, certain Council members emphasised that the lowering of the equilibrium unemployment rate would be a factor increasing the potential output of the economy and would simultaneously limit wage pressure in the economy.

While discussing the outlook for inflation in the context of the projection, Council members judged that in the coming quarters price growth would slowly increase. Price growth would be supported by stable growth in demand observed against the background of an improving economic situation in the euro area and the robust domestic labour market. At the same time, certain Council members pointed out that the period of deflation had prolonged, and the expected return of inflation to the target in the projection had receded. Certain Council members expressed the opinion that since they expected low commodity prices to persist in the global markets, and due to the limited growth of demand in the environment of the Polish economy, and therefore also in Poland, there was a risk of price growth continuing at a very low level for more prolonged period.

While referring to the projection, Council members pointed to the risk to the base scenario. The continued uncertainty about the global outlook, commodity prices and price growth in the environment of the Polish economy were emphasised. It was also stressed that due to the appointment of the new government, there was uncertainty about the future economic policy, particularly the shape of fiscal policy in the next year.

While discussing interest rates, the Council assessed that they should remain unchanged. While justifying this decision, Council members argued that in the coming quarters price growth would rise slowly, which would be driven by stable economic growth and the gradual closing of the output gap. Council members emphasised that prolonged deflation in Poland was mainly related to the factors beyond the reach of domestic monetary policy, among others, low commodity prices and low price growth abroad. Certain Council members also expressed the opinion that although GDP growth might remain below potential, the source of the negative output gap would continue to be external, and therefore it would remain beyond the influence of domestic monetary policy.

Some Council members argued that an additional factor in favour of a stabilisation of interest rates was the persisting uncertainty about the economic outlook abroad and the monetary policy of the main central banks, which could contribute to volatility in the financial markets, including volatility of exchange rates of the emerging economies. Some Council members also stressed the uncertainty about the shape of future economic policy, which should be taken into account in monetary policy decisions in order to ensure an optimal macroeconomic policy-mix.

Certain Council members were of the opinion that although interest rates should remain unchanged at the current meeting, in the coming months it could not be excluded that a slight lowering of the rates might be needed. While justifying this view, these members pointed to the risk of deflation persisting longer than expected which would shift the prospects of inflation returning to the target, and the risk of a slowdown in economic 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%, the rediscount rate at 1.75%.

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

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

When discussing economic activity abroad, Council members drew attention to the continued moderate recovery in developed countries. They underlined that consumer demand continued to be the main growth factor in the euro area. In turn, investment growth in this economy was still relatively low. It was pointed out that the pace of recovery was also hampered by the low demand in the emerging markets. This factor was most likely responsible for the slight drop in GDP growth in the euro area in 2015 Q3 and also the marked fall in German export growth. However, Council members judged that in the coming quarters the economic conditions in the euro area would probably continue to gradually improve. Growth in economic activity in this economy – in the opinion of the Council members – could additionally be supported by an increase in consumption and housing investment connected with the influx of immigrants. The possibility of a further slowdown in growth of the emerging economies remained a risk factor for the economic situation in the euro area.

In the United States the economic outlook remains moderately favourable. It was pointed out that the slowdown in GDP growth in 2015 Q3 resulted mainly from the drop in inventory and was probably temporary. However, it was underlined that the low growth in industrial output and retail sales suggested that the pick-up in GDP growth in the coming quarters might be moderate. Certain Council members were of the opinion that also in the long term economic growth in the United States might remain moderate due to the slow growth in productivity in the US economy. In this context, they underlined that in comparison with previous phases of the recovery, GDP growth in the United States is currently low.

Council members drew attention to the continued weak economic situation in the emerging economies. However, it was pointed out that in some of these economies there are signals of economic activity stabilising. In this context, attention was drawn to the reduction in scale of the GDP decline in Russia in 2015 Q3 and slower contraction in Russia's industrial output, as well as the slightly better PMI in China.

Certain Council members judged that the risk of severe shocks in the global economy remained, and that the likelihood of their materialisation is increased by the imbalances in many asset markets. In the opinion of these Council members, significant risk is posed by the possibility of financial crises in the emerging markets related to the considerable currency debts of these countries' enterprises. These Council members assessed that the occurrence of disturbances in the emerging markets - accompanied by relatively low GDP growth in the United States - could lead to deterioration in global economic conditions.

Referring to monetary policy of the major central banks, Council members emphasised that in the near future the divergence between the monetary policies of the Federal Reserve and the ECB would grow. The Federal Reserve announced the beginning of the cycle of interest rate hikes in the next months. In turn, the ECB signaled further easing of monetary policy. Council members emphasised that the divergence of monetary policy between the major central banks could lead to periodic increase in financial market volatility, particularly considering the continued uncertainty as to the scale and timeline of the Fed's interest rate hikes. Risk aversion in the financial markets could also increase in reaction to a renewed rise of fears about the economic situation of the emerging economies.

Certain Council members judged that global factors would strongly affect the asset prices and exchange rates of the emerging economies, including Poland. At the same time, it was underlined that the exchange rate of the zloty - despite a certain weakening in the recent period - remained relatively stable. In the opinion of some Council members, the volatility of the zloty is limited by the positive assessment of Poland by foreign investors, the effect of which is a significant share of long-term investors in structure of Poland's foreign debt.

While analysing the situation in Poland’s real economy, Council members pointed to the continued stable GDP growth, and even its’ slight acceleration in 2015 Q3. The main growth factor continued to be consumer demand, supported by growing employment and positive household sentiment. At the same time, in the view of some of the Council members, growth of consumer spending remained moderate due to the relatively low nominal wage growth and a higher rate of voluntary saving than earlier. It was pointed out that the growth in investment also contributed to GDP growth, although it had slowed down in 2015 Q3 -. Certain Council members judged that the investment slowdown in the economy could be connected with the lower absorption of EU funds. In turn, according to some Council members, the corporate propensity to invest could be reduced by the uncertainty regarding the economic situation abroad. It was pointed out that net exports also had a positive contribution to GDP growth in 2015 Q3. However, certain Council members underlined that growth of Poland's foreign trade had slowed down, while import growth had decelerated more than exports.

While discussing the situation in the labour market, Council members pointed out that the level of employment was high and that the unemployment rate was close to the pre-crisis level. Certain Council members emphasised that, despite the very favourable situation in the labour market, nominal wage growth in the economy remained relatively low. Other Council members also stressed that wage levels in Poland remained low compared to West European countries and pointed out that their growth required an increase in innovation and technological advancement of Polish production.

While analysing the situation on the credit market, Council members pointed to a certain pick-up in growth of corporate loans. Certain Council members judged that the growth of loans to enterprises was only modest, and in the case of SMEs, low. These Council members pointed out that the corporate loans to GDP ratio in Poland was considerably lower than in the euro area. However, some Council members underlined that currently the growth of corporate loans - amidst low interest rates and their high availability - was not restricted by supply factors. At the same time, certain Council members judged that an increased financial burden imposed on the banking sector could most likely adversely affect the credit supply in the future.

Referring to the outlook for economic growth, the majority of Council members believed that in the coming quarters GDP growth would remain relatively stable. Certain Council members even assessed that, provided GDP growth would not be weakened by external shocks, growth in 2016 could be higher than in 2015. The economic growth would continue to be supported by strong consumer demand and investment. However, it was pointed out that investment growth might slow down. The temporarily reduced inflow of EU funds in the initial phase of the new budget perspective would contribute to this process. In the opinion of certain Council members, corporate investment growth might be restricted by the relatively high level of investment outlays of enterprises in relation to fixed assets, and the moderate growth in demand, which did not create incentives to expand production capacity.

Council members judged that – besides domestic demand – rising exports would also boost economic activity in Poland. Certain Council members were of the opinion that in connection with the current economic recovery in the euro area, export growth would be higher than GDP growth. At the same time, it was pointed out that the weakening of foreign trade related to the further slowdown in emerging economies remained the main risk for domestic economic activity. Certain Council members also judged that possible financial crises in the emerging economies and resulting weakening of the global economy might be the source of negative shocks for the Polish economy.

While discussing inflation developments in Poland, Council members pointed out that the scale of consumer price deflation was gradually declining. Council members argued that in the coming quarters price growth would continue to rise, driven by further stable growth in economic activity and the robust domestic labour market. However, some Council members pointed out that the increase in price growth was slow and weaker than expected. Certain Council members highlighted that if wage growth did not pick up, the return of inflation to the target could lengthen. In this context, certain Council members pointed out that the announced unfreezing of wages in the public sector - in addition to the low unemployment - may contribute to a pickup in wage growth in 2016.

Council members discussed monetary policy conducted in the years 2010-2015. It was assessed that in this period the long-term stability of prices in Poland had been maintained, despite the increased volatility of price growth in certain years. It was pointed out that inflation volatility was mainly the effect of sharp changes in commodity prices in global markets. At the same time is was emphasised that monetary policy supported the stability of the zloty, which during the term of office of the Council was one of the least volatile currencies. It was also underlined that the flexible response of monetary policy to shocks contributed to the maintenance of balanced economic growth and financial stability. In this context, Council members pointed to, above all, the low volatility of the output gap, the current account surplus, and the maintenance of lending growth at a stable level.

While discussing interest rates, the Council assessed that they should remain unchanged. Council members argued that in the coming quarters price growth would pick up slowly, which would be driven by stable economic growth and the gradual closing of the output gap. Council members judged that in the light of available data and forecasts, the current level of interest rates is conducive to keeping the Polish economy on a sustainable growth path and sustaining macroeconomic balance.

Some Council members stressed that the persistence of uncertainty regarding the domestic and external developments also spoke in favour of interest rate stability. In this context, they pointed above all to the persistent risk of sharper weakening of growth in emerging economies and the expected growing divergence of monetary policies of the main central banks, which could contribute to an increase in volatility in financial markets. They also pointed to the uncertainty regarding the shape of future economic policy.

Certain Council members thought that the Council should consider interest rate increases in the nearest months. They argued that this would provide more room for monetary easing in the event of strong external shocks. These Council members argued that in the absence of interest rate hikes, monetary policy would become procyclical, contributing to a deterioration of the current account balance and an increase in Poland's foreign liabilities. The rising dependence of the Polish economy on foreign finance could, in turn, limit the possibility to conduct countercyclical monetary policy in the future, due to the concerns about a sharp change in the zloty exchange rate and flows of foreign capital.

However, certain Council members were of the opinion that although at the current meeting interest rates should remain unchanged, in the coming months – as the uncertainty about the determinants of monetary policy abates - it could be justified to lower them. These Council members pointed out that price growth was slow and inflation forecasts for the coming years were being revised downwards. These Council members also judged that a possible easing of monetary policy would contribute to a recovery of lending to enterprises which – particularly in the case of the SME sector – remained relatively weak. However, the easing of monetary policy could be pursued amid stable exchange rate. Other Council members argued that lowering interest rates would not contribute to acceleration of corporate lending – which was restricted by demand factors – yet it could have an adverse effect on the stability of the financial system.

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

Minutes of the Monetary Policy Council decision-making meeting held on 14 January 2016

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

When discussing the economic situation abroad, Council members pointed to the sustained recovery in the euro area and in the United States. At the same time, it was noted that euro area economic activity growth remained moderate, and price growth in this currency area was still close to zero. It was observed that economic conditions in the United States continued to be favourable, although GDP growth would probably rise only slightly this year. At the same time it was emphasised that given the steady output growth in this economy since 2010, core inflation was markedly higher than consumer price growth, and the unemployment rate was running relatively low. Council members highlighted, that under these circumstances, monetary policy stances of the ECB and the Federal Reserve diverged further. The Federal Reserve had raised policy interest rates after keeping them close to zero for seven years. In this context, some Council members expressed the opinion that any further tightening of monetary policy by the Federal Reserve would be only gradual and contingent upon the incoming information on the economic conditions. In contrast, the ECB had eased the monetary policy again by extending the period for its asset purchases and decreasing the deposit rate. However, the extent of the easing was smaller than expected by the financial markets.

While discussing economic conditions in emerging economies, Council members judged that these continued to be weak. Council members pointed to the continued recession and the persistently high inflation in Russia and Brazil. It was assessed that economic conditions in these countries were likely to deteriorate even further. While discussing the situation in China, Council members stressed that the recently released data had not been conclusive: while some of it had indicated stabilisation of economic activity growth, there had also been signs of an even deeper slump. Certain Council members held the view that economic growth in China might decelerate further, and high debt levels of economic agents in this country posed a risk of a sharp weakening of growth. Other Council members pointed out that China's economic policy would continue to aim for maintaining the stability of economic growth and financial system, which should mitigate the impact of any further weakening of the Chinese economy. Council members assessed that the economic outlook for China continued to be the main source of uncertainty for the global economy.

The Council also pointed to developments in commodity prices, including oil prices, as another major source of uncertainty about the global economic outlook. It was stressed that in the recent period the price of this commodity had plunged to a very low level, which would dampen global consumer price growth in the subsequent quarters. At the same time, it was underlined that amidst the mounting conflict between two major oil producers, i.e. Saudi Arabia and Iran, heightened uncertainty prevailed as to the expected output level, and hence also future prices of this commodity.

Council members emphasised the fact that sharp declines in oil prices, changes in the expectations about the future decisions of major central banks and continued concerns about economic activity in China had recently boosted asset price volatility in the financial markets. It was observed that some of these factors had increased investors risk aversion. This was reflected in declining asset prices and weakening currencies of emerging economies, including Poland.

While discussing the situation in Poland's real economy, Council members pointed to the continued stable economic activity growth. Retail sales data were judged to indicate sustained consumer demand expansion, at a rate close to that observed in the previous quarters. Consumption growth continues to be supported by rising employment and robust consumer sentiment. With regard to investment, it was observed that its growth was being fuelled by the high degree of capacity utilisation in companies amidst stable industrial output growth. At the same time, it was pointed out that firms' propensity to invest may be undermined by heightened uncertainty about the domestic and external environment of their activity. Certain Council members believed that consumption and investment growth remained merely moderate.

Council members pointed out that GDP growth in the following quarters would be supported by further decline in oil prices. At the same time, it was underlined that lower prices of this commodity would have an adverse impact on some businesses, especially mining sector companies and firms whose production was aimed at oil net exporting countries.

With reference to the situation in the labour market, sustained employment growth and declining unemployment were highlighted. Certain Council members observed that improving labour market conditions had not yet generated any tangible increase in nominal wage growth in the economy. At the same time, wage growth had recently accelerated somewhat in the corporate sector, and the share of firms planning pay rises had increased, which may signal a gradual rise in wage pressure in the economy, which - if it materialised - would support the return of consumer price growth towards the inflation target.

Council members discussed fiscal policy in the context of the 2016 Draft Budget Act. Most members judged that the fiscal policy as set out in the Draft Budget Act did not entail an increase in public finance imbalance in 2016. At the same time, members deemed that due to lags in monetary policy transmission, the shape of the 2017 fiscal policy was of key importance for the current interest rates decisions. In this context, it was pointed out that one-off revenues will make an important source of financing of the new budget expenditure in 2016. Thus, in order to keep the deficit at a moderate level in 2017, new, stable sources of budget revenue would have to be found. Some Council members assessed that the increased spending on social benefits – including the introduction of the Family 500+ programme – might stimulate consumption growth. Referring to the impact of the imposition of tax on financial institutions, these members expressed the view that it could lead to an increase in cost of obtaining credit and a slowdown in lending. With reference to the sales tax to be imposed on stores, Council members stated that in the absence of detailed information on this tax, it was difficult to evaluate its consequences; however, it could possibly add to price growth. Certain Council members expressed the opinion that the changes in fiscal policy may diminish the resilience of the Polish economy to external shocks, thus narrowing down the margin for a possible monetary policy easing.

When analysing the situation in the credit market, Council members pointed out that stable, moderate credit growth had been sustained. At the same time, some Council members underlined that lending growth in the following quarters might be hampered, on the one hand, by the lowering of the ceiling on the LtV ratio for mortgage loans, resulting from Recommendation S, and, on the other hand, by a possible rise in the borrowing cost after the imposition of the bank tax.

While discussing inflation developments in Poland, members of the Council indicated that the scale of consumer price deflation in December declined only slightly. Council members assessed that in the coming quarters CPI would continue to rise slowly, yet, due to a further fall in commodity prices, growth of consumer goods and services prices was likely to be significantly lower than previously estimated. It was pointed out that price growth would be supported by the closing of the output gap, amidst the recovery in the euro area and the robust domestic labour market. Council members also pointed out that the continued deflation did not yet have any adverse effect on decisions of economic agents. Some Council members expressed the opinion that it was necessary to closely monitor the impact of negative price growth on decisions of economic agents, in particular on financial situation of enterprises.

While discussing interest rates, the Council decided that they should be kept unchanged. It was assessed that the available data and forecasts suggested that the current level of interest rates helped to keep the Polish economy on a sustainable growth path and to maintain macroeconomic stability. It was argued that in the coming quarters price growth would slowly pick up. It was also noted that the likely slowdown in CPI growth as compared to the previous expectations was driven by declining oil prices in the global commodity markets, a factor beyond the influence of the domestic monetary policy. It was further noted that given the lags in the transmission mechanism of monetary policy, current decisions on interest rates would not affect price growth until the negative impact of declining energy commodity prices on inflation had already diminished. However, in the medium term CPI growth would be supported by steady growth in domestic economic activity. At the same time the rise in price growth may be driven up by the imposition of the sales tax on stores.

Some members of the Council emphasized that one of the arguments in favour of stabilization of interest rates was the continued uncertainty about the external and domestic determinants of monetary policy. It was also pointed out that this uncertainty was reflected in movements of the prices of Polish assets and the zloty. Certain Council members were of the opinion that in these conditions the decisions on interest rates should take into account their impact on the financial markets. Moreover, some Council members assessed that when deciding about the level of interest rates they should factor in their impact on the financial sector stability. In this context, those members pointed out that interest rate cuts could have a negative impact on the performance of the banking sector, a factor which could not be downplayed given the increased financial burden imposed on the sector.

Certain members of the Council were of the opinion that in the coming months it might be justified to consider interest rate hikes. They argued that this would leave more room for monetary policy response to severe external shocks. In contrast, other Council members were of the opinion that it might be justified to cut the interest rates in the coming months. Those members pointed to a merely modest – in their opinion – growth in domestic demand and a relatively high level of real interest rates, as well as forecasted low price 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 3 February 2016

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

When discussing economic activity abroad, it was highlighted that recovery in the euro area was progressing, supported by consumer demand growth fuelled by improving labour market conditions. However, certain Council members stressed that, despite economic recovery, GDP growth in the euro area remained relatively weak. Attention was drawn to recent economic developments in the United States, which remained favourable, notwithstanding a slowdown in the second half of 2015. At the same time, the Council members emphasized that economic conditions in emerging market economies were deteriorating. It was highlighted that GDP growth in China continued to slow down and underlined that it could decelerate further due to significant imbalances in China and limited scope to stimulate this economy. The Council members also pointed out that Brazil, Russia and Ukraine remained in a deep recession. Some Council members emphasised that deteriorating economic conditions in emerging market economies had already led to a decline in export growth of Germany, Poland's main trading partner, which could in turn result in weaker growth of Polish exports.

It was underlined that deteriorating economic conditions in emerging market economies could result in lower growth in other economies. In consequence, risk aversion in international financial markets has risen and global financial asset prices have fallen markedly. In this context, it was highlighted that many emerging market currencies, including the zloty, had also depreciated.

The Council members also noted that prices for crude oil and other commodities were still very low. It was assessed that low commodity prices were conducive to slower price growth worldwide. Certain Council members underlined that in some countries lower commodity prices were translating into larger purchasing power of households and higher consumer spending. At the same time, some Council members indicated that in commodity exporters, the fall in commodity prices resulted in decelerating economic growth, in some cases even in a recession. These Council members stressed that declining mining investment expenditures were one of the main reasons behind the economic slowdown in the United States in the second half of 2015.

Some Council members pointed to a recent rise in uncertainty regarding the world economic outlook, including not only the emerging market economies, but also the United States. Therefore, the Federal

Reserve indicated that interest rates in the US might be raised at a slower pace than previously expected. The ECB, in turn, pointed to a likely increase in monetary expansion in the coming months, as the inflation forecasts for the euro area had been revised downwards due to falling commodity prices. Some Council members judged that the more expansionary monetary policy outlook in the core economies might have contained the fall in Polish financial asset prices and the depreciation of the zloty.

While analysing the economic conditions in Poland, attention was drawn to preliminary estimate of national accounts for 2015 that pointed to an acceleration in GDP growth in 2015 Q4. It was underlined that domestic demand remained the main driver of economic growth. It was highlighted that investment and consumption growth had probably accelerated slightly in 2015 Q4 on the back of improving labour market conditions, envisaged by a further fall in unemployment rate, continued high employment and stable wage growth. The rise in demand is also supported by positive consumer sentiment, good financial standing of enterprises and their high capacity utilization. However, certain Council members noted that sentiment in industry had deteriorated somewhat of late, but stressed that it was not reflected in broader data on economic activity. Some Council members indicated that despite deteriorating conditions in the emerging market economies, Polish exports continued to grow and external trade balance remained positive.

Discussing the economic growth outlook, the majority of the Council members judged that it would most likely remain stable in the coming quarters. They highlighted that consumer demand growth in the near future could be supported by a likely further improvement in labour market conditions, the recent renewed fall in fuel prices and a rise in disposable income of some households resulting from family benefits (Family 500+ government programme, which is to be launched in the coming months). Moreover, certain Council members argued that the recent depreciation of the zloty could improve price competitiveness of Polish exports, leading to higher GDP growth. Some Council members also pointed to high capacity utilisation in the economy, which should support replacement investments of enterprises, particularly given ongoing high industrial production growth. Corporate investment growth will also be supported by good financial standing of enterprises. However, as highlighted by some Council members, the fall in commodity prices has an adverse effect on the profitability of the Polish energy industry. Certain Council members expressed concerns that rising risk in the environment of the Polish economy might prove a drag for economic growth in the coming quarters.

During a discussion on inflation developments in Poland, it was stressed that price growth remained negative. It was highlighted that price growth most likely would stay below zero for longer than previously expected. The main reasons for that are the fall in crude oil prices in the recent months and a reduction in energy tariffs on sale and distribution of gas and electricity for households effective from the beginning of 2016. It was underlined that price growth was also contained by the lack of inflation pressure resulting from a negative output gap as well as no wage pressure despite improving labour market conditions. Moreover, certain Council members were of the opinion that a Russian embargo on Polish food exports was also contributing to lower food prices in the domestic market.

Council members assessed that stable economic growth should support a gradual rise in core inflation, thus contributing to higher CPI growth. At the same time, some Council members pointed to upside risks to price growth in the coming months. Some of them pointed to a rise in probability that the output gap might close earlier than previously expected given a likely acceleration in consumption growth. In consequence, there is a risk that demand pressure might occur. These Council members also pointed to the risk that a positive output gap (which is a difference between the observed GDP and its estimate assuming no inflation pressure in the economy) and a further improvement in labour market conditions could result in an acceleration of growth in unit labour costs. Other Council members argued that following the introduction of family benefits, wage pressure could grow, since – given the improving labour market conditions and the persistent mismatches in this market – the bargaining position of lower-paid employees would increase. Certain Council members underlined that the recent depreciation of the zloty should contribute to higher import prices, which could translate into higher consumer price growth.

Referring to the interest rates, the Council decided that they should remain unchanged at the current meeting. The Council members indicated that lower than previously expected price growth in the coming months would be driven mainly by factors beyond the influence of domestic monetary policy. However, in the medium term, CPI growth would be supported by steady increase in domestic economic activity. The Council members confirmed their assessment that – given the available data and forecasts – the current level of interest rates helped to keep the Polish economy on a sustainable growth path and to maintain macroeconomic stability.

The majority of the Council members stressed that continued uncertainty regarding the external and domestic determinants of monetary policy was another argument in favour of stabilization of interest rates at the current meeting. The Council members expressed an opinion that in these conditions, decisions on the interest rates should take into account their potential impact on the financial markets. Moreover, some Council members assessed that when deciding about the level of the interest rates, they should factor in their impact on the financial sector stability. At the same time, in the opinion of certain Council members, there might be a room for further monetary policy easing after risk aversion in the international financial markets abates. In turn, certain Council members judged that in the coming months it might be justified to consider beginning of interest rate increases, since, in their view, inflation pressure could appear due to favourable labour market conditions and the risk of a significant acceleration in consumer demand growth.

The Council members also underlined that a more comprehensive assessment of the outlook for price developments and economic growth in the coming quarters would be possible after the Council gets acquainted with the March projection of inflation and GDP. Certain Council members indicated that the assessment of the impact of changes in fiscal policy on demand and prices in the economy should also be an important factor affecting monetary policy decisions.

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

Information from the meeting of the Monetary Policy Council held on 10-11 March 2016

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

Global economic growth remains moderate and the uncertainty about its outlook has recently increased. Economic recovery is under way in the euro area, yet driven mainly by consumer demand amid weak investment and export growth. In the United States, GDP growth slowed down in the second half of 2015, following several years of recovery, and there is a risk of further economic weakening. In turn, economic growth continues to decelerate in China, while Russia and Brazil remain in recession. Concerns that activity in the emerging market economies might weaken further and the threat that this might translate into lower activity in the advanced economies currently pose the greatest risk for global economic conditions.

Uncertainty about the global economy has affected financial market sentiment abroad, leading to a decline in the prices of many financial assets in recent months. Prices of oil and other commodities, including agricultural commodities, also remain low. In consequence, consumer price growth in many economies, including in the euro area, is close to zero, and inflation forecasts for the coming years are being revised down.

The European Central Bank lowered interest rates in March and increased the scale of quantitative easing. In the United States, despite an increase in interest rate in December and indications of a further increase in the coming quarters, uncertainty about the future direction of monetary policy has risen.

In Poland, stable economic growth continues and data for 2015 Q4 has even confirmed a slight acceleration in GDP growth. Domestic demand continues to be the key driver of GDP growth, supported by stable consumption growth and rising investment. The rise in demand is supported by favourable labour market conditions, positive consumer sentiment, sound financial standing of enterprises and their high capacity utilization, as well as lending growth.

As the output gap remains negative and nominal wage growth is only moderate, there is no inflationary pressure in the economy. Annual consumer price growth and producer price growth remain negative. Yet, the persistence of deflation results mainly from the strong fall in global energy commodity prices in recent quarters. Inflation expectations are still very low. The persisting deflation has not yet adversely affected decisions of economic agents.

The Council became acquainted with the projection of inflation and GDP prepared by the Economic Institute, which is one of the inputs to the Council's decisions on NBP interest rates. In line with the March projection based on the NECMOD model – prepared under the assumption of unchanged NBP interest rates and taking into account data available until 23 February 2016 (projection cut-off date) – there is a 50-percent probability that the annual price growth will be in the range of -0.9 – 0.2% in 2016 (against 0.4 – 1.8% in the November 2015 projection), 0.2 – 2.3% in 2017 (compared to 0.4 – 2.5%) and 0.4 – 2.8% in 2018. At the same time, the annual GDP growth – in line with this projection – will be with a 50-percent probability in the range of 3.0 – 4.5% in 2016 (against 2.3 – 4.3% in the November 2015 projection), 2.6 – 4.8% in 2017 (compared to 2.4 – 4.6%) and 2.1 – 4.4% in 2018.

In the Council's assessment, price growth will remain negative in the coming quarters due to the earlier strong fall in global commodity prices. At the same time, a gradual increase in core inflation is expected. It will be supported by stable economic growth, including an anticipated rise in consumer demand growth driven by rising employment, forecasted acceleration of wage growth and an increase in social benefits. This notwithstanding, the downside risks to the global economic conditions are a source of uncertainty for the domestic economy.

The Council continues to assess 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 2016.*

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[43], 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 2016 Q1 to 2018 Q4. The starting point for the projection is 2015 Q4.

The projection was prepared under the assumption of the constant NBP interest rates taking into account the data available until 23 February 2016.

[43] 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

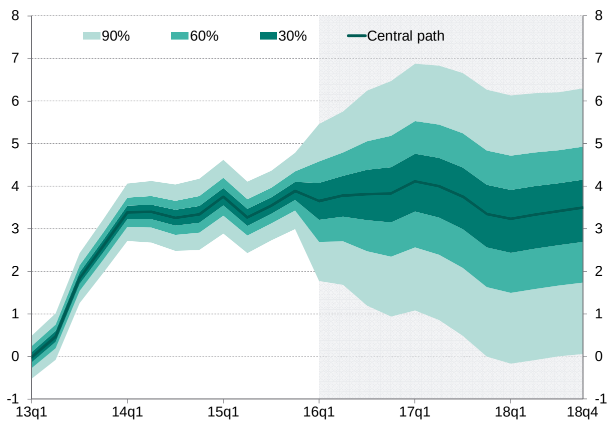
4.1 Summary

While the NBP Economic Institute projection presents developments in GDP growth and inflation which are the most likely scenario, it is necessary to keep in mind the rising risk of global economic growth slowing down in relation to the current consensus forecast. This eventuality is related to a further slowdown in China's growth and the risk of deterioration in business conditions in advanced economies. Should this scenario materialise, it might curb GDP growth in Poland and complicate the environment for fiscal policy conduct.

If the global economic conditions follow the path envisaged by the current consensus forecast, GDP growth will probably continue at relatively robust rates in the coming quarters, and inflationary pressures will remain very weak. The Central Statistical Office (GUS) data for 2015 Q4 point to accelerated GDP growth in that quarter, which reached the highest point since 2011. At the same time, recent information suggests a significantly higher risk of economy taking longer to exit deflation. Such scenarios of domestic economic growth and prices are underpinned – given the moderate extent of the global recovery – by low levels of energy commodity prices in the global markets, and especially by a further fall in crude oil quotations. While the impact of low oil prices on economic growth varies across countries, in the case of Poland, which is an oil-importing country, the decline in oil prices acts as a positive supply shock with a favourable impact on economic activity and a dampening effect on the level of prices.

The March projection shows that the 2016-17 GDP growth in Poland will continue at elevated rates. Apart from the gradually fading effect of low

Figure 4.1 GDP (y/y %)



Source: GUS data, NBP calculations.

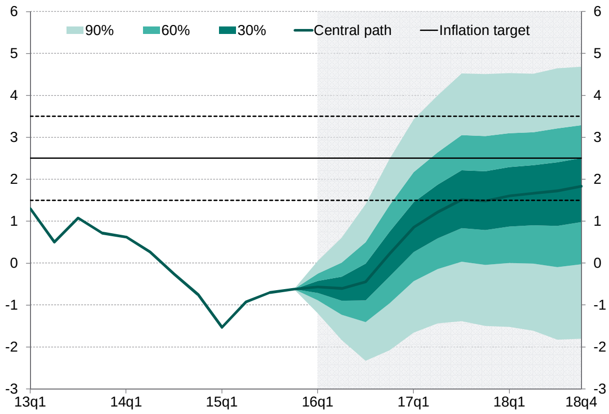
commodity prices, this will be driven by higher household consumption growth, related to the implementation of the "Family 500+" programme. Domestic economic growth will benefit from rising disposable income, related to increasing wages and low interest rates. On the other hand, domestic demand may be curbed by a likely rise in the cost of credit servicing due to the imposition of tax on some financial institutions, which will mitigate the impact of the above-listed factors. The impact of changes in the global economic environment on the future position of the Polish economy is ambiguous. On the one hand, a moderately-paced recovery is expected to continue in the euro area, on the other – there are mounting concerns about the sustainability of growth in emerging market economies.

Given the above, GDP growth in 2016-2018 will continue to be driven mainly by consumption, while gross fixed capital formation will expand more slowly as compared to the levels recorded in recent quarters.

Households' expenditure will be supported by a steady improvement in their financial situation, owing to the introduction of a new provision for childhood care and the continuation of the current positive trends in the labour market (further decline in the unemployment rate, accelerated wage growth). Consumer sentiment will also be boosted by low inflation enhancing households' purchasing power. As a result of the above factors, private consumption growth will exceed its long-term average in the projection horizon, reaching the highest levels in 2016-2017.

The relatively strong domestic demand growth in the projection horizon will also derive from higher investment spending in the enterprise sector, although the pace of growth in this category will slow down as compared to the rates seen in recent quarters. On the one hand,

Figure 4.2 CPI inflation (y/y, %)



Source: GUS data, NBP calculations.

investment will be fuelled by the currently high degree of capacity utilisation and expanding consumer demand related to increased family benefits. On the other hand, mounting uncertainty in the global financial markets, coupled with concerns about future levels of tax burden may cause enterprises to make more prudent decisions on new long-term investment projects. Corporate investment may also be hurt by the tax imposed on some financial institutions, effective from February 2016, which could boost the cost of banking services and cause a tightening of lending criteria.

The path of economic growth assumed in the projection will help to close the currently negative output gap at the beginning of 2017, and then to stabilise it at a positive – if close to zero – level. Such behaviour of the output gap shows that after several years of no demand pressure, economic conditions in the projection horizon may now contribute to higher inflation rate, although this influence will be relatively small.

The prolonged period of deflation in the Polish economy is – amidst the gradually closing output gap – primarily driven by supply-side factors: a slump in oil prices and high supply of agricultural products. These conditions are reflected in the persistently weak cost pressure in the economy, a decline in import prices and domestic producer prices (PPI), as well as moderately rising unit labour costs. Over the projection horizon, these phenomena will gradually fade away. Yet, the developments in the cost-side determinants of inflation show that consumer price growth will remain markedly below the NBP inflation target until the end of 2018. In particular, after the period of declines in agricultural and energy commodities prices in the global markets ends, early in the projection horizon, their rise in the following years will be slow. On the other hand, the persistently moderate growth in the global economy combined with the near-zero output gap will constrain the extent of growth of import prices and unit labour costs.

The uncertainty surrounding the current projection is mainly determined by different, than in the central scenario, macroeconomic developments in the external environment of the Polish economy. The possibility of a more pronounced slowdown in the emerging market economies, including, in particular, China, is the key risk factor. Furthermore, concerns are arising about the outlook for economic activity in the United States and other developed economies. The materialisation of these risk factors would significantly affect domestic economic conditions, especially if it dampened growth in the euro area economy, not only via the trade channel, but also through weaker consumer and business sentiment.

On the other hand, it cannot be excluded that the impact of asset purchases conducted by ECB and of the implementation of the European Commission's Investment Plan on the euro area economy will be stronger than currently expected. In this scenario, investment demand might support euro area economic growth in a greater measure than currently, which would speed up the entry of this economy into the recovery phase.

Another source of uncertainty for the projection is the future shape of fiscal policy. Should the government launch measures to curb budget deficit growth in 2017-2018, resulting, among others, from the implementation of the "Family 500+" programme, one can expect both an increase in taxation and cutbacks to spending. These changes would work towards higher consumer price growth and lower GDP growth than assumed in the baseline scenario.

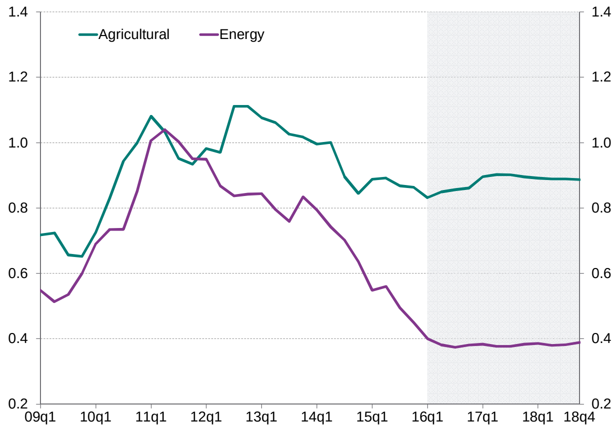
Given the impact of a potential materialisation of the above risk factors on the CPI inflation and GDP growth paths, the balance of risk for the first of these two variables is close to symmetrical, and for economic growth it's negative. This assessment is reflected in the relevant fan charts (Figure 4.1, Figure 4.2).

4.2 External environment

The main factor determining the shape of the current projection is low energy commodity prices, especially prices of crude oil, which are weighing on global inflation. The slump in commodity prices is observed amidst a stabilisation of economic growth in the external environment of the Polish economy at a level which is moderate in comparison with the pre-crisis levels.

The low level of oil prices is primarily underpinned by favourable supply conditions in the oil market, and, to a lesser extent, by the lower demand from emerging market economies. Developments in the supply-to-demand relationship are significantly affected by the policy of OPEC countries, which is geared to maintaining their share in global crude oil production at a constant level, and results in high production of this commodity in these countries. Another factor contributing to a further expansion in oil supply is the suspension of sanctions on oil exports from Iran. On the other hand, the slump in crude oil prices results in reduced oil production in non-OPEC countries. However, this process is gradual, as oil production projects launched while the prices of this commodity were high are continued. As a result, global crude oil reserves are at their historical highs, and will continue to grow in the nearest quarters – albeit at a slower pace than

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



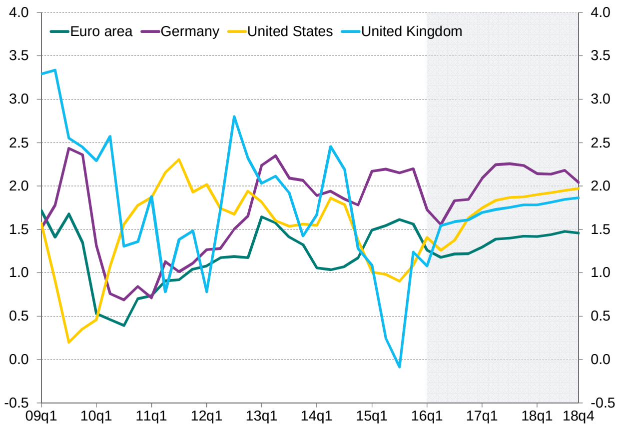
Source: Bloomberg data, NBP calculations.

recently. Low oil prices drag on the prices of the remaining energy commodities, which typically are substitutes in the production of energy. In effect, prices of global energy commodities will continue to persist at low levels – below those assumed in the previous forecasting round (Figure 4.3).

The prevailing supply conditions and the deteriorating economic activity in emerging market keep global prices of agricultural commodities relatively low, close to the levels assumed in the previous forecasting round (Figure 4.3). This is driven, in particular, by high crops of cereals, including wheat, which benefited from good weather conditions in most of the world's regions, and the persistently high supply of pork in the European market. High output of milk and the abolition of the quota mechanism for this product are keeping milk prices low. In 2017-2018, a moderate rise is expected in the prices of agricultural commodities from their current depressed level. This will be caused by the gradual matching of supply and demand in this market.

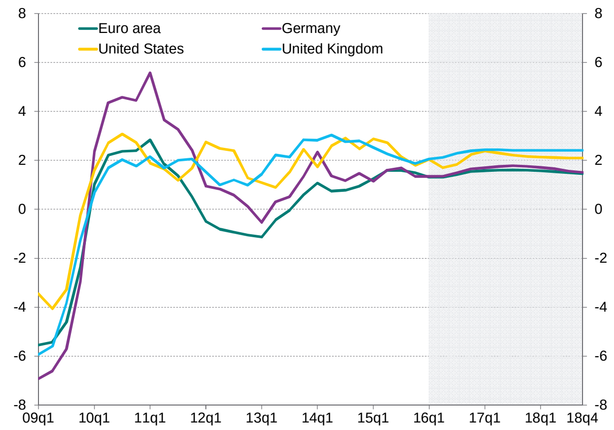
The projection scenario assumes that economic growth in the euro area will stabilise at moderate rates, close to those recorded in 2015 (Figure 4.5). Private consumption will remain the primary driver of growth in this economy. Factors conducive to expanding consumer demand include further improvement in the labour market, boosting consumer sentiment, and growth in consumer lending. Low inflation – in particular a low and relatively stable level of energy prices, which increases the purchasing power of households – should work in the same direction. Disposable income should also be boosted by this year's reduction in income taxes in some countries of the euro area. The persistently moderate investment growth is related to relatively low capacity utilisation,

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



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

Figure 4.5 GDP abroad (y/y, %)



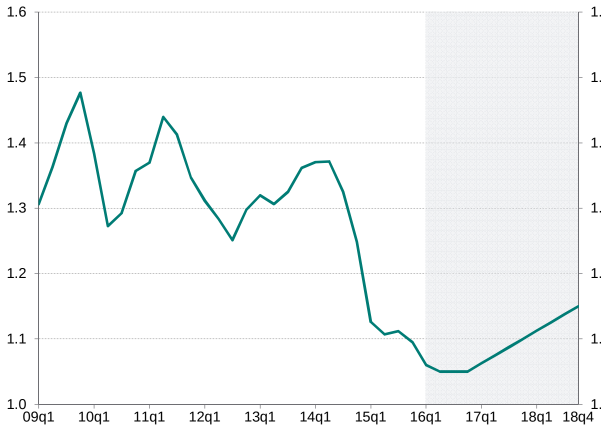
Source: Bloomberg, Eurostat data, NBP calculations.

continued deleveraging in the corporate sector and weak external demand. Yet, amidst rising consumer demand and improving corporate profitability, the gradual revival in investment will continue. Investment growth is supported by the ECB's accommodative monetary policy, involving, apart from the maintenance of low interest rates, the implementation of its asset purchase programme, facilitating enterprises' access to credit. The ECB's quantitative easing programme currently in operation is also supporting the euro area economic growth through the depreciation of the exchange rate, which enhances the price competitiveness of the euro area's exports. Lower bond yields as a result of the asset purchase programme also help reduce the cost of public debt service of the euro area countries (Figure 4.6). In addition, the relaxation of the provisions of the Stability and Growth Pact by the European Commission, providing for more "fiscal space" could lead to a rise in public investment growth.

Against the background of the expectations about the euro area economic growth, the outlook is more upbeat in the United States and the United Kingdom (Figure 4.5). Economic growth in these economies will continue, primarily on the back of private consumption, which will benefit from the currently positive trends in the labour market. In the United States employment growth, following a temporary slowing in 2015 Q3, has picked up again, and the unemployment rate has sunk to its seven-year low. Yet, employment growth entails weak labour productivity growth, which will have a constraining effect on economic growth in the United States, in the long-term.

Low energy commodity prices are curbing inflation in the economies being Poland's main trading partners (Figure 4.4). The drop in inflation is mediated by the direct impact of low commodity prices on the prices of energy charged

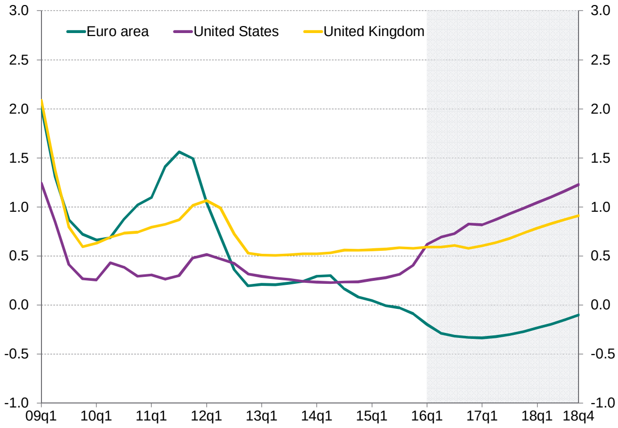
Figure 4.6 EUR/USD exchange rate



Source: Bloomberg data, NBP calculations.

to households. Lower energy commodity prices are also causing a drop in production costs, which translates into lower prices of the remaining components of the consumer goods and services basket. Yet, stronger economic conditions in the American economy and in the United Kingdom result in a higher inflation path in these countries than in the euro area. As a consequence, while in line with the expectations, further interest rate cuts are possible in the euro area. The United States embarked on a cycle of interest rate hikes in December 2015, and in the UK it is expected to start in 2017 (Figure 4.7).

Figure 4.7 Interest rate abroad (%)

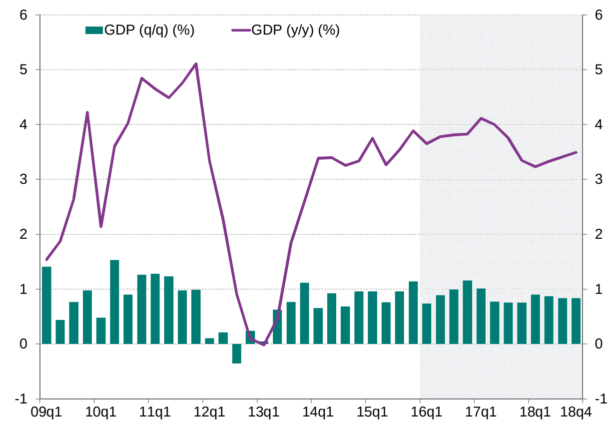


Source: Bloomberg data, NBP calculations.

4.3 Polish economy in 2016-2018

GDP growth in Poland will progress at an accelerated pace from 2016 Q2 to mid-2017, supported by expanding household consumption growth related to the introduction of the "Family 500+" programme. Later in the projection horizon, when the impact of this factor on the path of private consumption has waned, economic growth will drop back to 3.4% y/y, i.e. below its long-term average (Figure 4.8). Besides consumption, gross fixed capital formation will continue to act as a key driver of GDP growth over the projection horizon, amidst a negative contribution of net exports. Apart from the impact of higher social transfers, economic growth at home will be supported by an increase in disposable income related to rising wages, low commodity prices and the historically low interest rates. Domestic demand may on the other hand be stemmed by a likely increase in the cost of debt servicing due to the imposition of the tax on some financial institutions, which will mitigate the impact of the above-listed factors. The impact of the current and future global economic conditions on the performance of the Polish economy is

Figure 4.8 Economic growth



Source: GUS data, NBP calculations.

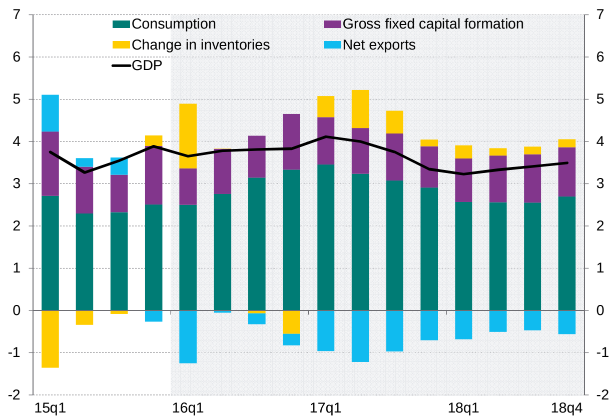
ambiguous. On the one hand, continued moderately-paced recovery is expected in the euro area, on the other – concerns are mounting about the sustainability of growth in emerging market economies.

The decline in consumer prices, dating back to 2014 Q3, will be halted in 2016 Q3; later in the projection horizon consumer prices are expected to rebound gradually (Figure 4.10). Yet, developments in cost-side determinants of inflation, as well as the degree of the forecasted increase in demand pressure point to consumer price growth remaining markedly below the NBP inflation target until the end of 2018. In particular, the reversal of the downward trend in the global prices of agricultural and energy commodities, early in the projection horizon, will give way to their merely weak growth in the subsequent years. The currently negative output gap will close gradually in the course of 2016, due to, among others, a fiscal impulse related to higher family benefits under the "Family 500+" programme. In the following years, the output gap will run at slightly above zero. Also, cost pressure will remain limited, which will be reflected in weak growth of unit labour cost and import prices, and an extended period of declines in the domestic producer prices (PPI).

Domestic demand

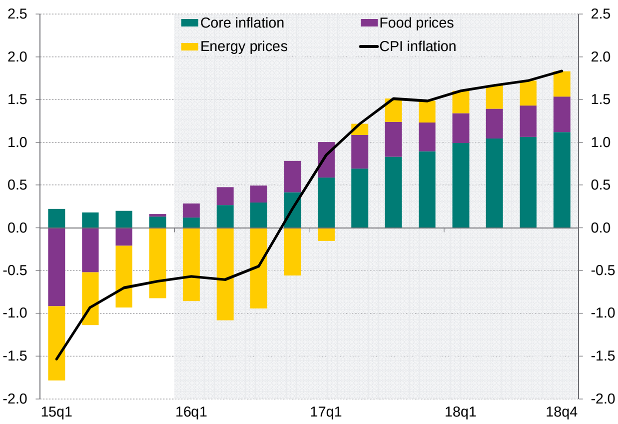
Throughout the projection horizon, private consumption growth (Figure 4.11) will be supported by the envisaged acceleration in wage growth and a decline in the unemployment rate. Higher family benefits resulting from the "Family 500+" programme will additionally boost disposable incomes as of 1 April 2016. Owing to the intertemporal consumption smoothing mechanism, these benefits will have a lagged upward effect on household spending. Driven by the above factors, private consumption growth

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



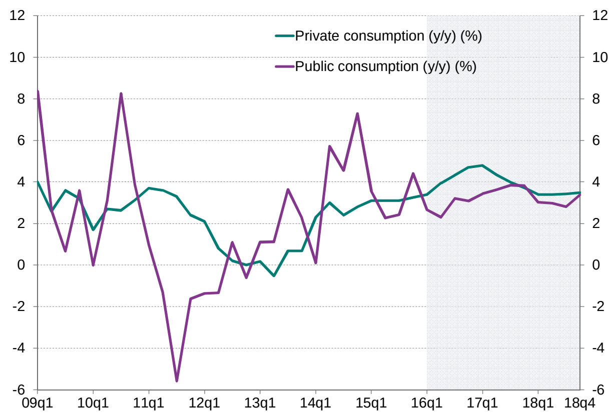
Source: GUS data, NBP calculations.

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



Source: GUS data, NBP calculations.

Figure 4.11 Private and public consumption



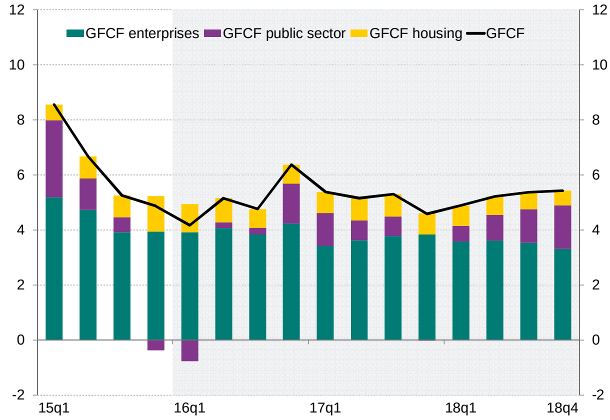
Source: GUS data, NBP calculations.

will probably hover above its long-term average in the projection horizon, exceeding it by the most in 2016-17, when the size of consumption will be materially affected by the heightened transfers. The increase in disposable income is expected to improve consumer sentiment further – GUS surveys reveal consumers' diminishing fears that unemployment might rise, and their upbeat assessments of their own future financial situation.[44] Thus, households may be more inclined to finance consumer expenditure with credit, a choice further facilitated by low interest rates, which favourably affect the cost of households' debt. At the same time, it is expected that the introduction of bank tax will have a relatively smaller impact on the availability of consumer loans – when compared with business and housing loans – due to the higher average interest they attract.

Corporate investment growth will slow down in 2016-2018 versus the pace seen in recent quarters. Yet it will continue to exceed GDP growth (Figure 4.12). This scenario is indicated by the high degree of capacity utilisation and the rising forecasts of demand voiced by the business community.[45] In the face of moderate economic growth abroad, the forecast of improved business conditions can be put down to the expected fiscal expansion, leading to a pick-up in domestic demand growth. On the other hand, firms report high uncertainty relating to the anticipated rise in taxes,[46] which may result in investment decisions being made – notwithstanding the rising demand – in a more conservative manner.

The current favourable climate for financing investment may deteriorate in the projection horizon. The introduction of tax on some financial institutions will result in higher prices of banking

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



Source: GUS data, NBP calculations.

[44] *Consumer sentiment survey – February 2016*, GUS.
[45] *Economic climate in the enterprise sector in 2015 Q4 and forecasts for 2016 Q1*, NBP.
[46] *Economic climate in the enterprise sector in 2015 Q4 and forecasts for 2016 Q1*, NBP.

services and stricter lending terms. Thus, the tax may hamper lending through an adverse effect on corporate investment. At the same time, nearly half of all investors are self-financing new projects,[47] which is facilitated by enterprises' sound financial performance.[48] In the projection horizon, enterprises are expected to further enjoy a favourable financial environment, supported by low energy commodity prices, which reduce their operating costs and allow them to maintain a relatively high profitability of operations despite the persistent deflation.

In the projection horizon, housing investment will be supported by good labour market conditions. They have a favourable effect on consumer sentiment by increasing the propensity to incur long-term loans. Financing home purchases is also being facilitated by the government scheme "Home for the Young." On the other hand, the introduction of the tax on some financial institutions will raise the cost of the new mortgage loans. In addition, as of the beginning of 2016, the criteria for granting housing loans have been tightened again as a result of the amended Recommendation S, introduced in 2014. The changes will restrict the availability of credit, thus dampening the positive impact of rising household income on investment.

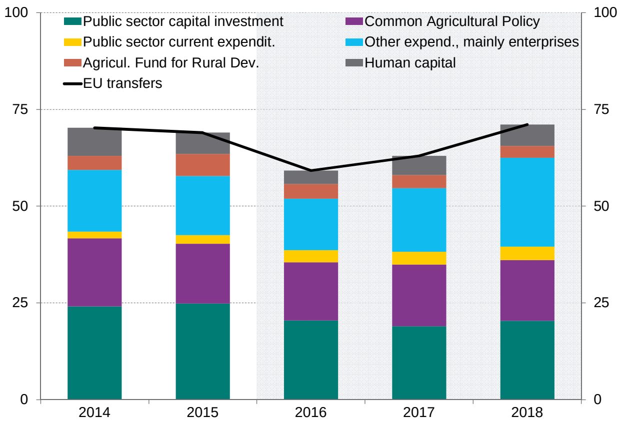
Public consumption growth is expected to weaken in 2016. This follows from the *Draft 2016 Budget Act*, which provides for a merely slow growth of current expenditure by the local government units, as well as absence of pay rises for teachers and academic teachers. Since no detailed information has been released to date about a likely continuation, beyond 2016, of measures aimed at reducing public sector expenditure, a slight acceleration in public

[47] *Economic climate in the enterprise sector in 2015 Q4 and forecasts for 2016 Q1*, NBP.
[48] *Financial situation of the enterprises in 2015 Q3*, NBP.

consumption growth is anticipated later in the projection horizon.

The level of public sector investment spending is, in turn, related to absorption of EU capital funds. In 2016, the absorption of EU funds under the 2007-2013 financial framework will come to an end. Previous experience shows that absorption of funds under the 2014-2020 will take off only gradually (Figure 4.13). Thus, higher public investment growth is expected in 2017-18 – comprising, in particular, projects implemented by local government units under regional programmes, as well as transportation investment.

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

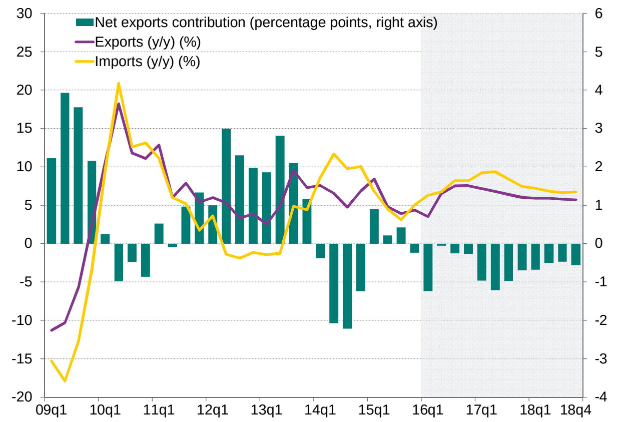


Source: NBP calculations.

Current and capital account balance

Exports growth is expected to remain relatively stable in the projection horizon, at an average rate of 6.2% (Figure 4.14). This results from the sustained relatively stable forecasts of growth in the European economies, and thus also of the demand generated by them. On the other hand, exports forecasts have been dragged by the weak business conditions in emerging market economies (further slowdown in China, recession in Russia and Brazil). Yet this impact – given the relatively small share of these countries in Poland's external trade (both direct and indirect – through Poland's participation in global value chains) – will not be substantial. Furthermore, the price competitiveness and profitability of Polish exports helps exporters maintain high profit margins; this applies also to enterprises exporting to emerging market economies. A scenario of moderate and stable growth of exports is additionally underpinned by declarations of the business community, whose expect exports to run at levels close to their long-term average.[49] On the other hand, given the expected rise in those

Figure 4.14 Foreign trade



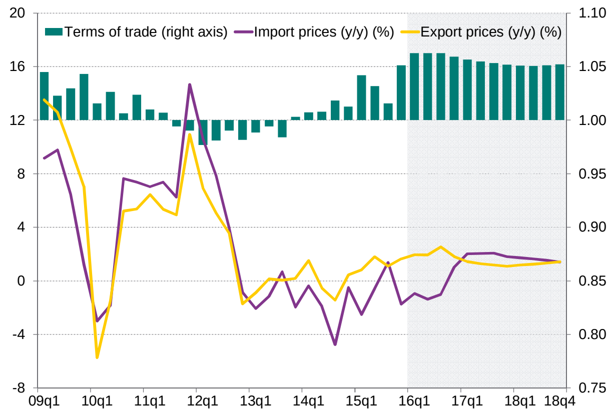
Source: GUS data, NBP calculations.

[49] *Economic climate in the enterprise sector in 2015 Q4 and forecasts for 2016 Q1*, NBP.

components of domestic demand that are characterised by high import intensity, imports may be anticipated to expand fairly robustly over the projection horizon. As a result, the contribution of net exports to growth will continue to hamper GDP growth.

In 2015, the balance of current and capital accounts hit the record 1.4% of GDP, which was supported by an improvement in the terms of trade (Figure 4.15), resulting, to a large extent from the slump in energy commodity prices. Throughout the projection horizon, the terms of trade will persist at a high level, owing to forecasts of continued low energy commodity prices on global markets. Thus, notwithstanding the negative contribution of net exports to growth, the trade balance will remain positive in 2016-2018, at a level which, except for the otherwise also very good year 2015, is at its highest since comparable balance sheet statistics have been compiled. In the projection horizon, also the balance of EU current and capital transfers, as well as that of workers' remittances, will remain in positive territory. The paths of these components of the balance of payments will determine the size of the combined balance of current and capital accounts, which in 2016-2018 will remain positive despite the persistently markedly negative balance of primary income. The deficit in this category is in turn driven by high yields on foreign investment in Poland, both direct and portfolio investment (in the form of debt and equity instruments).

Figure 4.15 Export and import prices



Source: GUS data, NBP calculations.

Potential output

There will be a slight increase in potential output growth over the projection horizon, from 3.0% to 3.3% y/y. However, until the end of 2018 it will run lower than the long-term average, below which it fell in the wake of the global financial crisis. With a drop in the labour force, the acceleration of capital formation and total factor productivity (TFP) as well as the fall in the equilibrium unemployment rate will contribute to a slight increase in growth of potential GDP (Figure 4.16).

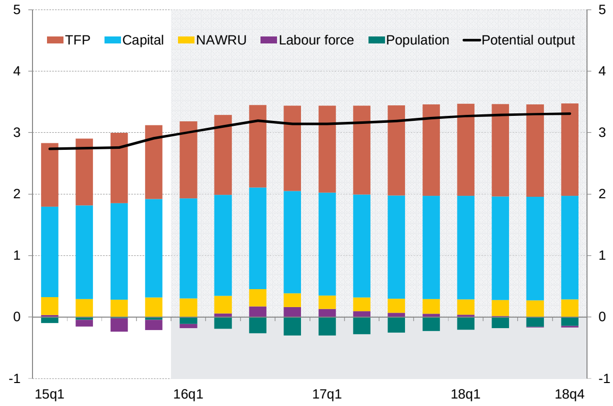
Corporate capital growth is a result of the lagged effect of the relatively high investment spending of the private sector – from 2014 to the end of the projection horizon it will grow faster than GDP.

The growth of TFP is a result of the continuation, in the projection horizon, of the process of real convergence of Polish economy. As a result, from the second half of 2013 a moderate upward trend in the currently low levels of TFP growth can be observed. However, by the end of the projection horizon TFP growth will not return to the level from before the onset of the global financial crisis.

The positive impact of the above conditions on the potential GDP over the projection horizon is partly compensated by the decline in the labour force (Figure 4.16). This stems from the continuation of the negative demographic trends observed in Poland, i.e. the decrease in the size of cohorts entering the labour market, the rising share of the post-productive age group and migration. The effective labour force is also limited by the increase in family benefits related to the "Family 500+" programme. This is because it increases non-wage income, resulting in discouraging people with low disposable income to search for work and take up employment. Therefore it contributes to a decline in the participation rate and an increase in the natural rate of unemployment.

The increase in activity of the pre-retirement age group, to a large extent attributable to the pension system reform, resulting in the systematic increase in the retirement age since 2013, will act in the opposite direction. This will partly alleviate

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



Source: NBP calculations.

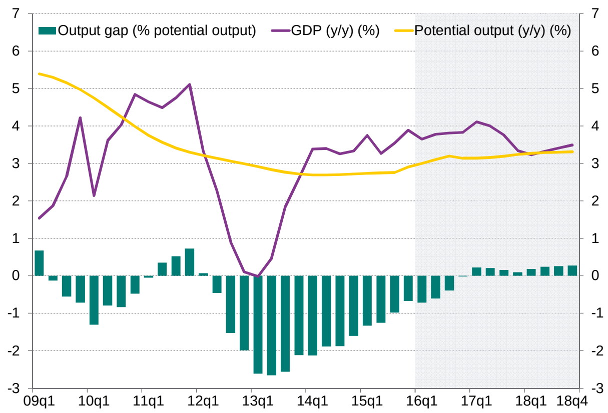
the impact of the above-mentioned factors on labour supply.

Across the whole of the projection horizon the equilibrium unemployment rate (NAWRU) will decline, having a positive impact on the level of potential GDP (Figure 4.19). The weakening of hysteresis effect, proceeding alongside the gradual decline in the unemployment rate, will have a positive impact on the equilibrium unemployment rate. The relatively high flexibility of the domestic labour market will contribute to the decline in the equilibrium unemployment rate in the projection horizon. In particular, NBP surveys indicate that from 2011 onwards the sensitivity of employment and wages to demand shocks has gradually risen.[50]

Output gap

Starting from the second half of 2013, when the Polish economy entered a recovery stage while the potential output growth was slow, the negative output gap started to narrow down (Figure 4.17). This process will continue in the short-term projection horizon, with the output gap reaching +0.2% of potential GDP and at the beginning of 2017. This will be supported by a strong fiscal impulse related to the increase in family benefits under the "Family 500+" programme. In the following years, as GDP growth slows down to equal the rate of potential output growth, the output gap will remain relatively stable at a little above zero. Such a path of the output gap shows that after several years of absent demand pressure, economic conditions in the projection horizon may support an increase in the inflation rate, although this influence will be relatively limited.

Figure 4.17 Output gap



Source: GUS data, NBP calculations.

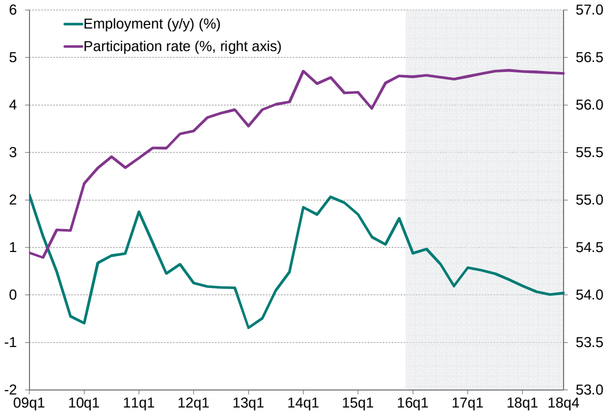
[50] *Labour market survey. Report 2015*, NBP.

Labour market

Growth in the number of the employed is expected to come to a halt over the projection horizon (Figure 4.18). Such employment developments are driven by the forecasted pick-up in the total TFP and production capital growth, supporting labour productivity. Mounting problems with matching employer requirements with workforce qualification, driven by the low unemployment rate, prolonging the time necessary for firms to fill the vacancy and the unemployed to find a job also contribute to this.[51] Given the difficulties in increasing the employment level, labour use intensity will grow, as indicated by the upward trend in the number of hours worked by the existing employees in 2015.[52]

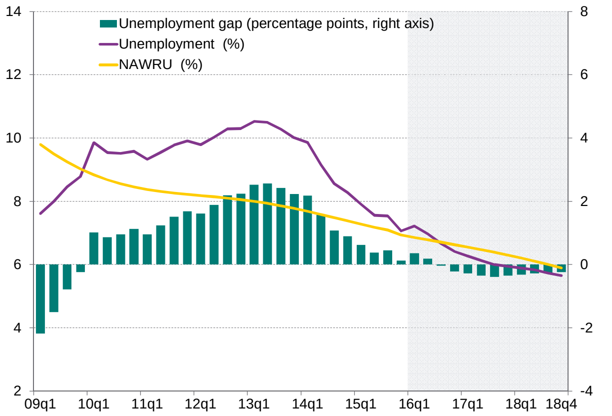
With the positive growth in employment and falling number of the economically active population, the LFS unemployment rate will fall (Figure 4.19). The decline in the unemployment rate will help to boost growth in nominal wages, which will, however, remain at a relatively low level, below the one observed in the period before the outbreak of the global financial crisis, until the end of the projection horizon (Figure 4.20). Wage pressure will be muted by the declining equilibrium unemployment rate (Figure 4.19), and the low CPI inflation, reducing the scale of employees' wage demands. The scenario of moderate wage growth is indicated by a relatively low percentage of companies declaring in the NBP surveys[53] mounting upward pressures on wages, despite a decline in the unemployment rate in 2015 Q4 to the level close to the 2008 minimum. With relatively stable labour productivity growth, low wage growth translates

Figure 4.18 Employment and labour force participation



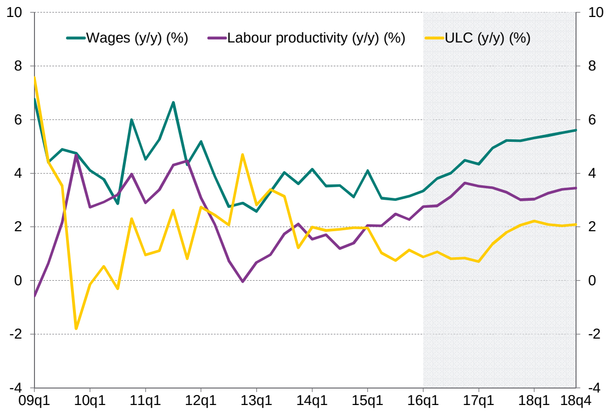
Source: GUS data, NBP calculations.

Figure 4.19 Unemployment



Source: GUS data, NBP calculations.

Figure 4.20 Unit labour costs



Source: GUS data, NBP calculations.

[51] *Quarterly Labour Market Report 2015 Q3*, NBP.

[52] *Quarterly Labour Market Report 2015 Q3*, NBP.

[53] *Economic climate in the enterprise sector in 2015 Q4 and forecasts for 2016 Q1*, NBP.

into a limited increase in unit labour costs, which at the end of the projection horizon will grow by 2.1% y/y.

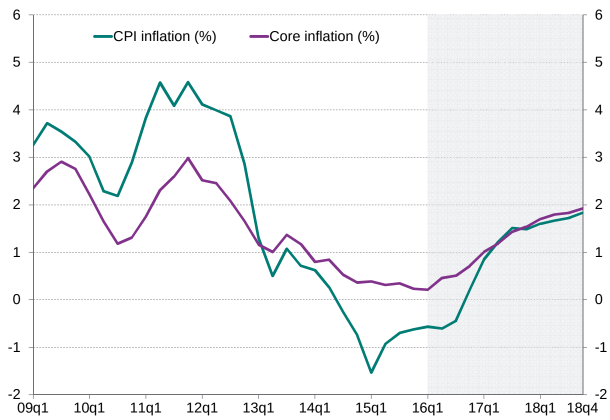
Exchange rate

In 2015 Q4 the average exchange rate of the zloty against the currencies of Poland's major trading partners was weaker than in the previous quarter. Depreciation of the zloty was driven by global factors, including the monetary policy of the ECB and the Fed and mounting risk aversion in the emerging markets. After the recently observed weakening, the zloty exchange rate depreciated significantly below the level determined by the fundamental factors. This is indicated, in particular, by the current and capital account balance standing at a record high in 2015. It is expected that in the projection horizon along with the stabilization of the situation in the international foreign exchange markets, the zloty will gradually depreciate, bringing the effective exchange rate closer to the equilibrium exchange rate. Further real convergence of the Polish economy, reflected in higher growth of domestic potential output than Poland's main trading partners' potential product growth, will work in the same direction.

Components of CPI inflation

In recent years, the Polish economy has seen a very low level of cost and demand pressures. This situation was reflected in the significant negative output gap, low growth in unit labour costs and falling import prices. Over the projection horizon, these developments will gradually fade away and, consequently, a moderate rise in core inflation will be observed (Figure 4.21). On the one hand, the slightly positive output gap remaining stable over the projection horizon indicates a gradual increase in demand pressure as compared with the years 2012-2015, when the

Figure 4.21 CPI and core inflation



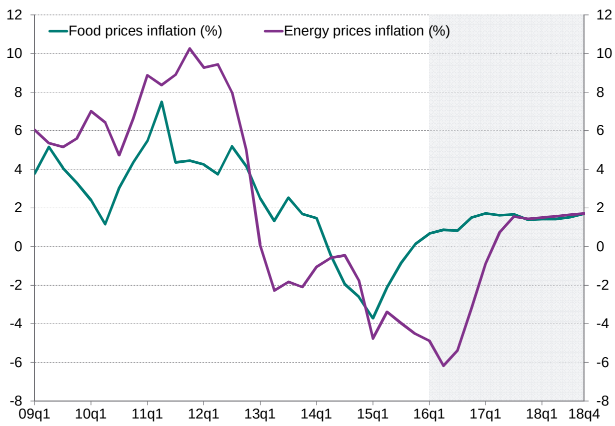
Source: GUS data, NBP calculations.

output gap was clearly negative. On the other hand, the persistently low cost pressure in the economy will be a factor limiting price growth in the economy. After the decline in import prices in 2013-2014, and probably also in 2015, a merely moderate rise in those prices is expected over the projection horizon. This is indicated by the projected low inflation in the euro area and the appreciation trend of the zloty assumed in the projection. Low cost pressure is also reflected in the negative producer price index (PPI) observed for over three years and slowly growing unit labour costs (Figure 4.20). In 2017, the reinstatement of lower VAT rates will additionally hamper core inflation growth.

After the record sharp fall observed in 2015, energy price inflation in 2016 is likely to run at an even lower level (Figure 4.22). This is suggested by the expected further decline in the price of fuel for private transport vehicles and the entry into force of new, lower tariffs for the sale and distribution of electricity and natural gas. In the subsequent years, energy price inflation will follow a gradual upward trend, which is associated with a gradual fading of the impact of the positive supply shock in the oil market. Yet, the increase in energy prices will remain moderate as it is curbed by persisting low level of energy commodity prices in the world markets over the projection horizon. The increase in energy prices in 2017 will be further hampered by the reduction in VAT rates.

After sharp declines in food prices observed in 2014-2015, a moderate growth in food prices is expected over the projection horizon. On the one hand, we will see the gradually fading impact on the growth of food prices in year-on-year terms of the high supply of agricultural commodities observed in the recent business seasons. The rise in food prices will also be supported by the gradually increasing consumer demand. On the

Figure 4.22 Food and energy price inflation



Source: GUS data, NBP calculations.

other hand, the growth of food prices will be limited by low agricultural commodity prices in the global markets (Figure 4.3). As in the case of other components of the CPI inflation, the scale of food price rises in 2017 will be further limited, although to a lesser extent, by the reduction in VAT rates.

Box 3: The impact of changes in oil prices on the revision to the inflation projection

The main factor determining the scale of revision to inflation forecasts in the recent period was the sharp decline in oil prices in the global markets. At the time of adoption of the assumptions for the projection published in November 2014, the price of oil exceeded USD 90 per barrel, to sink to a level close to USD 30 in February 2016. Oil price forecasts assumed in each forecasting round are based on futures contracts, reflecting the decisions of thousands of investors, as a result of which these contracts are factored in by many central banks and international institutions in their forecasts. The futures contracts relied on in the November 2014 projection pointed to relatively stable oil prices, running significantly above their actual trends known today (Figure B.3.1). The scale of the unexpected decline in oil prices is suggested by the forecasts running beyond the 90% confidence interval determined on the basis of the errors made in the previous forecasts.

Table B.3.1 NBP inflation forecasts against the inflation forecasts by other external forecasters (y/y, %)

Source	Publ. date	2014	2015	2016
Reuters	X ‘14	0.1	1.2	2.2
NBP surveys	X ‘14	0.2	1.2	2.2
NBP forecast of CPI inflation	XI ‘14	0.1	1.1	1.6
- core inflation	XI ‘14	0.7	1.0	1.3
- food price inflation	XI ‘14	-0.7	0.9	2.0
- energy price inflation	XI ‘14	-0.6	1.5	2.0
Actual CPI		0.0	-0.9	-
- core inflation		0.6	0.3	-
- food price inflation		-0.9	-1.7	-
- energy price inflation		-1.0	-4.2	-

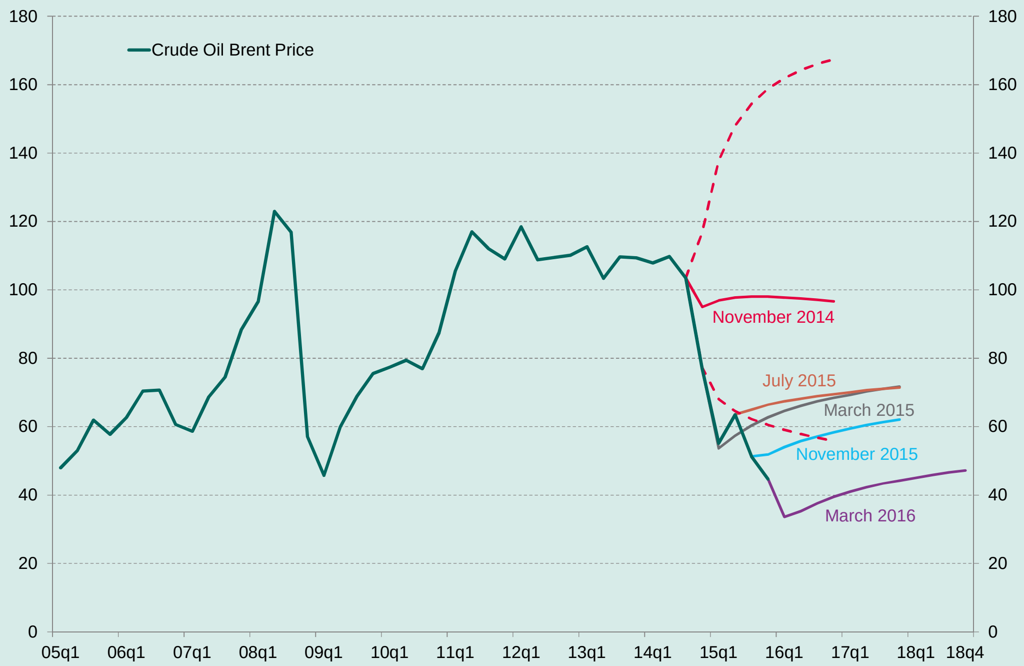
Source: NBP calculations.

The projection published in November 2014, pointed to a gradual rise in inflation to 1.1% in 2015 and to 1.6% in 2016 (under the assumption of constant NBP interest rates, Table B.3.1). The unexpected sharp fall in oil prices adversely affected the accuracy of the inflation forecasts formulated also by other forecasters. The results of the surveys conducted by Narodowy Bank Polski (September 2014) and Reuters (October 2014) among professional forecasters pointed to an even faster rise in inflation – to 2.2% in 2016 (median of forecasts). Meanwhile, the actual CPI inflation in 2015 amounted to -0.9%, falling 2 percentage points below the projection expectations. The forecast error was in approx. 50% due to the lower than expected growth of energy prices, which in this period fell by 4.2%. The decline in these prices was largely driven by the reduction in the prices of fuels for private transport vehicles and natural gas. Gas prices for households, approved by the Energy Regulatory Office, are highly impacted by the price of gas imported from Russia, which, in line with long-term contracts, responds to changes in oil prices with a delay of several quarters.

A further 30% discrepancy between the 2015 developments and the projection is due to lower-than-expected negative growth in the prices of food and non-alcoholic beverages. The decline in these prices was the result of both their high supply and low demand from Russia and Ukraine, which was affected by the economic crisis in these countries and the ban on food products from the European Union imposed by the Russian Federation.

The difference between the projection and the actual developments in the case of core inflation was relatively small and largely caused by the indirect impact of declines in crude oil prices on the components of core inflation, as well as lower inflationary pressures worldwide. The decline in oil prices contributed in particular to lower prices of transport services. Consequently, lower transport costs also put downward pressure on the prices of other goods and services.

Figure B.3.1 Revision of oil price forecasts (USD/bbl) in respective projections against the background of the 90% confidence interval* of the November 2014 projection



Source: NBP calculations.
The 90% confidence interval for oil price forecasts made in the November 2014 projection was determined on the basis of past forecast errors (from the 2005-2014 period).

4.4 Current versus previous projection

As compared to the November projection, in the current forecasting round the GDP growth path has been revised upwards and the CPI inflation forecast has been reduced in the years 2016-2017

(Table 4.1). The upward revision in the economic growth forecast is caused by the loosening of fiscal policy and zloty depreciation. This year lower consumer price growth is the result of sharply falling energy prices, driven by the revision of oil prices in the global markets and changes in administrative domestic prices in this group.

Table 4.1 March projection versus November projection

	2016	2017	2018
GDP (y/y, %)			
March 2016	3.8	3.8	3.4
November 2015	3.3	3.5	-
CPI inflation (y/y, %)			
March 2016	-0.4	1.3	1.7
November 2015	1.1	1.5	-

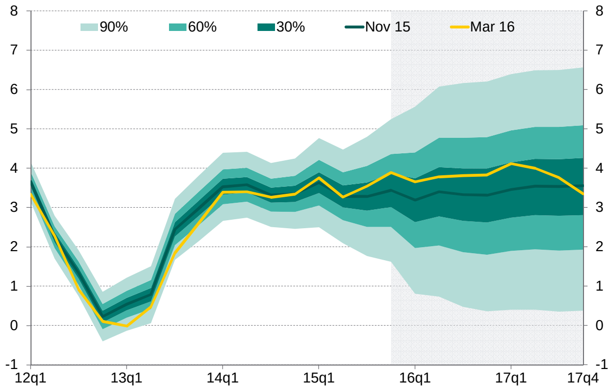
Source: NBP calculations.

GDP

Information released after the November projection was completed has contributed to an upward revision of GDP growth in the years 2016-2017 (Figure 4.23). The changes of economic growth path in this period is influenced, to the largest extent, positively by consumption (Figure 4.24) and negatively by gross fixed capital formation.

The main factor boosting consumption as compared to the previous forecasting round is the increase in family benefits from the "Family 500+" programme, affecting the level of household disposable income. While in 2016 these benefits will be paid for the period April - December, in 2017 the benefit payments will cover the whole calendar year. Moreover, the increase in social benefits due to the intertemporal consumption smoothing mechanism will be translated, with a certain time lag, into a rise in household expenditure adding to the annual consumption growth not only in 2016 but also in 2017.

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

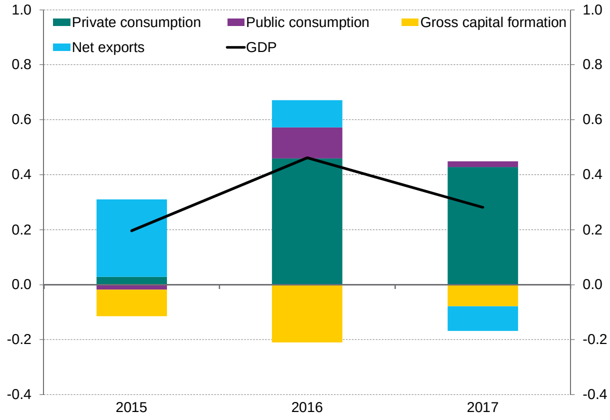


Source: NBP calculations.

Increased consumer demand in the years 2016-2017 translates into import growth, thus has a negative impact on the contribution of net exports to GDP growth in this period. Despite the impact of this factor, net exports in 2016 increases, as compared to the November projection, the expected economic growth. Firstly, this is due to the better-than-expected readings in this category in the second half of 2015. Secondly, the weakening of exchange rate, observed in 2015 Q4, improves the price competitiveness of domestic production, affecting exports and imports with some delay. In 2017, when the impact of the starting point and the exchange rate on net exports will fade away, this category will fall below the expectations from the last projection.

Central Statistical Office estimates from 26 January 2016 pointed to the investment growth in the second half of 2015 falling short of the November expectations and was a rationale for a similar revision of this variable also in the subsequent quarters of the projection. Another factor in favor of the downward revision, as compared to the previous forecasting round, of the investment path in the period 2016-2017 is the impact of tax on some financial institutions in force from February 2016. It was assumed that in the face of rising costs, banks will take measures aimed at generating higher revenues by increasing the cost of banking services. The effect of these measures can be, in particular, growing cost of credit and its declining availability, which may be a drag on corporate and household investment. It is expected, that the negative impact on investment exerted by taxes imposed on some financial institutions will grow in time as banks are able to increase the cost of credit for new loan agreements only. Downward revision of investment over the projection horizon is also associated with greater risk aversion of companies when making long-term investment plans due to increased uncertainty in the global financial markets and concerns about future tax burdens.[54]

Figure 4.24 Decomposition of deviations between March and November projection: GDP growth (percentage points)[55]



Source: NBP calculations.

Inflation

Information released after the cut-off date of the November projection point to lower consumer

[54] *Economic climate in the enterprise sector in 2015 Q4 and forecasts for 2016 Q1*, NBP.

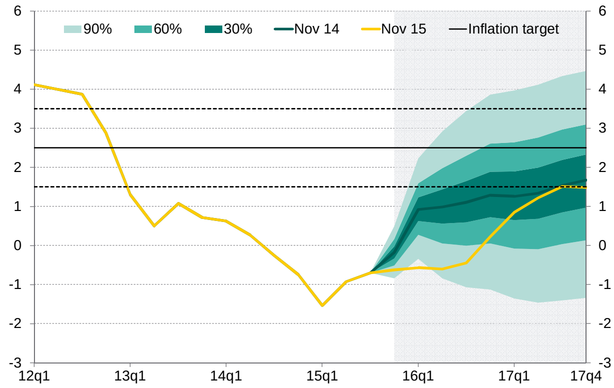
[55] The data presented in the chart may vary slightly from those in Table 4.1, due to rounding of numbers to one decimal place.

price growth in 2016 and, to a much lesser scale, also in 2017 (Figure 4.25). The main reason for changes in inflation developments are strong declines in crude oil prices in the global markets and changes in domestic administrative prices, affecting the level of domestic energy prices. To a lesser extent, the downward revision of the CPI inflation is also due to lower-than-expected food prices and smaller cost pressure from the domestic labour market (Figure 4.26).

In the period between the projections, the price of crude oil declined from almost USD 50 per barrel to the currently observed level of approximately USD 30 per barrel. This decline translated into decreasing cost of fuel for private means of transport. Lower prices of oil and other energy commodities was an additional factor behind the changes in domestic regulated prices. In particular, the Energy Regulatory Office approved lower, than forecasted in the November projection, tariffs for electricity and natural gas for households. The current projection assumes also further reduction in prices of natural gas for consumers in April, July and September 2016. This assumption is related to the expected decline in the price of gas imported from Russia as a result of the low oil prices and the ongoing arbitration proceedings between PGNiG and Gazprom. The fall in prices of imported natural gas contributed also to the downward correction, as compared to the November forecasting round, of the price of fuel and heat energy. This reduction is also driven by the decline in coal prices and favorable weather conditions.

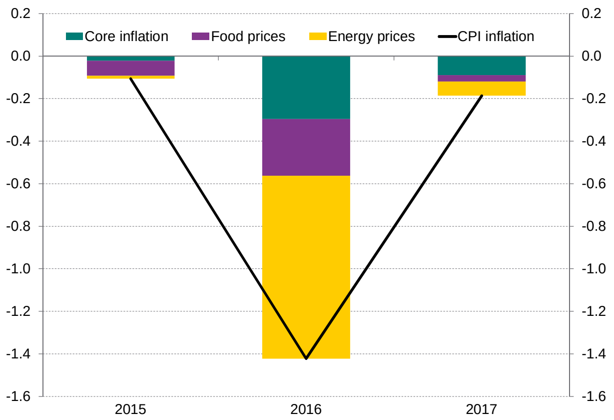
In 2016, the path of food prices, in particular unprocessed food prices, was also revised downward. Drought, which hit Poland and some other European countries in the second half of 2015, did not translate, to such a high degree as

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



Source: GUS data, NBP calculations.

Figure 4.26 Decomposition of deviations between March and November projection: CPI inflation (percentage points)[56]



Source: NBP calculations.

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

expected in the November projection, into food and vegetable prices which was a rationale behind their downward correction also in 2016. Moreover, due to the lower than anticipated use of subsidies for private storage of pork meat, there is a large oversupply on the meat market, resulting in lower, than expected in the previous forecasting round, prices.

Core inflation is a component of consumer prices which has been subject to the slightest revision. On the one hand, along with the weakening of the zloty exchange rate in 2015 Q4 prices of imported goods are forecasted to grow faster. On the other hand, however, low cost pressure from the domestic labour market was the key factor behind a slight downward revision of the path of core inflation in 2016. Labour productivity growth in line with the November projection will be observed amid weaker growth in nominal wages, which results from prolonging period of deflation translating into wage expectations of entrepreneurs and employees.

In 2017, along with the fading impact of oil price declines on inflation in year-on-year terms and the gradual stabilization of the food market, the domestic energy and food price growth should slowly return to the level assumed in the November projection. Whereas core inflation in 2017 falling short of the expectations formulated in the November projection, is the result of persistently lower cost pressure reflected in a slower pace of growth in unit labor costs.

4.5 Forecast uncertainty sources

The balance of risks for the March projection – related to the macroeconomic conditions both in Poland and its external environment – points to a near-symmetrical distribution of risks to CPI inflation (Table 4.2) and a negative balance of risk factors for GDP growth. Under the assumption of an unchanged NBP reference rate, the probability of CPI inflation running in the range of acceptable deviations from the NBP inflation target (1.5%-3.5%), now close to zero, rises early in the projection horizon to subsequently stabilize at close to 36% in 2017-2018 (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%)
16q1	1.00	1.00	1.00	0.50	0.00
16q2	1.00	1.00	1.00	0.50	0.00
16q3	0.96	1.00	1.00	0.50	0.04
16q4	0.83	0.95	0.99	0.50	0.17
17q1	0.66	0.85	0.95	0.49	0.30
17q2	0.56	0.77	0.91	0.49	0.35
17q3	0.49	0.70	0.86	0.49	0.37
17q4	0.50	0.71	0.86	0.50	0.36
18q1	0.49	0.70	0.86	0.52	0.37
18q2	0.50	0.71	0.87	0.54	0.37
18q3	0.50	0.70	0.86	0.55	0.35
18q4	0.49	0.69	0.85	0.56	0.36

Source: NBP calculations.

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

A significant source of risk to the March projection is related to the possibility of lower than assumed growth in the external environment of the Polish economy, especially in China and advanced economies.

The risk of a strong deterioration in business conditions in the Chinese economy is largely driven by the threats to the stability of China’s financial system. Should the effects of excessive investment in the housing and manufacturing sectors prove larger than currently assessed, firms’ problems with debt servicing might trigger a surge in uncertainty about the stability of the Chinese banking and shadow banking sector. Another source of risk to financial stability in China is the considerable debt of local government units due to heavy spending on infrastructure projects. The excessive debt of the private sector, Chinese local government units and the resulting problems in the banking sector may further dampen growth in investment and consumer expenditure.

A stronger slowdown in China, which is one of the major trading partners of the United States, would contribute to a significant downward revision of growth of the US economy as compared to the projection assumptions.

Weakening Chinese demand would further deepen the currently observed slowdown in US industry, especially in the situation of a stronger than assumed US dollar. Further declines in oil prices in the global markets would, in turn, curb investment and activity of the US mining sector. Deteriorating business conditions in this sector could undermine business sentiment also in other industries and among households, which would put a drag on the activity of the entire US economy.

Lower growth in China and the United States would bring about turmoil in the global financial markets and a slowdown in the global economy, both through the trade channel and as a result of deteriorating sentiment among consumers and businesses. The impact would be much stronger in the case of the United Kingdom’s withdrawal from the European Union (the so-called *Brexit*), which would further curb activity in the euro area economy. Due to relationships in global value-added chains, a slowdown in the German economy would have a particularly significant impact on business conditions in Poland. The scale of the weakening in the global economy would, however, be mitigated by the accommodative monetary policy and other monetary measures aimed at stabilizing the financial markets.

Slower growth in the world economy would have negative consequences for the Polish economy. Apart from declining export growth, increased uncertainty and the turmoil in the financial markets would undermine the sentiment among businesses and consumers in Poland. Lower investment and consumption growth than that envisaged in the baseline scenario would translate into a decline in GDP growth and lower inflationary pressure.

Economic downturn in Poland and abroad would significantly increase the risk of a higher budget deficit than the one in the March projection baseline scenario. In such a situation, the financial markets could revise downward their assessment of Poland's creditworthiness, which would raise the yield on government bonds. As a result of the possible difficulties with financing public finance sector expenditure, the government would probably undertake actions aimed at tightening fiscal policy. Lower risk appetite in the financial markets would also contribute to weakening the zloty exchange rate as compared with the baseline scenario of the March projection, which would be an additional factor increasing the government debt to GDP ratio (as part of bonds are issued in foreign currency). At the same time, however, by improving the price competitiveness of Polish exports and increasing the cost of import, the weaker zloty would somewhat reduce the scale of the slowdown of domestic growth.

The slowdown in economic activity in Poland and abroad would add to the risk of lower inflationary pressures than assumed in the baseline scenario, which, amid declining prices of agricultural and energy commodities, would be conducive to the low CPI inflation persisting in the longer term. This effect, however, would be reduced by an increase in import prices due to the weakening of the zloty exchange rate.

Rising domestic demand on the back of stronger economic activity in the euro area and Central European economies

Considerable uncertainty for the March projection, this time with a potential positive impact on GDP growth in Poland, stems from the possibility of faster than envisaged in the baseline scenario economic growth in Poland's major trading partners – the euro area and Central European economies. On the one hand, this could be driven by declining uncertainty about the global economic outlook, particularly regarding the developments in the United States and emerging markets. On the other hand, a higher growth rate in the euro area compared to what was assumed in the baseline scenario could be fuelled by a stronger impact of the ECB's government bond purchasing programme than currently expected and its possible expansion. Should the euro depreciate against the dollar more than expected, the euro area countries would increase their exports, which might result in a faster restoration of fixed capital in the economy, especially amid easier access to credit. Low borrowing costs, coupled with the improving labour market conditions, would give a boost to households' purchasing power. The greater than assumed scale of fiscal policy easing would also foster faster growth in the euro area.

Should business conditions in the euro area economy prove stronger than assumed in the projection, higher export growth would contribute to faster GDP growth in Poland and other Central European countries. An improvement in the situation of Polish exporters could help sustain the robust investment activity of domestic businesses over a longer time. A faster improvement in Polish labour market, coupled with low NBP interest rates, might encourage households to use their higher real wages to boost consumption at the expense of a lower savings rate than assumed in the baseline scenario. Higher domestic demand growth would translate into materially higher GDP growth and consumer price growth in comparison to the baseline scenario of the March projection.

Further in the projection horizon, economic growth could be supported by the effect of the implementation of the European Commission's Investment Plan for the years 2015-2017. According to the European Commission estimates, the full realisation of the plan may boost the European Union GDP by EUR 330-410bn, resulting in the creation of 1-1.3 million new jobs. Should the envisaged risk factors materialise, GDP and CPI inflation would run above the path assumed in the baseline scenario of the projection.

Oil prices in the global markets

Another source of uncertainty for the baseline scenario are prices of oil and other energy commodities in the global markets. The risk of significant fluctuations in oil prices is primarily driven by factors changing the global oil supply. They include supply of Iranian oil as a result of the lifting of sanctions in January 2016 by the European Union and the United States as well as the reaction of American oil producers to the deepening decline in prices of this commodity. Other sources of uncertainty concern the supply of oil related to the restoration of supply from Libya. Demand factors related to prospects of growth in the global economy, in particular in emerging market economies, also add (but to a lesser extent) to the risks associated with the path of oil prices assumed in the baseline scenario.

Fiscal policy

A risk for the current projection also results from the possibility of the government's measures aimed at limiting the deficit in the years 2017-2018. They would be connected with a tightening of fiscal policy, which could include the withdrawal of the planned reduction of the basic VAT rate since 2017 or even its increase. Measures aimed at boosting the budget revenue could also include an increase in the excise duty on fuel since 2017 and the introduction of the planned tax on retail sales. The likely reduction in expenditure would entail, among others, a slowdown in wage growth in the public sector. These changes would boost consumer prices above the baseline scenario and contribute to lower GDP growth. However, due to the absence of detailed information on the nature of possible fiscal adjustments, their potential effects have not been included in the baseline scenario of the March projection.

Table 4.3 Central path of inflation and GDP projection

	2014	2015	2016	2017	2018
Consumer Price Index CPI (%, y/y)	0.0	-0.9	-0.4	1.3	1.7
Food prices (%, y/y)	-0.9	-1.7	1.0	1.6	1.5
Energy prices (%, y/y)	-1.0	-4.2	-4.9	0.7	1.6
Core inflation net of food and energy prices (%, y/y)	0.6	0.3	0.5	1.3	1.8
GDP (%, y/y)	3.3	3.6	3.8	3.8	3.4
Domestic demand (%, y/y)	4.9	3.4	4.3	4.8	3.9
Private consumption (%, y/y)	2.6	3.1	4.1	4.2	3.4
Public consumption (%, y/y)	4.5	3.2	2.8	3.7	3.0
Gross fixed capital formation (%, y/y)	9.8	6.1	5.1	5.1	5.2
Contribution of net exports (percentage points, y/y)	-1.5	0.3	-0.5	-1.0	-0.6
Exports (%, y/y)	6.4	5.3	6.3	6.6	5.8
Imports (%, y/y)	10.0	4.8	7.4	8.6	6.9
Gross wages (%, y/y)	3.6	3.3	3.9	4.9	5.5
Total employment (%, y/y)	1.9	1.4	0.7	0.5	0.1
Unemployment rate (%)	9.0	7.5	6.8	6.1	5.8
NAWRU (%)	7.5	7.1	6.7	6.4	6.1
Labour force participation rate (%, y/y)	56.2	56.2	56.3	56.3	56.3
Labour productivity (%, y/y)	1.5	2.4	3.1	3.3	3.3
Unit labour cost (%, y/y)	1.9	1.2	0.9	1.5	2.1
Potential output (%, y/y)	2.7	2.8	3.1	3.2	3.3
Output gap (% potential GDP)	-1.9	-1.1	-0.4	0.2	0.2
Index of agricultural commodity prices (EUR; 2011=1.0)	0.93	0.88	0.85	0.90	0.89
Index of energy commodity prices (USD; 2011=1.0)	0.72	0.51	0.38	0.38	0.38
Inflation abroad (%, y/y)	1.2	1.4	1.3	1.4	1.5
GDP (%, y/y)	1.3	1.6	1.5	1.7	1.6
Current and capital account balance (% GDP)	0.4	1.4	2.6	1.0	0.7
WIBOR 3M (%)	2.52	1.75	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 2015 – January 2016

■ Date: 1 December 2015

Subject matter of motion or resolution:
Resolution No. 7/2015 of 1 December 2015 on approving the Financial Plan of the National Bank of Poland for 2016.

Voting of the MPC members:

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

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