

NBP

Narodowy Bank Polski

Monetary Policy Council

Report on monetary policy in 2016



Report on monetary policy in 2016

Warsaw, May 2017

In presenting the *Report on monetary policy*, the Monetary Policy Council acts in accordance with Article 227 of the Constitution of the Republic of Poland, which imposes an obligation on the Council to present a report on the achievement of the purposes of monetary policy within 5 months following the end of the fiscal year. In accordance with Article 53 of the Act on Narodowy Bank Polski, the *Report on monetary policy* is announced in the Official Gazette of the Republic of Poland, the *Monitor Polski*. The *Report* presents the main elements of the monetary policy strategy, a description of macroeconomic conditions and decisions taken with respect to monetary policy in the reported year, as well as a description of the applied monetary policy tools.

The *Report on monetary policy in 2016* is accompanied by appendices presenting the development of important macroeconomic variables, as well as by *Minutes of the Monetary Policy Council decision-making meetings* and *Voting records of the Monetary Policy Council members on motions and resolutions* in the year the *Report* encompasses.

An ex-post assessment of the conduct of monetary policy should take into account, above all, that the decisions of monetary authorities affect the economy with considerable lags and that they are taken under uncertainty about future macroeconomic developments. Moreover, the economy is subject to macroeconomic shocks, which, while remaining outside the control of the domestic monetary policy, may to a large extent affect economic conditions and domestic inflation developments in the short and sometimes in the medium term.

The *Report on monetary policy in 2016* is a translation of the publication of Narodowy Bank Polski entitled *Sprawozdanie z wykonania założeń polityki pieniężnej na rok 2016*. In case of discrepancies, the Polish version prevails.

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1. Monetary policy strategy in 2016

In 2016, the Monetary Policy Council conducted monetary policy in line with the *Monetary Policy Guidelines for 2016* adopted in September 2015. As in previous years, the main objective of monetary policy was to maintain price stability, while supporting sustainable economic growth and financial system stability. This way, the Council pursued the basic objectives of Narodowy Bank Polski set out in the Constitution of the Republic of Poland and the Act on Narodowy Bank Polski. According to Article 227 Section 1 of the Constitution, Narodowy Bank Polski “shall be responsible for the value of Polish currency”. The Act on Narodowy Bank Polski states in Article 3 Section 1 that “the basic objective of the activity of NBP shall be to maintain price stability, while supporting the economic policy of the Government, insofar as this does not constrain the pursuit of the basic objective of NBP”.

The Council pursues price stability objective within the inflation targeting framework. Since 2004 the Council has pursued a medium-term inflation target of 2.5%, with a band for deviations of ± 1 percentage point. The medium-term orientation of the target means that shocks affecting the economy might cause inflation to temporarily deviate from the target. The monetary policy response to shocks and the resulting deviations of inflation from the target depends on the underlying cause and the character of these shocks, as well as the assessment of the sustainability of their effects, including their impact on price developments and inflation expectations. The Council flexibly determines the time necessary for inflation to return to the target depending on the character of the shock, its persistence and the overall assessment of risks posed by the shock to both price stability and broadly understood macroeconomic stability in the medium term.

The analysis of the causes of the global financial crisis has led to a partial modification of views on the appropriate way of conducting monetary policy. Nowadays, it is generally accepted that stabilising inflation at a low level is a very important, yet insufficient condition to keep the economy in the equilibrium. In order to ensure macroeconomic stability, monetary policy has to be pursued in a manner which, while striving to stabilise inflation at the target in the medium term, simultaneously contains the risk of imbalances building up in the economy, especially in the financial system. Hence, the Council conducts monetary policy in such a way so as to support the stability of the financial system, which is necessary to ensure price stability in the longer term and at the same time enables smooth functioning of the monetary policy transmission mechanism. Therefore, in its decisions, the Council takes into account the prices of assets, especially prices of real estate, and growth in lending. In order to support the stability of the financial system it may be necessary, in certain conditions, to lengthen the horizon of achieving the inflation target.

The Council pursues inflation targeting under the floating exchange rate regime. However, the floating exchange rate regime does not rule out interventions when these prove necessary to ensure macroeconomic and financial stability of the country, which is conducive to meeting the inflation target in the medium-term.

2. Monetary policy and macroeconomic developments in 2016

In 2016, economic developments in Poland were broadly favourable. Real GDP grew by 2.7%, i.e. still in line with the potential output, yet somewhat slower than in the previous year. Consumer demand remained the main driver of growth, supported by faster rise in household disposable income related to improving labour market conditions and newly introduced child benefits. Labour market recovery was reflected in rising employment as well as a fall in the unemployment rate, which reached the lowest level since 1991. At the same time, lending growth was stable and recovery in the real estate market continued. Lower GDP growth in 2016 mainly resulted from a fall in investment following the completion of the EU financial framework 2017-2013.

Polish exports were rising at a faster pace than a year before, supported by stable economic growth in Poland's main trading partners and improving competitiveness of Polish products. This, along with steady import growth, led to higher foreign trade surplus. In consequence, current account deficit narrowed to the lowest level since 1995 and the joint current and capital account remained in surplus.

Stable economic growth was accompanied by low, albeit rising, price growth. In December 2016, consumer prices rose by 0.8% y/y compared with a fall of 0.9% y/y in January 2016. Deflation persisted over most of the year, mainly due to a sharp fall in the global prices of energy commodities in late 2015 and early 2016, with still limited domestic demand pressure. However, deflation did not adversely affect economic conditions in Poland. Lower energy commodity prices had a positive impact on financial standing of most economic agents. Moreover, households did not delay spending in anticipation of a fall in prices and enterprises indicated that deflation did not significantly affect their financial positions or investment plans. In addition, no deflation expectations were recorded among economic agents.

In view of such conditions, in 2016 the Council kept the NBP interest rates unchanged, including the reference rate at 1.5%. The Council was acting in line with the flexible inflation targeting framework, as indicated in the Monetary Policy Guidelines. The Council took into consideration an external and temporary nature of factors holding back price growth on the one hand, and balanced economic growth, solid improvement in labour market conditions and steady lending growth on the other. Keeping the interest rates unchanged was supportive of price stability as well as maintaining macroeconomic stability and stability of the financial sector.

Monetary policy decision-making environment over the course of 2016 is presented in a greater detail below.

Data released in the first half of 2016 pointed to further moderate global economic growth. The euro area, Poland's main trading partner, continued to recover, though deteriorating conditions in the emerging market economies exerted some negative impact on this economy. At the same time, in the United States, GDP growth decelerated, mainly on the back of a fall in investment, mostly in shale oil extraction amid a fall in prices for this commodity. The drop in oil prices contributed also to weaker activity in its exporters, including Russia, which remained in recession. In China, GDP growth was

slower than in previous years, yet with signs of stabilising economic conditions. Relatively low growth in the emerging market economies was translating into a decline in global trade turnover, and, in consequence, weaker industrial output growth in many countries.

Prices of oil and other commodities were markedly lower than in previous years in spite of a gradual increase in the first half of 2016. As a result, the euro area and most Central and Eastern European economies experienced a deflation.

Monetary policy of the major central banks was still highly expansionary. The European Central Bank (ECB) reduced its interest rates, including the deposit rate to a more negative level, and, in addition, it enlarged the scale of its asset purchases. At the same time, the Federal Reserve (Fed) was keeping its interest rates stable after increasing them in December 2015, while continuing to reinvest maturing debt securities purchased during the successive rounds of quantitative easing.

Against this backdrop, the government bond yields in the euro area and other European economies decreased significantly in the first half of 2016, reaching negative values in some countries. At the same time, share prices in the global markets declined and some emerging market currencies, including the zloty, depreciated. This was driven by elevated risk aversion stemming from still low economic growth in emerging market economies, most notably in China.

In Poland, economic growth was stable, albeit somewhat slower than in previous quarters. The slowdown resulted from a decline in investment related to lower inflow of EU funds after the completion of the previous EU financial framework. Despite the slowdown, GDP was growing at a rate close to its potential, driven mainly by steadily rising private consumption, supported by improving labour market conditions. In particular, employment was still increasing at a considerable pace and the unemployment rate fell to the lowest level since 1991. Against this background, wage growth picked up, yet remained moderate. Consumption growth was also helped by improving household sentiment and, starting from 2016 Q2, new child benefit payments disbursed under the "Family 500 plus" programme. Moreover, loans, both to households and enterprises, were rising steadily, while housing investment growth picked up. At the same time, Polish export growth was higher than in previous years, in spite of a decline in the global trade turnover.

In the first half of 2016, price growth in Poland stayed negative, which, however, resulted mainly from the fall in global commodity prices in late 2015 and early 2016. Price growth was also contained by a lack of demand pressure and still moderate wage growth. However, deflation had no negative impact on decisions taken by economic agents. In particular, financial results of enterprises remained good, and households did not delay spending in anticipation of a fall in prices. Inflation expectations of enterprises and households were very low, yet positive. Nevertheless, as a result of deflation lasting longer than previously anticipated, inflation forecasts for 2016 were revised downwards. This notwithstanding, it was expected that in 2017 inflation would be markedly positive, supported by dissipating effects of the earlier fall in global commodity prices.

Given the sustainable economic growth on the one hand, and a lack of negative impact of deflation on economic activity on the other, the Council recognised that the interest rates should remain unchanged. Other reason for keeping the interest rates unchanged was external and temporary nature of deflation. In particular, the Council took into account that inflation would rise to a markedly

positive level, aided by waning effects of the previous fall in commodity prices. In its decisions, the Council was also considering a stable increase in lending and residential real estate investment.

In the second half of 2016, global economic growth remained moderate, but its outlook improved. GDP growth in the euro area was stable, in spite of a decline in some EU member states, including Germany, amid lower investment growth rate and subdued increase in exports. At the same time, in the United States, economic growth accelerated notably. Emerging market economies experienced first signs of improving economic conditions. In China, GDP growth was stable, and even accelerated somewhat in 2016 Q4. Incoming data from Russia indicated the end of recession in this country.

Improving global economic outlook was translating into rising oil prices. Another factor supportive of oil prices was an agreement on oil production cuts reached in late 2016 by key exporters of this commodity. Prices of many agricultural commodities also increased significantly. Both fed through into stronger price growth in many countries.

Under these conditions, the major central banks were keeping their interest rates unchanged over most of the second half of the year. In addition, the ECB continued its asset purchase programme, and the Fed was reinvesting maturing debt securities. In late 2016, the ECB prolonged its asset purchases, yet reduced their monthly scale. The Fed, in turn, raised its interest rates, pointing to further tightening in the coming years, which led to an increase in the government bond yields, appreciation of the US dollar and weakening of some emerging market currencies, including the zloty. At the same time, improved global economic outlook was reflected in a further rise in prices of financial assets, mostly shares, particularly in advanced economies.

In Poland, economic growth in the second half of 2016 was lower than in previous quarters. Like in most Central and Eastern European economies, the slowdown was caused mainly by a fall in investment resulting from the completion of the previous EU financial framework. At the same time, GDP growth was supported by an increase in private consumption, which was accelerating, driven by labour market recovery, reflected in growing employment and wages. Consumption growth was also underpinned by child benefit payments and improving household sentiment. Similarly to previous quarters, economic growth was additionally propped up by a steady rise in both lending and housing investment. This was accompanied by still relatively high growth in exports.

As prices for commodities, most notably oil, were higher than a year before, price growth in Poland increased considerably, turning positive in late 2016. Core inflation, however, remained low amid still negative output gap and moderate wage growth. Macroeconomic projections indicated further rise in inflation in the following year, while inflation expectations picked up somewhat.

Taking the above into consideration, the Council was keeping interest rates unchanged in the second half of 2016. Decisions to stabilise the NBP interest rates were justified by a temporary nature of the slowdown in the second half of 2016, as the Council expected an improvement in economic conditions in the coming quarters. More specifically, the Council judged that in 2017 consumer demand growth would remain stronger than in previous years, while investment would recover on the back of higher absorption of EU funds. In addition, the Council recognised that price growth had risen over the second half of 2016, yet the available forecasts were pointing to rather moderate inflation in coming quarters.

Like in the previous years, communication with the public played an important role in the conduct of monetary policy within the inflation targeting framework in 2016. Thus, the Council informed about its decisions and provided an assessment of economic developments behind them. As in the previous years, the key communication instruments used in 2016 included the cyclical publications: *Information from the meeting of the Monetary Policy Council* (with the accompanying press conferences held after the Council's meetings), *Minutes of the Monetary Policy Council decision-making meetings*,¹ *Inflation Reports*, as well as *Report on monetary policy implementation in 2015* and *Monetary Policy Guidelines for 2017*.

¹ The *Minutes of the Monetary Policy Council decision-making meetings* (included in Annex 6) contain a more detailed coverage of issues and arguments with an impact on the decisions made by the Council in 2016.

3. Monetary policy instruments in 2016

In pursuing its monetary policy in 2016, NBP employed the range of instruments adopted by the Monetary Policy Council in the *Monetary Policy Guidelines for 2016*.

Liquidity of the banking sector in 2016

In 2016, surplus liquidity continued to prevail in the banking sector.² The amount of liquidity surplus averaged PLN 73,206 million during the year,³ thus being PLN 16,386 million, or 18.3% lower than in 2015.

The level of excess liquidity fluctuated over the year. Between the beginning of the year and the end of July, it diminished from PLN 86,504 million in January to PLN 66,079 million in July. In the following three months, excess liquidity remained stable. In November, following the purchase of a considerable amount of foreign currency from the Ministry of Finance, the liquidity surplus increased to PLN 76,969 million. In December, it remained at a similar level, i.e. PLN 76,944 million. As a result, the average level of liquidity surplus in December 2016 was lower than in December 2015 by PLN 10,720 million (i.e. 12.2%).

Changes in currency in circulation had the biggest impact on the banking sector liquidity level in 2016, accounting for its fall of PLN 24,190. Excess liquidity in the banking sector was also curbed by an increase in the required reserve holdings – amounting to an average of PLN 2,984 million.

The most significant factors increasing the banking sector liquidity level in 2016, were NBP FX transactions involving the purchase of foreign currency from the Ministry of Finance. The surplus of foreign currency purchases over their sales by NBP in 2016 led to a rise of PLN 6,042 million in banking sector liquidity.

Liquidity was additionally boosted by the payment from the NBP profit to the state budget amounting to PLN 7,862 million.

NBP interest rates

The instrument of the key significance for the monetary policy implementation in 2016 was the NBP reference rate. By determining the yields on open market operations, this rate influenced the interest on short-term money market instruments, in particular unsecured interbank deposits.

The range of fluctuations of interbank overnight interest rates was determined by the NBP deposit and lombard rates.

² The liquidity surplus of the banking sector are the funds held by the banking sector in excess of the required reserve. Liquidity surplus is measured by the combined balance of the NBP open market operations and standing facility operations.

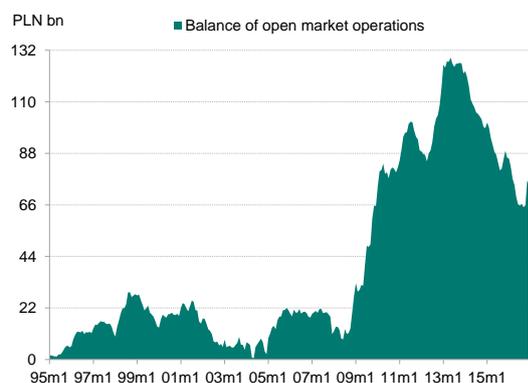
³ During the required reserve maintenance period.

Open market operations

In 2016, as in the previous year, the operational target of monetary policy was to keep the POLONIA rate running close to the NBP reference rate. This was achieved mainly by open market operations (main and fine-tuning ones), carried out on the initiative of the central bank. The central bank used these instruments to manage the liquidity of the banking sector. The implementation of the operational goal of monetary policy was supported by the required reserve system and the standing facilities offered by the central bank.

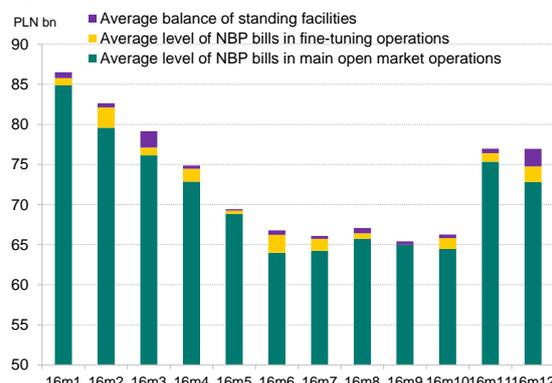
By using the main open market operations, the central bank affected the amount of liquidity in the banking sector. NBP strived to ensure balanced liquidity conditions in the sector throughout the entire required reserve maintenance period. At the same time, the yields on the individual operations, equal to the NBP reference rate at the date of the operation, had a direct impact on the cost of money determined in the interbank market (including the POLONIA rate).

Figure 1 Average monthly balance of open market operations in 1995-2016



Source: NBP data.

Figure 2 Liquidity absorbing instruments in the respective months of 2016



Source: NBP data.

In 2016, the main open market operations were carried out on a regular weekly basis, in the form of issuance of the NBP bills with a 7-day maturity. By using the main open market operations, the central bank sterilised the majority of the surplus liquidity in the banking sector. In 2016, the average volume of the NBP bills categorised as main open market operations amounted to PLN 71,175 million and was PLN 16,809 million lower than in 2015.

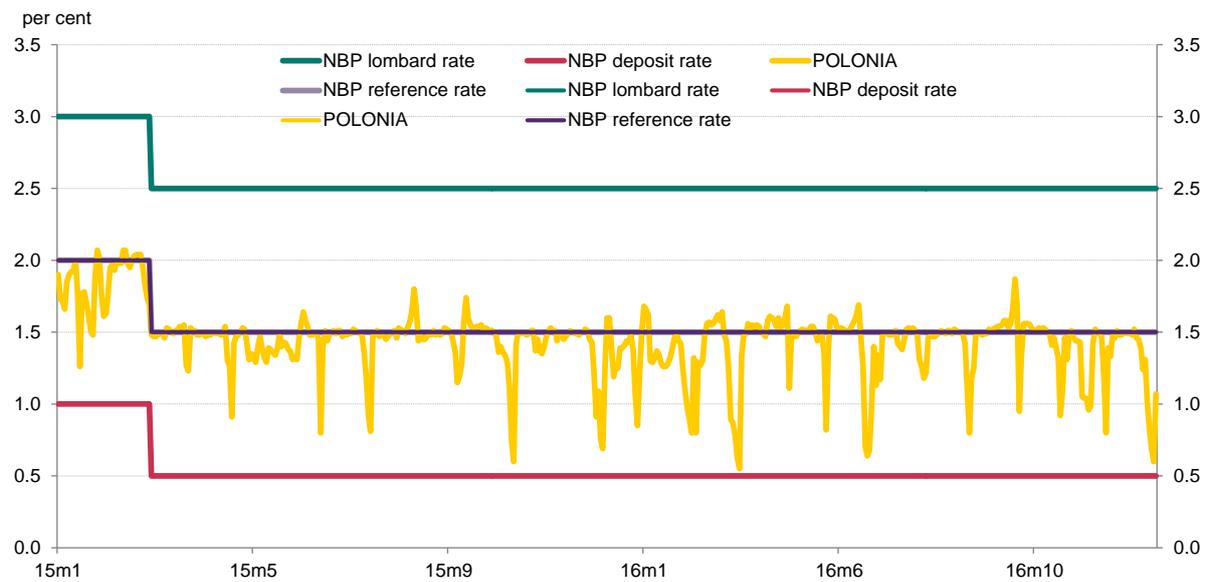
Apart from the main open market operations, in 2016, NBP also conducted fine-tuning open market operations, which played a complementary role in achieving the operational target of monetary policy. Fine-tuning operations were aimed to ensure that banks had a possibility to balance their liquidity positions throughout the reserve maintenance periods. Yields on these operations were equal to the NBP reference rate and they affected the price of money in the interbank market in a similar manner to the main operations.

In 2016, NBP carried out 11 fine-tuning operations on the last day of the required reserve maintenance period. In addition, NBP conducted four fine-tuning operations in the required reserve maintenance period. Within the framework of the fine-tuning operations, central bank issued the NBP bills with maturities of 1, 2, 3 and 4 days, i.e. shorter than in the case of the main operations. The average issue

of NBP fine-tuning operations amounted to PLN 1,263 million and exceeded the 2015 level by PLN 155 million.

The liquidity management by NBP enabled the banks to effectively balance their liquidity positions in the required reserve maintenance period as reflected in the highly successful implementation of the central bank's operational monetary policy target. The POLONIA rate was running close to the NBP reference rate in 2016. The average absolute spread between the POLONIA rate and the NBP reference rate was 16 bps in 2016, compared with 12 bps in 2015.⁴

Figure 3 NBP interest rates and the POLONIA rate in 2015-2016



Source: NBP data.

Reserve requirement

The system of required reserves supported the implementation of the operational target of monetary policy, thus contributing to the stability of short-term market interest rates. The averaged character of the required reserve system enabled entities to freely determine the amount of holdings at the central bank during the reserve maintenance period, provided that the average holdings at NBP in the reserve maintenance period were at least equal to the required reserve level. Moreover, the obligation to maintain the required reserve limited the scale of the NBP open market operations necessary to sterilise the excess liquidity prevailing in the banking sector in 2016.

In 2016, the following entities were subject to the reserve requirement: banks, branches of credit institutions, branches of foreign banks operating in Poland, credit unions and the National Association of Credit Unions.

⁴ The quoted index has been computed as the average absolute daily deviation of the POLONIA rate from the NBP reference rate (the average module of the differential) based on a 365-day year.

In 2016, the basic reserve requirement ratio amounted to 3.5% on all liabilities, except for funds received from the sale of securities in repo and sell-buy-back transactions, on which the reserve requirement ratio stood at 0.0%.

The amount of required reserves as of 31 December 2016 stood at PLN 40,033 million, including the required reserve of commercial banks of PLN 39,712 million (of which PLN 2,438 million were the required reserves of cooperative banks), and that of the National Association of Credit Unions of PLN 321 million. This represents an increase of PLN 2,918 million, or 7.86%, on the level recorded on 31 December 2015. The main factor responsible for the rise in the total amount of the required reserve holdings in 2016 were the rising deposits of the banking sector, on which the required reserve was calculated.

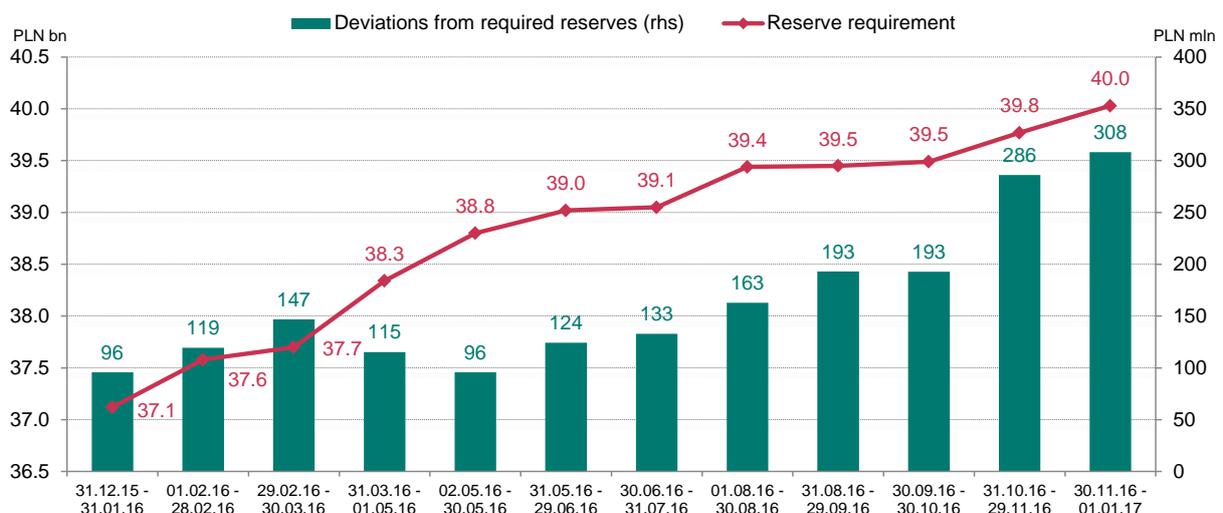
The remuneration on reserve balances in 2016 was equivalent to 0.9 of the NBP reference rate. This means that on average it was equal to 1.35%, compared with 1.43% in 2015.

In all the required reserve maintenance periods in 2016, entities' average holdings at NBP remained above the required level. The surplus ranged from the lowest point (of PLN 95.7 million) observed in January to a peak (of PLN 308.2 million) in December. The average funds in excess of the required reserves holdings in 2016 amounted to PLN 164.5 million and accounted for 0.42% of the average level of the required reserves.

Four instances of failure to maintain the required reserve level were observed in 2016, including two by commercial banks, one by a cooperative bank and one by a credit union. The reasons for these failures included miscalculations and technical problems related to internal computer systems of the relevant entities.

In 2016, the NBP Management Board exempted one cooperative bank, in which a restructuring procedure was in progress, from the obligation to maintain the required reserve.

Figure 4 Changes in required reserves level and deviations from the reserve requirement in 2016



Source: NBP data.

Standing facilities

Standing facilities (overnight deposit facility and lombard credit) acted as a tool for stabilising the level of liquidity in the interbank market and overnight rates. These operations were conducted at the initiative of banks. These entities used them to supplement their liquidity needs for the term of 1 day, or to place surplus funds with NBP for the same period.

The interest rate of lombard credit, setting the maximum price of borrowing money at NBP, determined the upper bound of overnight rate fluctuations in the interbank market. The overnight deposit rate, in turn, provided the floor for these fluctuations.

In 2016, like in previous years, banks used the lombard credit only occasionally. The total drawing on this credit in 2016 (set for the days of using this instrument) was PLN 1,349.5 million, compared to PLN 10.9 million in 2015. The average daily drawing on the lombard credit stood at PLN 3,667.2 thousand (compared with PLN 29.9 thousand in 2015).

In 2016, banks placed overnight deposits totalling PLN 284.2 billion at NBP (calculated for the period of their holding), i.e. 55.6% higher than in the previous year (PLN 182.5 billion). The total amount of overnight deposits fluctuated between PLN 40.0 million and PLN 17,052.5 million. In 2016 the average daily overnight deposit amounted to PLN 772.3 million, as against PLN 500.3 million in 2015. Banks deposited the highest amounts with NBP on the last days of the required reserve maintenance periods.

Foreign exchange swaps

By using a foreign exchange swap, NBP could purchase (or sell) the Polish zloty against foreign currency in the spot market, with a simultaneous sale (repurchase) in a fixed-date forward transaction.

In 2016, the central bank did not conclude any such transactions.

Foreign exchange interventions

Under the existing monetary policy strategy, NBP may purchase or sell foreign currency in the foreign currency market against the Polish zloty.

In 2016, the central bank did not conclude any such transactions.

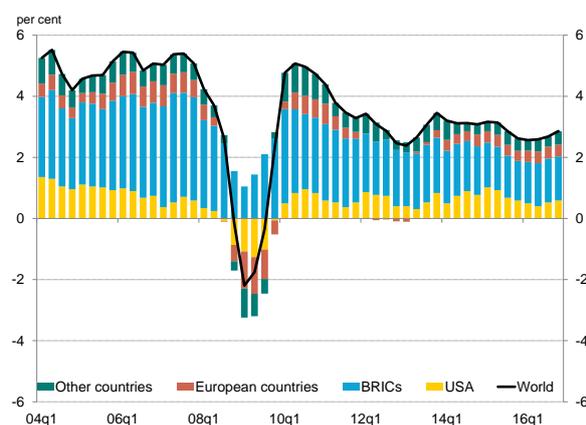
Appendix 1. Economic developments abroad

In 2016, economic growth continued at a moderate pace, with signs of recovery observed in the second half of the year (Figure 5). Price growth in the external environment of the Polish economy remained low and rose markedly only in late 2016.

In the euro area, Poland's main trading partner, GDP growth was stable in 2016 (Figure 6), driven primarily by expanding domestic demand, supported by improving labour market conditions. Growth in the euro area was also supported by expansionary monetary policy of the ECB, which was translating into better household and corporate financing conditions, as well as very low – or even negative – interest rates and government bond yields (Figure 9). However, over most of the year, GDP growth in the euro area was contained by weak increase in exports, related to the subdued global trade performance. In most Central and Eastern European economies, GDP growth was slightly slower than in previous years. This was mainly due to a fall in investment resulting from the completion of the 2007-2013 EU financial framework.

In the United States, favourable economic conditions continued in 2016, although GDP growth slowed down temporarily in the first half of the year, mostly on the back of lower activity in the shale oil extraction amid a decline in prices of this commodity as compared with previous years. In the largest emerging market economies, economic conditions were still weak. In China, GDP growth was expanding at a slower pace compared to previous years, yet it picked up somewhat in late 2016. In Russia, in turn, recession continued, although its scale was gradually diminishing (Figure 6).

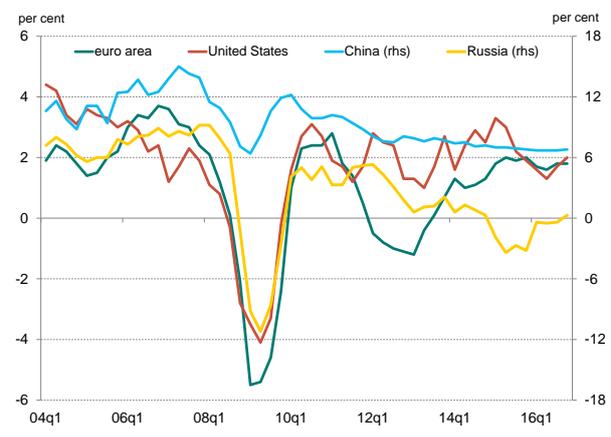
Figure 5 Annual global economic growth in 2004-2016 by country groups



Source: Bloomberg data, Eurostat, IMF, NBP calculations.

GDP-weighted average GDP growth in economies accounting for 80% of the global GDP (Australia, Brazil, Canada, China, France, Germany, India, Indonesia, Italy, Japan, Korea, Mexico, Russia, Switzerland, the United Kingdom and the United States).

Figure 6 Annual GDP growth in selected economies in 2004-2016

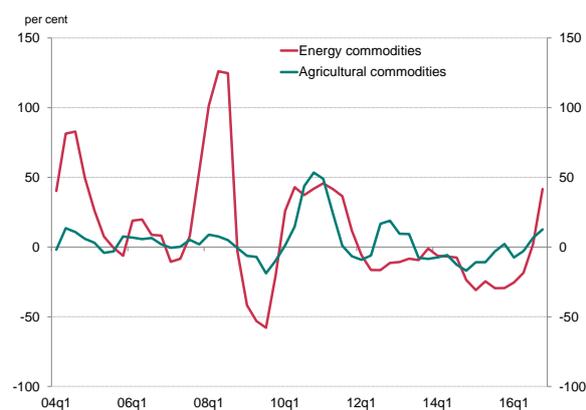


Source: Bloomberg data.

Commodity prices were significantly lower than in previous years, yet they grew steadily over the course of the year. As a result, the annual commodity price growth was negative in the first half of the

year, while in the second half it turned positive (Figure 7).⁵ These developments in commodity prices largely determined changes in global consumer price growth. In the first half of the year, deflation continued both in the euro area and Central and Eastern European economies. As prices of commodities, most notably oil, rose in the second half of the year, the annual consumer price growth in both the euro area and Central and Eastern European economies moved into a positive territory (Figure 8). At the same time, amid the persistently weak demand pressure, core inflation in the euro area and in Central and Eastern Europe continued to run markedly below its long-term average.

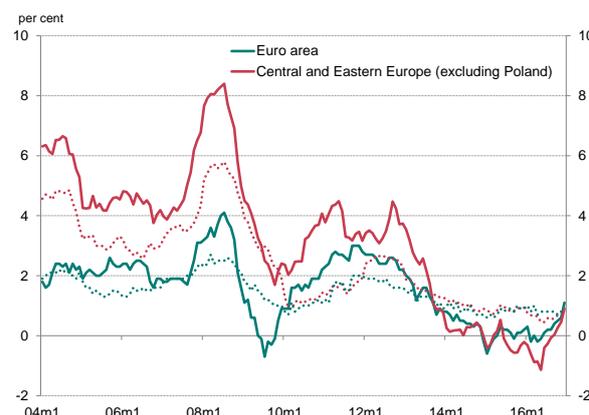
Figure 7 Annual growth in global energy and agricultural prices in USD in 2004-2016



Source: Bloomberg data, NBP calculations.

The agricultural commodity price index comprises the prices of wheat, colza, pork, potatoes, sugar, cocoa, coffee, skimmed powdered milk, butter and condensed frozen orange juice. The system of weights reflects the consumption structure of Polish households. The energy commodity price index comprises the prices of coal, oil and gas. The system of weights reflects the structure of primary energy carrier consumption in the Polish economy.

Figure 8 Annual consumer price growth in the environment of the Polish economy in 2004-2016



Source: Bloomberg data, NBP calculations.

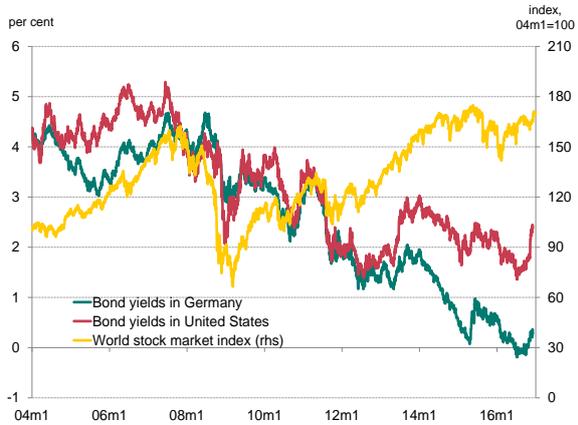
HICP and core inflation (HICP inflation excluding the prices of unprocessed food and energy, marked with dotted line). The indices for Central and Eastern Europe are the GDP-weighted averages for the following countries: Bulgaria, Croatia, the Czech Republic, Estonia, Hungary, Latvia, Lithuania, Romania, Slovakia and Slovenia.

Under these conditions, the ECB shifted towards a more expansionary monetary policy. In particular, in the first half of 2016, the ECB reduced its interest rates including the deposit rate to a more negative level. Moreover, it expanded its asset purchase programme with respect to its duration and scale. In the second half of the year, despite a rise in inflation in the euro area, the ECB once again prolonged the programme, yet reduced its monthly scale. At the same time, amid a slowdown of economic activity in the United States in the first half of 2016, the Fed was keeping its interest rates unchanged after raising them in December 2015. As economic conditions improved and inflation resumed to rise, the Fed increased its interest rates in December 2016, pointing to further tightening in the coming years.

Amid gradual improvement in economic conditions in some emerging market economies and in the United States, as well as highly expansionary monetary policies of most central banks, global stock indices rose somewhat in 2016 (Figure 9). At the same time, monetary policy tightening in the United States resulted in an increase in government bond yields, both in this country and several emerging market economies, as well as a depreciation of some emerging market currencies. However, rising commodity prices led to appreciation in exchange rates of the net commodity exporters (Figure 10).

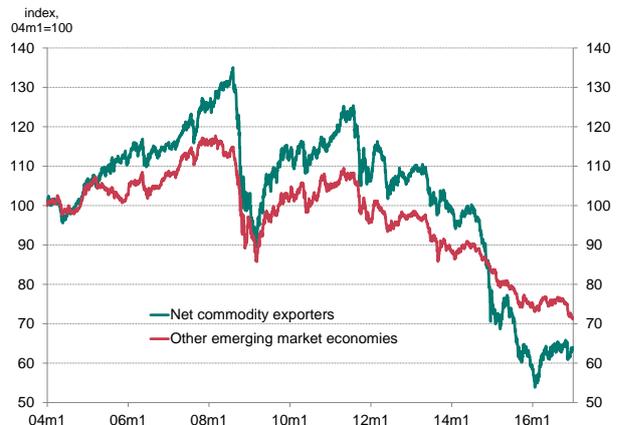
⁵ Between December 2015 and December 2016, oil prices rose by 41.2%, coal prices by 64.8%, gas prices by 10% and agricultural commodity prices by 10.8%. At the same time, the prices of oil, gas and agricultural commodities were lower than their 10-year averages by 35%, 25% and 13%, respectively.

Figure 9 10-year German and US government bond yields and the world stock market index in 2004-2016



Source: Bloomberg data, NBP calculations.
 The world stock market index denotes the MSCI (Morgan Stanley Capital International) World Index.

Figure 10 Exchange rates of emerging market currencies in 2004-2016

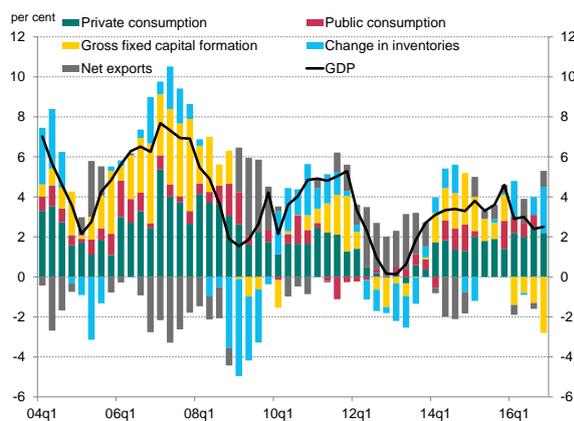


Source: Bloomberg and IMF data, NBP calculations.
 GDP-weighted indices of emerging market currencies against the US dollar. Net commodity exporters: Brazil, Chile, Colombia, Mexico, Peru, Russia and South Africa. Other emerging market economies: India, Indonesia, Hungary, Malaysia, the Philippines, Poland, Romania, Singapore, South Korea, Taiwan, Thailand, Turkey and Ukraine. Increase denotes appreciation.

Appendix 2. Gross domestic product

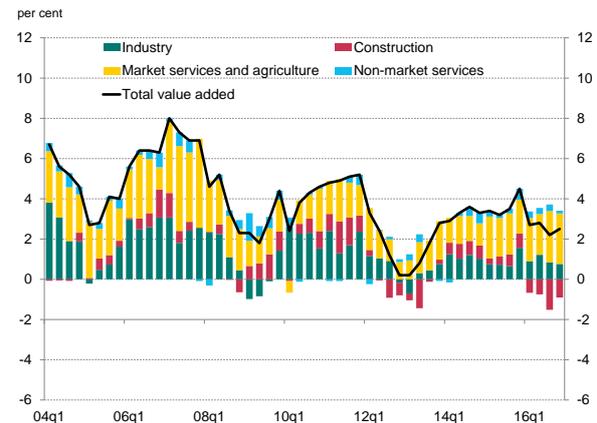
In 2016, real GDP growth amounted to 2.7%, compared to 3.8% a year earlier (Figure 11; Table 1). Consumer demand, rising stronger than in the previous year, was the main growth driver. The weaker GDP growth in 2016 mainly resulted from a decline in investment, which was related to the completion of the 2007-2013 EU financial framework. Despite the weakening, economic growth remained close to its potential rate.

Figure 11 Annual GDP growth and its components in 2004-2016



Source: GUS data

Figure 12 Annual value added growth and its components in 2004-2016



Source: GUS data, NBP calculations.

Market services and agriculture cover categories A and G-N of PKD classification (Polish equivalent of NACE): agriculture, trade, transportation, accommodation and food services, information and communication, financial and insurance activities, real estate activities, professional, scientific and technical activities, administrative and support service activities.

Non-market services comprise categories O, P and Q of PKD classification: public administration and defence, compulsory social security, education, human health and social work activities.

Higher private consumption growth in 2016 was in large part accounted for by improving labour market conditions, reflected in increases in wages and employment, and the launch of child benefit payments under the "Family 500 plus" programme. Consumption growth also benefited from rising consumer sentiment and interest on loans lower than in previous years.

Like in other Central and Eastern European economies (see also Appendix 1 *Economic developments abroad*), the decline in gross fixed capital formation primarily resulted from a temporary fall in the absorption of EU funds after the completion of the 2007-2013 EU financial framework.

As the inflow of EU funds subsided, public and corporate investment diminished. This was, however, accompanied by a rise in housing investment, driven by increasing disposable income of households, high availability of credit, and lending rates lower than in previous years.

In 2016, the contribution of net exports to GDP growth was slightly positive, although smaller than a year before, as import growth exceeded that of export. The acceleration in import growth was related to higher consumer demand growth. In turn, steeper export growth was supported by stable economic activity in the euro area and rising price competitiveness of Polish products due to the zloty being weaker than a year earlier.

Decomposition of the gross value added growth by sectors of the economy indicates that rising activity in services was the main driver of economic growth in 2016. Industry also contributed positively to value added growth, while value added in construction decreased (Figure 12; Table 1).

Table 1 GDP and its components in 2008-2016

	2016		2008	2009	2010	2011	2012	2013	2014	2015	2016				
	Current prices (PLN billion)	per cent of GDP	Annual growth at the previous year prices (in per cent)												
			Q1	Q2	Q3	Q4									
GDP	1851.2	100.0	4.2	2.8	3.7	5.0	1.6	1.4	3.3	3.8	2.7	2.9	3.0	2.4	2.5
Domestic demand	1779.3	96.1	5.4	-0.1	4.2	4.2	-0.5	-0.6	4.7	3.3	2.4	3.5	1.9	2.7	1.7
Consumption	1416.4	76.5	6.2	3.6	2.8	2.0	0.5	0.8	2.8	2.8	3.6	3.6	3.5	4.0	3.1
Private consumption	1072.3	57.9	6.8	3.6	2.5	3.3	0.8	0.3	2.6	3.0	3.8	3.4	3.4	4.1	4.5
Capital formation	362.8	19.6	2.7	-12.6	9.7	12.8	-3.9	-5.8	12.8	4.9	-1.8	2.9	-5.0	-2.2	-1.6
Gross fixed capital formation	334.3	18.1	8.8	-2.7	-0.4	8.8	-1.8	-1.1	10.0	6.1	-7.9	-9.8	-4.5	-6.7	-9.8
Exports	967.8	52.3	7.1	-5.9	12.9	7.9	4.6	6.1	6.7	7.7	9.0	7.1	11.8	7.8	9.3
Imports	895.9	48.4	9.5	-12.4	14.0	5.5	-0.3	1.7	10.0	6.6	8.9	8.7	10.1	8.7	8.2
Value added	1637.5	88.5	4.2	3.1	3.5	5.0	1.7	1.5	3.3	3.7	2.6	2.7	2.8	2.2	2.5
Industry	433.6	23.4	6.3	0.3	8.4	7.9	2.8	0.9	4.5	3.8	3.6	3.2	5.0	3.6	2.7
Construction	112.3	6.1	2.5	10.1	4.9	13.5	-4.0	-5.0	9.0	6.4	-12.0	-12.7	-9.6	-16.7	-9.6
Market services and agriculture	851.3	46.0	3.3	2.6	2.1	3.5	2.2	3.2	2.5	3.7	4.6	4.3	3.8	4.8	5.3
Non-market services	240.2	13.0	3.1	5.3	-0.3	1.1	0.1	0.9	1.7	2.0	1.8	2.0	2.2	2.3	0.9
Contribution to GDP growth at the previous year prices (in percentage points)															
Domestic demand	-	-	5.5	-0.3	4.3	4.3	-0.5	-0.6	4.7	3.2	2.4	3.4	1.8	2.7	1.7
Consumption	-	-	4.9	2.9	2.3	1.6	0.4	0.6	2.2	2.2	2.8	3.0	2.7	3.1	2.2
Private consumption	-	-	4.1	2.2	1.7	2.0	0.5	0.2	1.5	1.8	2.3	2.2	2.0	2.5	2.2
Capital formation	-	-	0.6	-3.0	1.9	2.7	-0.9	-1.2	2.5	1.0	-0.4	0.4	-0.9	-0.4	-0.5
Gross fixed capital formation	-	-	1.9	-0.6	0.0	1.8	-0.4	-0.2	1.9	1.2	-1.6	-1.4	-0.8	-1.3	-2.8
Net exports	-	-	-1.3	3.2	-0.5	0.9	2.1	2.0	-1.4	0.6	0.3	-0.5	1.2	-0.3	0.8
Industry	-	-	1.5	-0.1	2.1	1.9	0.4	0.1	1.2	1.0	0.9	0.9	1.2	0.8	0.8
Construction	-	-	-0.1	0.9	0.5	0.8	-0.2	-0.4	0.7	0.5	-1.0	-0.7	-0.7	-1.5	-0.9
Market services and agriculture	-	-	2.2	1.4	1.0	1.4	1.4	1.4	1.2	1.9	2.4	2.1	2.0	2.5	2.5
Non-market services	-	-	0.2	0.7	0.1	0.1	0.0	0.1	0.3	0.3	0.3	0.3	0.3	0.3	0.1

Source: GUS data, NBP calculations.

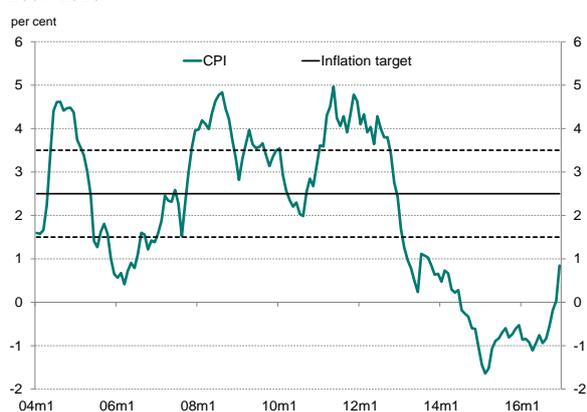
Market services and agriculture cover categories A and G-N of PKD classification (Polish equivalent of NACE): agriculture, trade, transportation, accommodation and food service activities, information and communication, financial and insurance activities, real estate activities, professional, scientific and technical activities, administrative and support service activities.

Non-market services comprise categories O, P and Q of PKD classification: public administration and defence, compulsory social security, education, human health and social work activities.

Appendix 3. Consumer prices

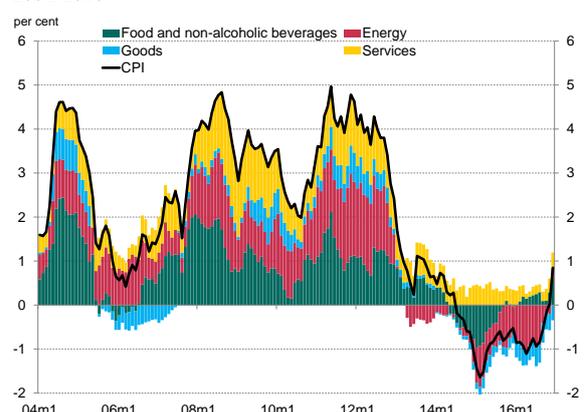
Average consumer price growth stood at -0.6% in 2016 (as compared with -0.9% a year before), turning positive at the end of the year (Figure 13; Table 2).

Figure 13 Annual growth in CPI and the inflation target in 2004-2016



Source: GUS data.

Figure 14 Consumer price growth and its components in 2004-2016



Source: GUS data, NBP calculations.

In 2016, price developments in Poland, like in other European economies, were determined primarily by changes in global energy commodity prices (Figure 14). In the first half of the year, these prices were lower than in previous years, and hence their annual growth was negative (see Appendix 1 *Economic developments abroad*), while in the second half of the year they rebounded. This was reflected in a gradual acceleration in energy price growth, which, however, turned positive only at the end of the year. Energy price growth was contained by reductions in the regulated natural gas and electrical energy prices charged to households,⁶ as well as lower prices of heating fuels.

Lower energy prices translated also into weaker cost pressure, which, together with low inflation abroad, contained prices of goods, which were falling throughout the entire 2016, dampening the overall price growth in Poland. At the same time, prices of goods were supported by weaker zloty exchange rate in relation to the previous year.

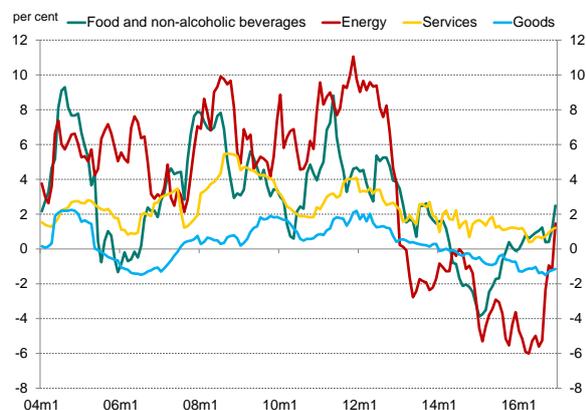
Prices of food and services were rising over the entire year, thereby adding to higher annual CPI growth compared to a year before (Figure 14, Figure 15). Over most of the year, the rise in food prices resulted from an increase in global prices of many agricultural commodities (i.a. the prices of pork, dairy products, sugar, coffee, citrus fruit, and, towards the end of the year, also vegetables). In addition, food prices were under influence of domestic factors. Above all, lower vegetable and fruit supply at home due to drought in 2015 put an upward pressure on the prices of these goods in the first half of 2016. In addition, reduced headcount of livestock, caused by low profitability of production, triggered a steeper growth in meat and dairy product prices.

In turn, the rise in prices of services was attributable to the acceleration in consumption growth. It was supported by a rise in employment and wages, disbursement of child benefits under the "Family 500

⁶ Energy tariffs were reduced in January 2016, and natural gas tariffs – in January, April and July.

plus" programme, as well as strong consumer sentiment and a stable rise in lending. Higher prices of services also resulted from an increase in home maintenance charges and a rise in the insurance of motor vehicles.

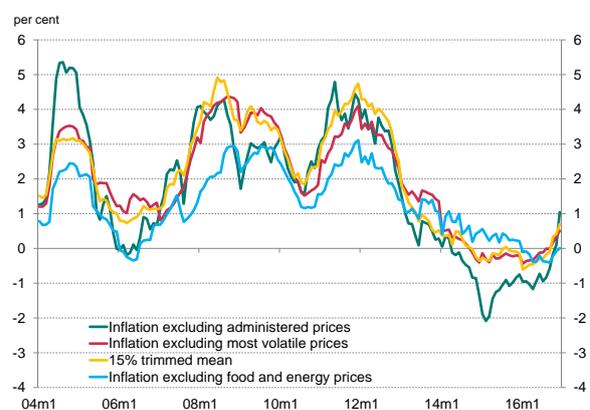
Figure 15 Annual growth in the prices of food and non-alcoholic beverages, energy, goods and services in 2004-2016



Source: GUS data, NBP calculations.

The category of energy comprises energy products (electricity, gas and heating fuel), as well as engine fuels (for private means of transport). The category of goods excludes food, non-alcoholic beverages and energy.

Figure 16 Core inflation indices in 2004-2016 (y/y)



Source: GUS data, NBP calculations.

Table 2 Annual growth in consumer goods and services prices and contribution of main price categories to CPI growth

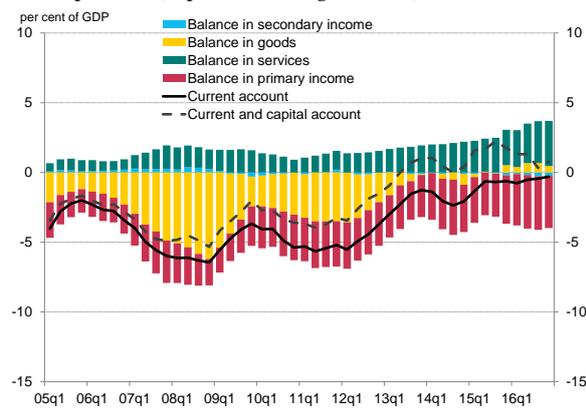
	Weights 2016, per cent	Change (y/y, per cent) 2016												Annual average
		I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII	
CPI	100.0	-0.9	-0.8	-0.9	-1.1	-0.9	-0.8	-0.9	-0.8	-0.5	-0.2	0.0	0.8	-0.6
Core inflation	58.9	-0.1	-0.1	-0.2	-0.4	-0.4	-0.2	-0.4	-0.4	-0.4	-0.2	-0.1	0.0	-0.2
Goods	30.2	-1.3	-1.3	-1.2	-1.1	-1.1	-1.0	-1.4	-1.3	-1.5	-1.3	-1.2	-1.1	-1.2
Services	28.6	1.2	1.2	0.9	0.4	0.4	0.7	0.7	0.6	0.7	0.9	1.1	1.2	0.8
Food and non-alcoholic beverages	24.0	0.0	0.4	0.8	0.6	0.8	0.9	1.0	1.2	0.4	0.4	1.2	2.5	0.8
Processed	13.1	-1.0	-0.7	-0.6	-0.5	-0.4	-0.2	-0.1	0.3	0.6	1.2	1.7	2.1	0.2
Unprocessed	11.0	1.2	1.6	2.4	1.9	2.1	2.2	2.4	2.3	0.1	-0.5	0.5	2.9	1.6
Meat	6.3	-2.0	-2.1	-1.9	-2.1	-1.0	-0.6	0.7	1.3	1.2	1.6	2.3	3.1	0.0
Vegetables	2.4	5.2	4.4	6.9	7.9	10.1	7.9	5.2	2.8	-5.7	-7.5	-5.6	0.9	2.8
Fruit	1.4	9.3	13.6	14.5	8.6	1.9	4.1	4.6	4.6	2.3	-1.1	0.4	4.1	5.5
Energy	17.1	-4.7	-5.2	-5.9	-6.0	-5.3	-5.0	-5.6	-5.3	-2.4	-0.9	-1.2	1.5	-3.9
Energy carriers	12.0	-2.5	-2.7	-2.7	-3.3	-3.3	-3.2	-3.1	-3.1	-2.3	-2.1	-2.0	-1.6	-2.6
Fuels	5.1	-9.8	-11.3	-13.4	-12.3	-9.9	-9.0	-11.1	-10.2	-2.5	1.8	0.7	8.9	-6.7
According to COICOP														
Food and non-alcoholic beverages	24.0	0.0	0.4	0.8	0.6	0.8	0.9	1.0	1.2	0.4	0.4	1.2	2.5	0.8
Alcoholic beverages and tobacco products	6.6	0.9	0.6	0.3	0.5	0.6	0.5	0.6	0.6	0.6	0.8	0.9	1.0	0.7
Clothing and footwear	5.5	-4.6	-4.5	-3.5	-3.9	-4.3	-4.1	-4.7	-4.8	-4.9	-4.6	-4.7	-4.7	-4.4
Home maintenance and energy carriers	21.0	-0.6	-0.6	-0.7	-1.0	-1.1	-1.0	-1.0	-1.0	-0.5	-0.4	-0.4	-0.1	-0.7
Home equipment and household maintenance	5.0	-0.5	-0.4	-0.6	-0.2	-0.2	-0.2	0.0	0.2	0.2	0.4	0.0	0.3	-0.1
Health	5.4	0.1	0.0	-0.1	0.1	0.3	0.4	-1.2	-1.4	-2.1	-2.1	-1.8	-1.6	-0.8
Transportation	8.7	-6.4	-7.3	-8.4	-8.0	-6.8	-6.0	-7.1	-6.9	-2.5	0.3	-0.2	4.3	-4.6
Telecommunications	5.3	-0.2	0.0	-0.3	-1.6	-1.1	-0.4	-1.4	-1.4	-1.2	-0.8	-0.7	-0.7	-0.8
Recreation and culture	6.6	-0.7	-0.5	-2.0	-2.9	-3.1	-3.0	-2.3	-2.3	-2.1	-1.8	-1.2	-0.8	-1.9
Education	1.0	0.8	0.8	0.8	0.8	0.8	0.8	0.7	0.7	0.9	0.7	0.7	0.7	0.8
Restaurants and hotels	5.0	1.1	1.2	1.2	1.2	1.3	1.3	1.3	1.4	1.7	1.7	1.6	1.6	1.4
Other goods and services	5.8	0.3	0.3	0.6	0.9	1.3	1.7	1.7	2.0	1.8	2.4	3.0	2.9	1.6
Contribution to CPI growth (in percentage points)														
	Weights 2016, per cent	Change (y/y, per cent) 2016												Annual average
CPI	100.0	-0.9	-0.8	-0.9	-1.1	-0.9	-0.8	-0.9	-0.8	-0.5	-0.2	0.0	0.8	-0.6
Core inflation	58.9	-0.1	0.0	-0.1	-0.2	-0.2	-0.1	-0.2	-0.2	-0.2	-0.1	0.0	0.0	-0.1
Goods	30.2	-0.4	-0.4	-0.4	-0.3	-0.3	-0.3	-0.4	-0.4	-0.5	-0.4	-0.4	-0.3	-0.4
Services	28.6	0.3	0.3	0.3	0.1	0.1	0.2	0.2	0.2	0.2	0.3	0.3	0.4	0.2
Food and non-alcoholic beverages	24.0	0.0	0.1	0.2	0.1	0.2	0.2	0.2	0.3	0.1	0.1	0.3	0.6	0.2
Processed	13.1	-0.1	-0.1	-0.1	-0.1	0.0	0.0	0.0	0.0	0.1	0.2	0.2	0.3	0.0
Unprocessed	11.0	0.1	0.2	0.3	0.2	0.2	0.2	0.3	0.3	0.0	-0.1	0.1	0.3	0.2
Meat	6.3	-0.1	-0.1	-0.1	-0.1	-0.1	0.0	0.0	0.1	0.1	0.1	0.1	0.2	0.0
Vegetables	2.4	0.1	0.1	0.2	0.2	0.2	0.2	0.1	0.1	-0.1	-0.2	-0.1	0.0	0.1
Fruit	1.4	0.1	0.2	0.2	0.1	0.0	0.1	0.1	0.1	0.0	0.0	0.0	0.1	0.1
Energy	17.1	-0.8	-0.9	-1.0	-1.0	-0.9	-0.9	-1.0	-0.9	-0.4	-0.2	-0.2	0.2	-0.7
Energy carriers	12.0	-0.3	-0.3	-0.3	-0.4	-0.4	-0.4	-0.4	-0.4	-0.3	-0.2	-0.2	-0.2	-0.3
Fuels	5.1	-0.5	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.5	-0.1	0.1	0.0	0.4	-0.3
According to COICOP														
Food and non-alcoholic beverages	24.0	0.0	0.1	0.2	0.1	0.2	0.2	0.2	0.3	0.1	0.1	0.3	0.6	0.2
Alcoholic beverages and tobacco products	6.6	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.0
Clothing and footwear	5.5	-0.3	-0.2	-0.2	-0.2	-0.2	-0.2	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3	-0.2
Home maintenance and energy	21.0	-0.1	-0.1	-0.1	-0.2	-0.2	-0.2	-0.2	-0.2	-0.1	-0.1	-0.1	0.0	-0.1
Home equipment and household maintenance	5.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Health	5.4	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	0.0
Transportation	8.7	-0.6	-0.6	-0.7	-0.7	-0.6	-0.5	-0.6	-0.6	-0.2	0.0	0.0	0.4	-0.4
Telecommunications	5.3	0.0	0.0	0.0	-0.1	-0.1	0.0	-0.1	-0.1	-0.1	0.0	0.0	0.0	0.0
Recreation and culture	6.6	0.0	0.0	-0.1	-0.2	-0.2	-0.2	-0.2	-0.2	-0.1	-0.1	-0.1	-0.1	-0.1
Education	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Restaurants and hotels	5.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Other goods and services	5.8	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.1

Source: GUS data and NBP calculations based on GUS data.

Appendix 4. Balance of payments

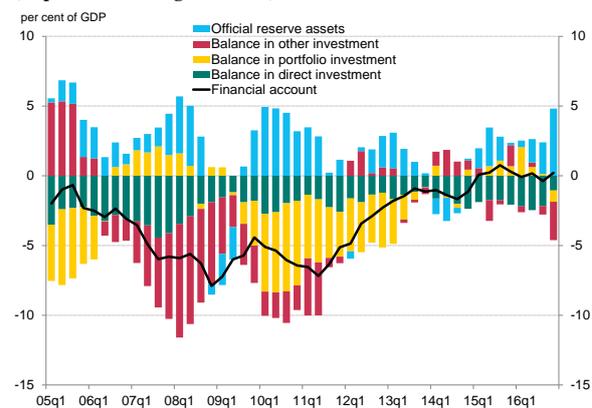
In 2016, current account deficit in Poland reached a record low of 0.3% of GDP (compared with 0.6% in 2015 and 3.5%, on average, during the years 2004-2016, Figure 17, Figure 18). The deficit resulted mainly from a deficit on income, while it was contained by a trade surplus increase stemming mainly from a higher surplus on trade in services.

Figure 17 Current and capital account balance and its decomposition (4 quarters rolling window) in 2005-2016



Source: NBP and GUS data.

Figure 18 Financial account balance and its decomposition (4 quarters rolling window) in 2005-2016



Source: NBP and GUS data.

The surplus on trade in goods and services was supported by stable economic growth in the neighbouring economies, especially in the euro area, as well as improving price competitiveness of Polish products, both conducive to higher exports. This notwithstanding, in the second half of 2016, the surplus in goods declined compared to the corresponding period of 2015 on the back of higher crude oil prices and a temporary slowdown in exports in 2016 Q3 related to weaker activity in the global industry.

Like in previous years, current account balance was contained by a relatively high primary income deficit and a slight secondary income deficit. The primary income deficit was mainly attributable to high income of foreign direct investors resulting from good financial standing of foreign companies operating in Poland and high income of non-residents on portfolio investment.

In 2016, the capital account surplus declined, yet remained positive (at 1.1% of GDP against 2.4% in 2015). Lower capital account surplus, particularly in 2016 Q2 and Q3, was a result of a lower inflow of EU funds following the completion of EU 2007-2013 financial framework, accompanied with virtually no inflow of funds from 2014-2020 framework. As the inflow of funds under the current financial framework picked up in 2016 Q4, the capital account surplus resumed to rise, reaching a level comparable to previous years.

Table 3 Main items of the balance of payments (PLN million) in 2008-2016⁷

Balance of payments	2008	2009	2010	2011	2012	2013	2014	2015	2016
Current account	-85,780	-54,261	-77,770	-81,497	-60,477	-21,039	-35,655	-11,232	-5,501
Balance of trade in goods	-82,538	-33,187	-43,677	-54,790	-34,128	-1,345	-13,633	9,326	8,536
Balance of services	17,983	21,715	13,174	21,073	25,145	32,070	37,922	45,625	59,785
Balance of primary income	-24,209	-38,603	-47,108	-50,914	-50,874	-50,016	-58,369	-62,553	-69,189
Balance of secondary income	2,984	-4,186	-159	3,134	-620	-1,748	-1,575	-3,630	-4,633
Capital account	14,241	22,097	25,705	30,618	35,711	37,857	41,990	42,510	19,700
Financial account	-100,814	-60,189	-92,927	-80,229	-37,275	-18,673	-19,558	5,332	3,883
Direct investment: assets	10,027	19,262	28,075	12,944	4,237	-10,502	21,297	15,702	36,772
Direct investment: liabilities	34,131	43,754	53,939	53,575	23,929	2,809	62,025	52,997	56,178
Portfolio investment: assets	-6,017	4,270	-488	-2,796	1,395	6,891	17,603	41,781	-24,524
Portfolio investment: liabilities	-14,023	47,935	87,130	47,426	65,455	7,289	9,964	29,457	-9,486
Other investment: assets	-15,369	-17,026	11,878	11,060	7,179	5,286	12,751	20,146	8,894
Other investment: liabilities	62,174	25,254	39,230	18,944	-11,669	11,064	1,098	-10,592	60,455
Derivative financial instruments	2,727	5,850	1,789	525	-8,942	-2,200	-62	-3,551	620
Official reserve assets	-9,900	44,398	46,118	17,983	36,571	3,014	1,940	3,116	89,268
Balance of errors and omissions	-29,275	-28,025	-40,862	-29,350	-12,509	-35,491	-25,893	-25,946	-10,316

Source: NBP data.

The capital account surplus in 2016, though lower than in previous years, was higher than the current account deficit. As a result, the total current and capital account balance remained positive, which was reflected in positive financial account balance and narrowing in Poland's negative net investment position. The financial account surplus resulted mainly from an increase in NBP foreign exchange reserves,⁸ which translated into a rise in Polish foreign assets. Another factor supportive of financial account surplus was higher inflow of foreign direct investment, mostly reinvestment of profits gained in Poland, reflected in a rise in foreign liabilities.

As a result of the abovementioned changes, Poland's external imbalance indicators were still favourable. In particular, both the balance of trade in goods and the current account balance in relation to GDP remained at record highs (Table 4).

Table 4 Selected external stability indicators in 2005-2016

	2008	2009	2010	2011	2012	2013	2014	2015	2016
Current account balance/GDP (per cent)	-6.7	-4.0	-5.4	-5.2	-3.7	-1.3	-2.1	-0.6	-0.3
Current and capital account balance/GDP (per cent)	-5.6	-2.4	-3.6	-3.2	-1.5	1.0	0.4	1.7	0.8
Balance of trade in goods and services/GDP (per cent)	-5.1	-0.8	-2.1	-2.2	-0.6	1.9	1.4	3.1	3.7
Official reserve assets in terms of monthly imports of goods and services	4.0	5.2	5.5	5.7	5.5	5.2	5.3	5.3	6.4
Foreign debt/GDP (per cent)	56.8	58.7	65.5	70.8	70.2	69.8	72.7	71.6	75.8
Net international investment position /GDP (per cent)	-56.0	-57.8	-65.1	-62.4	-65.4	-69.0	-69.1	-62.5	-62.0

Source: NBP calculations based on GUS and NBP data.

⁷ With regard to the financial account, the presented figures should be interpreted as follows: a positive (negative) value of residents' investment abroad (items: direct investment: assets, portfolio investment: assets, other investment: assets, official reserve assets) denotes an increase (decrease) in Polish assets abroad. Conversely, a positive (negative) value of non-residents' investment in Poland (items: direct investment: liabilities, portfolio investment: liabilities, other investment: liabilities) means an increase (decrease) in Polish liabilities against non-residents.

⁸ The increase in NBP foreign exchange reserves was accompanied by an increase in NBP liabilities in the form of other investment. These changes resulted to a large extent from the repo transactions carried out by NBP in managing foreign exchange reserves.

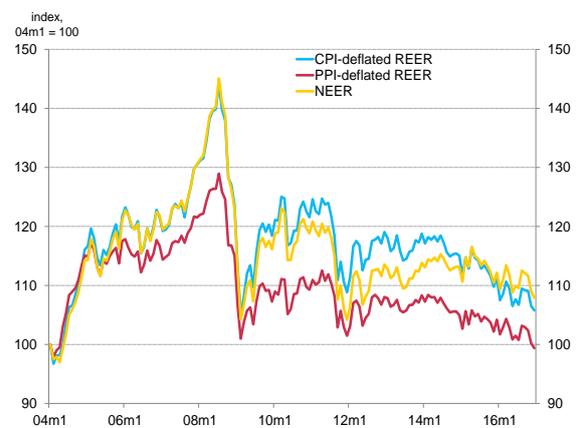
In 2016, the nominal effective exchange rate was weaker than in 2015 (Figure 20), which supported the price competitiveness of Polish exports, and hence the surplus in Polish foreign trade, as well as contributed to the increase in consumer price growth by propping up import prices. The exchange rate was driven largely by external factors. Depreciation of the exchange rate in the first half of 2016 resulted mainly from uncertainty about the global economic outlook, yet, at the same time, it was contained by anticipated further monetary policy easing by the ECB. In the second half of the year, the weakening of the nominal effective exchange rate of the zloty was mainly driven by expected interest rate increases in the United States, which translated into higher government bond yields in the United States, as well as an appreciation of the US dollar (Figure 19).

Figure 19 Nominal effective zloty exchange rate against major currencies in 2004-2016



Source: Bloomberg data.
Increase denotes appreciation.

Figure 20 Real and nominal effective exchange rate in 2004-2016

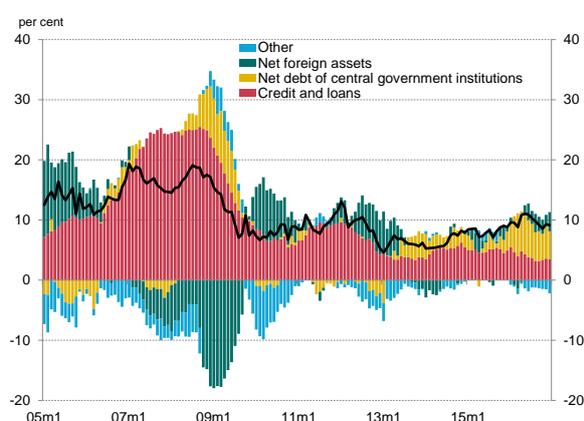


Source: Eurostat, OECD, Reuters data, NBP calculations.
Increase denotes appreciation.

Appendix 5. Money and credit

In 2016, M3 aggregate growth rate was higher than in the previous year (9.7% y/y and 8.2% y/y, respectively⁹). It was underpinned by a rise in deposits, particularly current deposits, as well as cash. The main source of broad money creation in 2016 was faster growth in central government liabilities with commercial banks (37.7% y/y against 10.0% y/y in 2015, Figure 21).¹⁰ Lending to the remaining sectors of the economy, above all to households and enterprises, continued to rise steadily (by 4.3% y/y¹¹ against 5.2% y/y in the previous year, Figure 22).

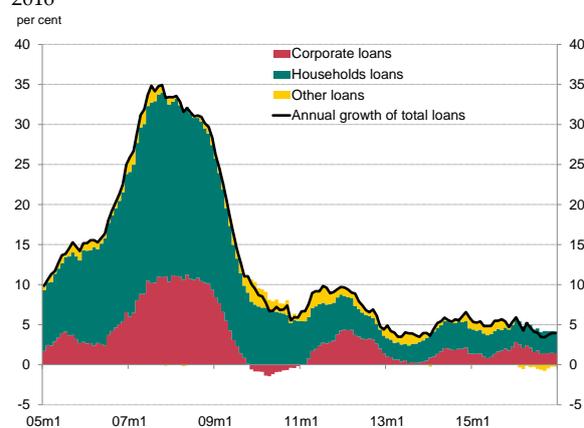
Figure 21 Annual growth rate of M3 aggregate and contribution of the main components in 2005-2016



Source: NBP data.

The category *Other* covers: (i) receivables of monetary financial institutions arising from debt and equity securities; (ii) fixed assets (excluding financial assets); and (iii) financial liabilities with a maturity of over two years, which are not included in the M3 aggregate and for this reason – in order to ensure comparability – are included in the statistics of the main components of money creation with a minus sign.

Figure 22 Annual growth rate of loans to the non-monetary sector and contribution of the main components in 2005-2016



Source: NBP data.

The category *Other loans* covers non-monetary financial institutions, non-profit institutions serving households, local government units and social security funds.

Lending to households in 2016 continued to grow at a stable pace, mainly fuelled by the slightly faster growth in consumer loans and the steady growth in housing loans, despite a tightening in lending terms and conditions in case of the latter (Figure 23).^{12, 13, 14} Lending growth to this sector was supported by improving financial standing of households related to favourable labour market

⁹ The growth rates discussed in this appendix refer to the average annual changes in transactions settled in a given period.

¹⁰ The increased banking sector holdings of government securities can be partially attributed to the Act of 15 January 2016 on tax on certain financial institutions, which came into force in February 2016 and which excludes government bonds from the tax base.

¹¹ The sector of non-monetary entities comprises households, non-monetary financial institutions, non-financial corporations, enterprises, non-profit institutions serving households, local government units and social security funds.

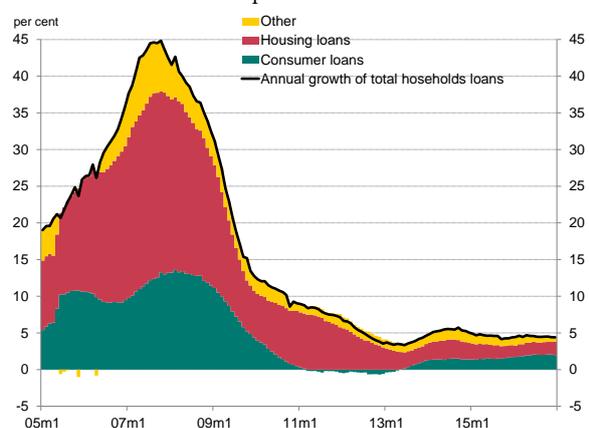
¹² In line with the requirements of Recommendation S of the Polish Financial Supervision Authority, in recent years banks have been obliged to reduce each year the loan value to real estate value ratio (LtV ratio). In 2016, this ratio was lowered to 85% against 90% in 2015.

¹³ The average growth rate of consumer loans in 2016 stood at 8.2% y/y against 6.3% y/y in the previous year, while that of housing loans was 2.8% y/y and 3.1% y/y, respectively. As in the previous year, in 2016 the zloty-denominated housing loans were growing at a rapid pace (of 10.6% y/y against 10.8% y/y in 2015), while foreign currency-denominated loans were declining (at a rate of -6.5% y/y in both 2015 and 2016)

¹⁴ In 2016, lending to the households was fuelled by the “Flat for the Young” programme, though its positive impact was observed in the first half of the year only. Due to the depletion of the funds allocated for 2016, the allocation of funds planned for 2017 began already in 2016 Q1. These funds were, however, used up in early 2016, thus in the second half of the year, the programme was no longer supporting mortgage lending activity.

conditions and the child benefit payments. Another factors supportive of these loans included relatively low interest rates,¹⁵ as well as, particularly in the case of consumer loans, eased lending conditions.

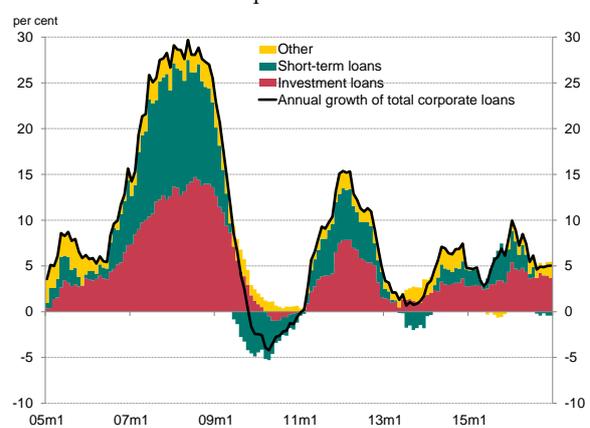
Figure 23 Annual growth rate of household loans and contribution of main components in 2005-2016



Source: NBP data.

The category Other covers operating and investment loans to small enterprises.

Figure 24 Annual growth rate of corporate loans and contribution of main components in 2005-2016



Source: NBP data.

The category Other covers, among others, loans for the purchase of securities or export loans.

Another significant source of lending growth in 2016 were corporate loans (Figure 24),^{16,17} propped up predominantly by a rise in investment loans that was higher than in 2015, despite relatively low investment activity of firms in 2016. The rise in investment loans could be attributed to high availability of corporate loans and relatively low interest on these loans. At the same time, high financial liquidity of enterprises and tighter lending terms and conditions, primarily with respect to non-interest costs of credit, increased the propensity of enterprises to finance their current activity with own funds.¹⁸ These factors contained short-term lending, which slowed down significantly in 2016, and even turned negative in the second half of the year.

¹⁵ The interest rates on consumer loans to households averaged 7.9% in 2016 compared to 8.6% in the previous year. In turn, the average interest rate on housing loans did not change compared to the previous year and stood at 4.4%.

¹⁶ The average annual growth rate of corporate loans in 2016 amounted to 6.5% y/y against 5.1% y/y in the previous year. Corporate investment loans grew at a steady average rate of 8.2% y/y against 6.0% y/y in 2015, while short-term loans rose by 2.6% y/y and 5.2% y/y respectively.

¹⁷ The higher growth of corporate loans compared with the previous year may in part result from the one-off transaction made by one entity at the beginning of 2016, which involved conversion of its foreign debt into domestic debt, amounting to PLN 3.2 billion. This transaction accounted for approximately 18% of the total annual growth of corporate debt due to investment loans. The fading of its effects at the beginning of 2017 was reflected in lower growth in this category of loans.

¹⁸ This is indicated, among others, by the gradually declining percentage of enterprises applying for loans.

Appendix 6. Minutes of the Monetary Policy Council decision-making meetings

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%.

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

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

When discussing economic activity abroad, the Council members recognized that global economic activity remained moderate and that the uncertainty about its outlook had recently increased. It was noted that in the major advanced economies, i.e. in the United States and the euro area, consumer expenditure growth remained stable, as labour market conditions continued to improve. It was pointed out, however, that GDP growth in both economies was constrained by low investment growth and a slowdown in exports. It was underlined that slower export growth, particularly in the case of the euro area, resulted from weaker conditions in the major emerging market economies, particularly China. It was added that conditions in global industry were very volatile and

deteriorating. Exports had weakened also in Germany, and – in association with this – conditions in German industry had ebbed. This might be conducive to lower growth in Polish exports and industrial production, as Polish and German industries cooperate closely within global supply chains. At the same time, it was stressed that in spite of weaker exports, German economy continued to recover, supported by ongoing domestic demand growth, partly stimulated by increased public expenditures.

The Council members judged that the uncertainty about the global economic outlook had particularly increased in recent months. This uncertainty results from the risk of a stronger deterioration in economic conditions in China and other emerging market economies, as well as the extent to which this weakening would translate into activity in the advanced economies. In this context, it was pointed out that many international institutions had revised their forecasts for global economic growth downwards. Certain Council members expressed the opinion that these revisions could be associated with the downtrend in financial asset prices in the advanced and emerging market economies which had been observed for several months.

The Council members stressed that energy and agricultural commodity prices – in spite of their recent rebound – were still low, which is the main reason for low consumer and producer price growth worldwide. Certain Council members pointed to factors which could contribute to lower commodity prices over the longer run. It was noted i.a. that gas prices might decline further, as several producers of this commodity suggested an increase in its exports. Some Council members, in turn, drew attention to geopolitical tensions, arguing that their increase could lead to higher prices of commodities, particularly of crude oil.

It was highlighted that the uncertainty about the global economy was affecting financial market sentiment, which in recent months had been reflected by capital outflows from many emerging market economies and the resultant fall in financial asset prices in these countries as well as the depreciation of their currencies. Attention was drawn to the significant depreciation of the zloty, the fall in share prices on the Polish stock exchange and the outflow of capital from the government bond market. This notwithstanding, the Council members underlined that investor sentiment had improved in recent weeks, which resulted i.a. in an appreciation of the zloty.

It was pointed out that the likelihood of the major central banks maintaining their expansionary monetary policy for longer than previously expected had increased over recent months. It was noted that the ECB had again expanded its monetary policy, in particular by lowering the deposit rate to a more negative level and significantly increasing the scale of its monthly asset purchases. It was also outlined that in the United States, in spite of an increase in interest rates in December 2015, the uncertainty about the direction of the Fed's monetary policy had risen of late.

The Council members pointed to likely consequences of further monetary easing by the ECB on the Polish economy. It was highlighted that it might be conducive to a decline in Polish government bond yields and an appreciation of the zloty. However, as certain members pointed out, the zloty was broadly stable over the course of the ECB's asset purchase programme. Some Council members expressed the opinion that the reduction in the ECB deposit rate to a more negative level might create

a risk of higher foreign capital inflow to the Polish banking sector, although the extent of the risks associated with this is hard to assess for the time being.

While analysing the current domestic economic conditions, it was highlighted that – in spite of the rise in external risks – stable economic growth in Poland continued and in 2015 Q4 GDP growth had even accelerated slightly. It was also stressed that domestic demand continued to be the key driver of GDP growth. It was highlighted that investment expenditure had accelerated in 2015 Q4, which had been accompanied by stable growth in consumption. Consumer expenditures are supported by improving labour market conditions, reflected particularly in rising employment and a fall in the unemployment rate, which had reached the lowest level since 2008. Moreover, as certain Council members underlined, consumer demand growth was also supported by an improvement in consumer sentiment. Investment demand, in turn, is propped up by sound financial standing of enterprises and the capacity utilization above the long-run average. It was also outlined that Polish exports continued to grow and sentiment in Polish industry remained positive, even though German exports and industrial conditions had weakened of late. It was also pointed out that moderate loan growth also contributed to stable domestic demand growth. Certain Council members noted in addition that surveys of the Polish enterprise sector did not point to limited access to external financing as a major hurdle for corporate investment.

Discussing the economic outlook for Poland, it was highlighted that in line with the March GDP projection, GDP growth should remain stable in the coming years. It was noted that consumer demand growth was forecasted to accelerate, propped up by rising employment and an increase in wage growth, as well as a boost to government transfers to households resulting from the introduction of the “Family 500+” programme. Certain Council members expressed the opinion that higher consumer demand growth could translate also into an acceleration in investment. Rising investment, in turn, should increase the productive capacity of the Polish economy, which could alleviate inflationary pressure that might appear in the medium term due to an increase in consumer demand growth. These members also outlined that an acceleration in domestic demand might lead to wider current account deficit and greater external imbalances, particularly given moderate growth in economic activity abroad.

Reviewing price developments in Poland, attention was drawn to still negative price growth, which – similarly to other countries – was mainly due to the fall in commodity prices in recent quarters. Low inflation in Poland’s major trading partners is another factor behind lower consumer price growth. It was highlighted that consumer price growth in the Polish economy was also lowered by a lack of wage pressure, which persists in spite of a notable improvement in the labour market. In this context, some Council members noted that unit labour cost growth had been slow for some time. In addition, certain Council members expressed the opinion that embargo imposed by Russia on Polish food products had been conducive to lower food prices in Poland. These members also pointed to an ongoing fall in apparel prices, which – in their opinion – might be further exacerbated by softer demand of foreign consumers caused by i.a. recession in Russia and Ukraine as well as a sharp depreciation of their currencies.

During the discussion on the results of the March inflation projection, it was highlighted that, according to this projection, price growth should turn positive in 2016 Q4 and return to the tolerance band within two years. At the same time, it was noted that core inflation was projected to gradually increase, supported by an acceleration in domestic demand, an expected rise in wage growth as well as higher consumer expenditure of households resulting from the introduction of the “Family 500+” programme. Certain Council members underlined in addition that the negative impact of the fall in commodity prices should be fading out, which would be conducive to higher CPI inflation later in the projection horizon. According to some Council members, an acceleration in price growth, stemming from faster growth in consumer demand and good labour market conditions, might prove faster than forecasted in the projection.

Discussing the effects of negative price growth in Poland, some Council members emphasized that no negative developments associated with deflation had been observed so far. In particular, households and enterprises do not hold off their consumption and investment expenditures. Certain members outlined that the risk of a prolonged period of deflation in Poland was low due to very good labour market conditions, which result in stable nominal price growth. Other Council members assessed in turn that the risk that economic agents will start to postpone their expenditures increases as the period of negative price growth extends. Therefore, the Council members decided that the impact of low price growth on the behaviour of economic agents in Poland should be monitored further.

Referring to the interest rates in the context of direct inflation targeting, the Council decided that they should remain unchanged at the current meeting. The Council members indicated that the currently observed low price growth was mainly due to factors beyond the influence of domestic monetary policy. However, in the coming quarters, CPI growth would be supported by a steady increase in domestic economic activity. This assessment is backed by the results of the March projection of inflation and GDP.

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 Council members stressed that the elevated uncertainty regarding external conditions, more notably persisting risks to global economic activity and volatile financial market sentiment, also spoke in favour of a stabilization of the interest rates. Other important monetary policy determinant was the uncertainty about the outlook for fiscal policy beyond 2016. The Council members also judged that decisions on the interest rates should take into account their potential impact on the stability of the domestic financial sector.

The majority of the Council members expressed the opinion that under these conditions keeping interest rates at the current level ensured room for monetary policy easing in the event of negative shocks, which would result in a deterioration in economic conditions and lower price growth. Certain Council members did not rule out a necessity for lowering the interest rates should indications of negative developments associated with deflationary processes occur, even though they assessed their probability as low.

Certain Council members indicated in turn that in the coming quarters it might be justified to consider the circumstances under which the monetary policy stance could be re-examined. This could be

justified if inflationary pressure appeared as a result of favourable labour market conditions and expected acceleration in consumer demand.

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 6 April 2016

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

While discussing economic situation abroad, Council members recognised that global economic activity remained moderate. At the same time, it was stressed that uncertainty regarding the global economic outlook was still elevated. Council members pointed to continued economic recovery in the euro area. It was judged that growth in employment and wages in the euro area, as well as rising industrial output and some improvement in economic indicators, signalled further moderate growth in the coming quarters. It was pointed out that in the United States economic situation remained relatively favourable. However, it was underlined that recent incoming data made an accurate assessment of the economic prospects of the US economy difficult. It was emphasised that a source of uncertainty for the economic outlook in developed countries – both in the United States and in the euro area – was the scale of economic slowdown in the emerging economies and its impact on the developed economies. In this context, attention was drawn to the further deceleration in economic activity in China, indicated by slower growth in industrial output and retail sales as well as a sharp fall in exports. This notwithstanding, certain Council members drew attention to a slight recovery in investment in the Chinese economy in the recent period, which may be connected with an easing of economic policy and might signal lower risk of a significant economic slowdown in China in the coming quarters. Referring to the economic situation in other emerging economies, Council members underlined that Russia and Brazil remained in recession. The possibility of a further fall in energy commodity prices and the cessation of imports of these commodities by some countries was cited by certain members of the Council as a possible risk factor for the improvement in the economic situation in Russia and for the stability of Russia's public finances. In Brazil the economic outlook could be negatively affected by the deepening political crisis.

When discussing global commodity prices, Council members pointed out that despite a slight increase in the last two months, they remained at a low level. It was judged that low commodity prices were the key factor behind very low price growth worldwide. At the same time, attention was drawn to the significant volatility of commodity prices in the recent period and uncertainty regarding their future developments. Certain Council members expressed the opinion that in the coming months energy commodity prices, including oil, could once again decline. The factors conducive to possible decrease in prices of these commodities include increased supply of oil associated with the lifting of sanctions on Iranian oil exports in the absence of a significant reduction in oil production in the United States and the possible increase in energy commodity exports from Russia. However, other Council members were of the opinion that oil prices might increase in the near future, should the OPEC countries and Russia reach an agreement on oil production limits.

It was noted that the increase in commodity prices and some weakening of concerns about global economic situation had improved the sentiment in the global financial markets in the recent period. As a result, the prices of many financial assets had risen, including share prices and exchange rates of emerging markets currencies. However, certain Council members judged that the improvement in market sentiment was temporary and that renewed decline in share prices in the global stock markets could not be ruled out in the coming quarters.

When discussing monetary policy abroad, it was pointed out that some central banks in Europe had lowered their interest rates in the recent period. Certain Council members underlined that currently it was difficult to assess the effectiveness of a further easing of monetary policy, especially considering the external nature of the shocks causing deflation. At the same time, it was judged that in the United States there was continued uncertainty regarding the future decisions of the Federal Reserve, although in the opinion of the Fed and the financial markets, interest rate hikes were likely in the coming quarters. In this context, attention was drawn to the risks associated with the withdrawal of the strong monetary expansion.

When discussing the economic situation in Poland, attention was drawn to the continuing stable economic growth in last several quarters. Some Council members judged that incoming data on industrial production and construction output signalled that GDP growth in 2016 Q1 might have been slightly lower than in the previous quarter, but still remained relatively high. It was pointed out that economic growth continued to be supported mainly by domestic demand. The growth of consumer demand was fuelled by rising employment and improving household sentiment. In turn, investment demand was supported by the sound financial standing of enterprises, their high capacity utilization and the relatively favourable prospects for demand. Certain Council members emphasized that despite the weakening of foreign demand, Poland had a surplus in trade of goods, which was supported by the high – despite a certain appreciation of the zloty in the recent period – price competitiveness of Polish exports. However, other Council members stressed that the trade surplus was partly the result of the falling commodity prices in the global markets. It was noted that the continuing good situation in the real economy was accompanied by a stable growth in lending, including a certain pick-up in growth in corporate credit.

While discussing the situation in the labour market, Council members pointed to the steady growth in employment and the falling unemployment rate, which was close to the pre-crisis level. It was underlined that despite this, the growth of average nominal wages in the economy was moderate. This led to continued low growth of unit labour costs. In addition, certain Council members pointed out that the level of wages most commonly earned by employees was significantly below the average and in the last several years its growth had been slower than that of average wages. However, other Council members pointed out that the good situation in the labour market was reflected in the relatively high growth of the total wage bill, which was essential for growth of aggregate demand.

While discussing the economic outlook in Poland, Council members judged that the coming quarters were likely to see further stable and relatively fast economic growth. Certain Council members were of the opinion that GDP growth could even accelerate. It was pointed out that a factor supporting consumer demand growth would be the further increase in household disposable income resulting from both growing employment and nominal wages and the launch of the “Family 500+” programme.

In turn, growing consumption, which improves the sales outlook of firms, could – according to certain Council members – lead to an acceleration in corporate investment growth. However, certain Council members pointed out that the propensity of firms to invest could be limited by the continued uncertainty regarding the economic outlook and business conditions. Certain Council members judged that the stable economic growth and improving labour market situation would lead to a gradual closure of the output gap and the approach of the unemployment rate to the equilibrium rate (NAWRU), which could lead to an increase in domestic demand pressure.

While analysing price developments in Poland, Council members discussed the methods of calculation and properties of particular measures of inflation, analysing, in particular, the influence of changes in the structure of the CPI basket on consumer price growth. Council members also analysed price developments in particular categories of goods and services and discussed the possible causes of the long-term fall in prices of some of those categories.

Referring to the current data, Council members pointed out that price growth remained negative. However, Council members emphasised that the continued deflation was still mainly driven by external factors – including the earlier fall in global commodity prices – which were beyond the direct impact of Poland's monetary policy. It was pointed out that the negative impact of external factors on domestic prices was so strong that it caused the core inflation indicators to fall below zero. However, it was underlined that these factors mainly reduced the prices of goods, while price growth of services remained positive. At the same time, it was stressed that there was still no wage pressure in the economy.

Some Council members pointed out that the continued deflation had not so far adversely affected the decisions of economic agents. In particular, it was underlined that it did not lead to the postponement of purchases by households or deferral of corporate investment. Certain Council members also pointed out that although inflation expectations of economic agents were running at a very low level, households failed to notice the fall in the general level of consumer prices. However, other Council members judged that the prolonged period of deflation might increase the risk of a permanent de-anchoring of inflation expectations, which might in turn have an adverse impact on the effectiveness of monetary policy in the future.

Council members underlined that at the end of 2016 price growth was expected to become positive. It was pointed out that growing consumer demand, supported by the "Family 500+" programme, as well as the expected increase in growth of unit labour costs resulting from the improvement in the labour market situation would contribute to increase in price growth. However, other Council members pointed out that the further fall in global energy commodity prices expected by these Council members and a reduction in the price of imported goods caused by appreciation of the zloty might have a negative effect on price growth in the coming quarters. In this context, attention was drawn to a certain strengthening of the zloty in recent months caused, among others, by the ECB's easing of monetary policy. Certain Council members stressed that in the medium term the increase in price growth might also be curtailed by growth in production capacity in the economy resulting from rising investment.

Referring to the level of interest rates in the economy, some Council members judged that the interest rate on corporate loans was currently relatively low. Certain Council members expressed the opinion that the cost of credit was not a factor curbing lending growth. In turn, other Council members pointed out that the low level of interest rates might reduce household demand for long-term savings instruments and thus limit the development of the domestic financial market.

While discussing the level of NBP interest rates, Council members decided that they should remain unchanged at the current meeting. Council members stressed that the continued negative price growth was mainly caused by external factors and deflation had no adverse effects on the decisions of economic agents. As a result, low price growth was accompanied by stable and relatively fast economic growth and steady tightening of the labour market. Certain Council members also underlined that the stabilisation of nominal interest rates amidst expected increase in price growth over the coming year would lead to a decline in real interest rates. Council members judged that in these conditions a stabilisation of interest rates helped to keep the Polish economy on a sustainable growth path. In addition, some Council members drew attention to the need to take into account the impact of the level of interest rates on the risk to financial stability.

Council members judged that the increased uncertainty regarding the domestic and external developments also spoke in favour of a stabilisation of interest rates. In this context, attention was drawn to the uncertainty regarding the outlook for fiscal policy in 2017, fears about a global economic slowdown and the risk of financial turmoil caused, among others, by the possible decision of the United Kingdom to leave the European Union. In the opinion of certain Council members, stabilisation of interest rates, which – in the face of monetary policy easing by central banks in the environment of the Polish economy – causes an increased differential between domestic and foreign rates, might reduce the vulnerability of both Polish assets and the exchange rate to a possible increase in risk aversion in the financial markets and a deterioration of investor sentiment.

Council members also argued that the stabilisation of interest rates ensured the room for their adjustment in the case of shocks adversely affecting the domestic economic situation and price developments. The majority of Council members did not rule out the possibility of interest rate cuts in the case of an economic slowdown in Poland and deepening deflation. Certain Council members argued that given the current level of interest rates – should interest rate cuts turned out to be necessary – a sharper interest rate adjustment would be possible.

In turn, certain Council members expressed the opinion that taking into account the relatively high GDP growth and the favourable outlook for economic growth, additionally supported by the reduced restrictiveness of fiscal policy, it would be justified to keep interest rates unchanged in the coming quarters. This assessment might even require considering the circumstances for a change in the monetary policy stance.

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 6 May 2016

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

While discussing the economic conditions in the environment of the Polish economy, Council members recognised that global economic activity remained moderate, amid continuing uncertainty about its outlook. It was highlighted that forecasts for global growth had been revised down by some international institutions. Attention was drawn to a renewed slowdown in GDP growth in the United States in 2016 Q1, which was assessed as an important factor that could have both direct and indirect impact on economic activity globally and in Poland. It was stressed, though, that GDP growth in the euro area, Poland's main trading partner, had remained stable. This notwithstanding, downside risks to growth in the euro area were mentioned. It was noted that household sentiment had recently deteriorated and exports of the euro area fell in early 2016 due to weaker economic conditions in emerging market economies, most notably China. These factors were assessed as downside risks to growth in the euro area. It was underlined that GDP growth forecasts for China – in spite of their recent minor upward revisions – were still pointing to continued gradual economic slowdown in this country in the coming years.

While discussing price developments abroad, it was pointed out that price growth was still weak in many countries, and in some economies, including in the euro area, it was negative. It was stressed that this was mainly due to global commodity prices, which remained low despite some pick-up in recent months, as well as the moderate growth of global economic activity. It was also indicated that inflation forecasts in many countries had been revised down in the recent period.

When discussing the economic conditions in Poland, attention was drawn to a revision of national accounts data for 2014-2015, which pointed to higher than previously estimated GDP growth in 2015 Q4. However, it was emphasised that the economic growth estimates for the previous quarters had been revised down, and that GDP growth in the whole of 2015 had remained unchanged. It was judged that in 2016 Q1 GDP growth had probably declined. It was argued that in March 2016 industrial production and retail sales growth had both decelerated markedly, and the fall in construction output had deepened. Certain Council members noted, however, that these indicators could have been affected by calendar factors. It was also highlighted that sentiment in the industrial sector, also relating to new export orders, was deteriorating, which could indicate the persistence of low industrial production growth in Poland in the following months.

Council members judged that the economic slowdown in early 2016 was probably temporary. In next quarters, GDP growth should pick up slightly, although – as some Council members emphasised – given only moderate economic growth abroad the space for strong GDP growth is limited.

In the coming quarters, GDP growth in Poland should be driven mainly by increasing consumption growth, supported by ongoing recovery in the labour market, further improvement in household sentiment, stable growth in consumer loans and an increase in family benefits resulting from a launch of the "Family 500+" programme. Growing corporate investment will probably also contribute to higher GDP growth, as it would be supported by sound financial standing of enterprises, their high

capacity utilization and growing investment loans. It was noted, however, that the pace of absorption of funds from the new EU financial perspective was a factor of uncertainty for investment growth.

While discussing price developments in Poland, attention was drawn to ongoing deflation, which resulted to a large extent from the earlier sharp fall in global commodity prices, amid low price growth in the environment of the Polish economy and continued negative output gap. It was noted that low energy prices stemming from the earlier fall in commodity prices reduced the prices of other goods and services, translating into negative core inflation indicators. It was pointed out that currently there were no cost pressures in the economy. It was highlighted that wage growth remained moderate in spite of improving labour market conditions and PPI growth had been negative for four years. However, some Council members noted that PPI growth excluding energy-related goods was higher than growth in total PPI and close to zero.

Council members judged that although price growth in Poland had been negative for a long time, it had not adversely affected the decisions of economic agents so far. In particular, available data do not indicate the postponement of purchases by households or a reduction in corporate investment resulting from low price growth. However, some Council members expressed an opinion that currently observed investment growth was relatively low, given the high capacity utilisation and the expected improvement in economic conditions in Poland. This could suggest that deflation might reduce expected profitability of companies. Council members concluded that the impact of deflation on the financial standing and the behaviour of economic agents, in particular enterprises, should be still closely monitored.

Referring to the outlook for consumer price growth, Council members assessed that it would remain negative in the coming quarters, mainly due to the continued fall in energy prices. However, as this factor abates, consumer price growth should gradually increase, supported by ongoing stable economic growth and improving labour market conditions. Some Council members also argued that persistently limited wage growth, despite falling unemployment, was an additional downside risk to price growth in Poland. Another downside risk to price growth named by some Council members was a possible deterioration in the economic conditions abroad, which could adversely affect domestic economic growth and domestic demand pressure. In the opinion of certain Council members, a significant increase in global commodity prices could not be ruled out in the coming quarters, which could lead to a notable increase in inflation in Poland, even if accompanied with a decline in economic growth.

While discussing the level of NBP interest rates, Council members decided that they should remain unchanged at the current meeting. Council members stressed that the continued negative price growth was mainly caused by external factors and deflation had no adverse effects on the decisions of economic agents. Council members confirmed their assessment that the stabilisation of interest rates helped to keep the Polish economy on a sustainable growth path and maintain macroeconomic balance. In addition, some Council members pointed out the need to take into account the impact of the level of interest rates on financial stability, drawing attention to heightened volatility in domestic financial markets. Certain Council members also expressed an opinion that fiscal loosening in 2016 was another significant factor which should be taken into account in the decisions on interest rates.

Council members judged that the increased uncertainty regarding the domestic and external developments also spoke in favour of a stabilisation of interest rates. In this context, attention was drawn to concerns about a global slowdown and the risk of financial turmoil caused, among others, by the possible decision of the United Kingdom to leave the European Union. Council members also argued that a stabilisation of interest rates ensured room for their adjustment in the case of shocks adversely affecting domestic economic situation and price developments. Some Council members did not rule out the possibility of interest rate cuts in the case of an economic slowdown in Poland, deepening deflation or signs that behaviour of economic agents was adversely affected by negative price growth. Certain Council members argued that interest rate cuts would stimulate economic growth in Poland, including investment expenditure. At the same time, other Council members were of the opinion that given heightened uncertainty, the impact of lower interest rates on investment growth might be limited.

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 8 June 2016

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

While discussing the economic conditions abroad, Council members recognised that global economic growth remained moderate, amid continuing uncertainty about its outlook. GDP growth in the euro area picked up in 2016 Q1, although it was judged that this acceleration was likely to be temporary because of a further drag from weak economic conditions in emerging economies. At the same time, it was stressed that despite these unfavourable external developments, in recent months there had been a marked improvement in the export sector in Germany, Poland's main trading partner. This improvement – along with a further recovery of German domestic demand – resulted in a pick-up in economic growth in Germany.

Council members drew attention to the persisting sources of uncertainty for economic conditions and political situation in the euro area countries and the remaining EU economies. Among these, they mentioned the possible decision of the United Kingdom to leave the European Union, political developments in France and Spain, the possible re-intensification of Greece's debt problem and the immigration crisis. Certain Council members also pointed to the uncertainty regarding the effectiveness of the ECB's measures undertaken to stimulate economic activity in the euro area.

Council members indicated that the United States expected to see further moderate economic growth, supported mainly by rising consumption. At the same time, attention was drawn to recent information from the labour market and services market, which might indicate that the outlook for the US economy was worse than previously anticipated. As a result, uncertainty remains about the timing of further interest rate cuts by the Federal Reserve.

Referring to the economic conditions in the major emerging economies, it was pointed out that in China recent data on industrial output, retail sales and investment indicated a further slowdown in economic activity. In turn, in Russia – according to the national accounts data – the fall in GDP was

weaker in 2016 Q1. Certain Council members stressed that the higher global energy commodity prices had a positive impact on the outlook for the Russian economy, although this might be limited by the reduction in imports of energy commodities from Russia announced by some European countries.

Council members underlined that energy commodity prices – despite some increase in recent months – were still markedly lower than in previous years. Low commodity prices, combined with moderate global economic activity, were the main factors behind very low consumer price growth in many economies.

When analysing the economic conditions in Poland, Council members drew attention to the slowdown in GDP growth in 2016 Q1. Council members noted that it was mainly driven by the fall in total investment outlays, including weaker corporate investment activity. The decline in investment was partly related to the completion of projects co-financed with EU funds under the previous financial framework as well as statistical effects related to the implementation of large investments in the energy sector in 2016 Q1. Some Council members judged that uncertainty regarding future business conditions, persuading firms to postpone investment projects, might have contributed to the slowdown in corporate investment. Certain Council members also pointed out that a certain weakening in export growth had a negative impact on GDP growth in 2016 Q1. Other Council members judged that the slowdown in GDP might have partly reflected the relatively low growth in economic activity in March 2016, which was related to fewer working days than in the corresponding month a year before.

It was underlined that GDP growth in 2016 Q1 was mainly driven by stable growth in consumer demand and an increase in stocks. Rising consumption was supported, in particular, by robust labour market with record high employment and historically low unemployment rate. In this context, some Council members judged that the level of employment might be even higher than indicated by official statistics, which do not include a significant number of employees from Ukraine. Certain Council members underlined that the growth in employment was supported by increased economic activity of older people and longer period in which people at retirement age continue their employment. In turn, other Council members judged that the growth in employment in recent months could partly result from the imposition of social security contributions on civil law contracts, leading to changes in the forms of employment of some employees. Certain Council members expressed the opinion that although the average unemployment rate in Poland was low, in certain parts of the country it remained relatively high.

While discussing the outlook for economic activity, the majority of Council members judged that the fall in GDP growth in 2016 Q1 was temporary. Some Council members pointed out that GDP growth should pick up in the coming quarters, although it would probably be somewhat lower than expected in the March projection. In the opinion of certain Council members, in the following quarters GDP growth might be curbed by the low growth in investment, partly related to the uncertainty regarding the future economic developments. Other Council members were of the opinion that GDP growth could increase markedly and exceed the forecast as early as in 2016 Q2. In this context, they pointed to the significant acceleration in industrial output and the further improvement in labour market conditions in April. At the same time, it was pointed out that the relatively high GDP growth in the coming quarters should be supported by increasing consumption growth amidst ongoing

strengthening in the labour market, favourable household sentiment, and the start of family benefit payments under the "Family 500+" programme. Some Council members judged that the investment outlook also remained relatively favourable. They pointed to the high capacity utilisation of companies and their sound financial standing, as well as the possible disbursement of funds under the new EU financial framework in the second half of 2016. It was underlined that the possible launch of the recently announced government programme supporting investment might have boosted investment growth, although its form and timing were uncertain. Taking into account the above-mentioned factors, it was indicated that the output gap would close within the monetary policy transmission horizon. However, certain Council members underlined that an exact assessment of the economic outlook for the coming quarters was made more difficult due to the heightened uncertainty regarding the environment of the Polish economy and the investment outlook.

When analysing price developments in Poland, attention was drawn to ongoing deflation. However, Council members stressed that continued negative price growth was mainly due to external factors, including the earlier sharp fall in global commodity prices and low price growth in the environment of the Polish economy. Certain Council members were of the opinion that structural changes in retail trade, i.e. the growing market share of discount stores, might also limit consumer price growth. It was pointed out that currently there were no cost pressures in the economy. It was noted that PPI growth remained negative, although producer prices excluding energy-related goods were higher than a year before. The persistence of low PPI growth was supported by the still moderate wage growth, despite very good labour market conditions. In the opinion of certain Council members, the relatively large number of employees from Ukraine – probably earning relatively low wages – employed in the Polish labour market was a factor that curbed wage growth in the Polish economy. However, certain Council members pointed out that despite moderate wage growth, the share of wages in the operating costs of enterprises was rising.

The majority of Council members judged that the persisting deflation had not adversely affected decisions of economic agents so far. Certain Council members pointed out that although inflation expectations of economic agents were running very low, households failed to notice the fall in the general level of consumer prices and were not postponing purchases. It was also underlined that the fall in prices had not led to a decrease in profitability of enterprises so far. However, certain Council members expressed the opinion that the continued deflation could be one of the factors behind the decline in corporate investment growth. These Council members judged that given falling prices, there was growing uncertainty about the future profitability of sales, which curbed firms' propensity to embark on investment projects. Council members believed that it was necessary to continue to monitor the impact of deflation on the financial standing and the decisions of economic agents, in particular enterprises.

Referring to the outlook for price growth, Council members judged that in the coming quarters CPI growth would remain negative, while at the end of 2016 it should be positive, and in the monetary policy transmission horizon it would probably return close to the lower limit of deviations from the inflation target. It was indicated that, apart from the fading effects of the previous sharp falls in global commodity prices, the forecasted rise in wage growth and the increase in social benefits would boost price growth. Certain Council members underlined that a marked acceleration in wage growth in

April could signal a certain wage pressure emerging in the economy. They also expressed the opinion that the pick-up in consumer growth and increase in its contribution to GDP growth could lead to a stronger reaction of prices to the changes in real economy and faster than expected growth in CPI. However, other Council members drew attention to the fact that the increase in wage growth in April could stem from the postponement of the payment of bonuses in the mining sector, and 2016 Q1 data for the whole economy did not indicate a rise in wage pressure.

While analysing the credit market conditions, Council members pointed to stable growth in household and corporate loans. Some Council members indicated that despite the stabilisation of NBP interest rates, the interest on housing loans and corporate loans had risen slightly last month. In turn, the interest on deposits offered to these entities had decreased somewhat in previous months. Certain Council members stressed that this notwithstanding, the growth of corporate deposits remained relatively high, which – in the opinion of these Council members – could be related to the firms' preference for the safe forms of investment amid heightened uncertainty. At the same time, the growth of household deposits had picked up. However, it was underlined that this was accompanied by a slower rise in the more risky forms of investment and – altogether – a slowdown in growth of total household assets.

While discussing the level of NBP interest rates, Council members decided that they should remain unchanged. Negative price growth was mainly driven by external factors. At the same time, deflation had no adverse effects on the decisions of economic agents. Moreover, negative price growth continued to be accompanied by relatively good economic conditions and a gradual improvement in labour market situation. Council members confirmed their assessment that against this background the stabilisation of interest rates helped to keep the Polish economy on a sustainable growth path and maintain macroeconomic stability.

Council members judged that the increased uncertainty regarding the domestic and external developments also spoke in favour of a stabilisation of interest rates. In addition, Council members argued that a stabilisation of interest rates ensured room for their adjustment in the case of shocks adversely affecting domestic economic situation and price developments. Some Council members did not rule out the possibility of interest rate cuts in the case of an economic slowdown in Poland, deepening deflation or signs of its negative impact on the behaviour of economic agents. Certain Council members pointed out that interest rate cut would be conducive to an increase in GDP growth, in particular by stimulating investment activity. However, other Council members judged that interest rate cut could have a limited impact on investment recovery, and any possible increase in investment could lead to launching projects with low expected profitability. Some Council members underlined that the decision of the Council should also take into account the impact of the level of interest rates on the stability of domestic financial sector.

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 6 July 2016

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

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

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

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

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

When analysing the developments in global financial markets, the Council members drew attention to an increase in risk aversion following the announcement of the UK's EU referendum results. The rise in risk aversion was demonstrated in depreciation of exchange rates and a decline in asset prices in many economies, including Poland. The Council members pointed out that the market reaction to this event, while relatively strong, was short-lived. Certain Council members underlined that the zloty

exchange rate fluctuations in response to external shocks – such as the outcome of the UK vote – might cushion the impact of those shocks on economic conditions in Poland.

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

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

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

With reference to the outlook for investment, some the Council members assessed that investment growth would probably accelerate in the following quarters. In this context, attention was drawn to

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

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

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

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

With respect to the outlook for price growth, it was observed that in line with the July projection it should increase above zero in the last quarter of 2016 and return near the lower bound for deviations from the target in 2017 Q2. The opinion was expressed that the path for price growth in the July

projection – despite the output gap closing more slowly than expected – was only marginally weaker than previously anticipated. It was emphasised that price growth might be boosted by the weaker zloty exchange rate, higher child benefits and the forecasted acceleration in wage growth, additionally supported by the announced rise in the minimum wage.

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

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

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

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

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

The Council reviewed the developments abroad, which are relevant for economic conditions in Poland. It was recognised that global economic growth remained moderate, but the uncertainty about its outlook continued. It was noted that economic growth in the euro area was stable and emphasised that in Germany – Poland's main trading partner – in 2016 Q2 it was higher than expected despite a certain slowdown. GDP growth in this country has been supported by stable rise in consumption driven by improving labour market conditions and high public expenditure growth. A number of factors, which had a negative impact on economic activity in the euro area, particularly on investment expenditure, were cited. Attention was drawn to weak economic conditions in non-European emerging market economies, low growth in global industrial production and trade, and the

uncertainty regarding the situation in the banking sector in several euro area member states. It was underlined that – contrary to previous concerns – the uncertainty related to the United Kingdom's withdrawal from the European Union had not yet had a significant impact on economic activity in Britain or the euro area.

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

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

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

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

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

Council members pointed out that the uncertainty regarding the legal environment of business could also be contributing to weaker investment growth.

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

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

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

Referring to the outlook for price growth, it was pointed out that in the coming months the annual consumer price index would remain negative, although the scale of deflation would be gradually subsiding due to dissipating effects of the earlier drop in global commodity prices. It was emphasised that higher price growth in the coming quarters would also be supported by stable GDP growth and

further acceleration in wage growth. As a consequence – in the opinion of the majority of the Council members – in 2017 price growth would be materially positive. However, certain Council members did not rule out that deflation in Poland could last longer. It was stressed that the main source of uncertainty for growth outlook came from a possibility of a deterioration of the global economic conditions and of a fall in commodity prices, which would reduce price growth in the environment of the Polish economy and thus also domestic price growth.

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

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

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

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

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

The Council reviewed the developments abroad, which have an impact on economic conditions in Poland. It was recognised that global economic growth remained moderate, but uncertainty about its outlook continued. It was noted that economic growth in the euro area was stable despite negative impact of weak economic conditions in the non-European emerging market economies. Attention was

drawn to signs of recovery in European and German industrial sector and to a rise in export orders in Germany. It was stressed that this could support growth in Polish industrial output, particularly export manufacturing. It was assessed that GDP growth in the United States might have picked up slightly in 2016 Q3, but – like in the previous quarters – had been held back by low investment growth rate. It was also pointed out that in China GDP growth was lower than in previous years, yet data on activity indicated a stabilisation of economic conditions in the previous months. At the same time, an opinion was expressed that this stabilisation had been achieved due to significant fiscal expansion and an acceleration in lending growth, which had perpetuated long-term risks for the Chinese economy. Also in Russia, recession had been alleviated, mainly by the rise in oil prices since the beginning of the year.

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

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

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

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

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

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

Referring to the outlook for price growth, the majority of the Council members judged that the scale of deflation would continue to gradually decrease in the coming months. It was stressed that, according to both NBP's and external forecasts, the annual price growth rate should be close to 1% in 2017. It was pointed out that higher price growth would be supported by stable GDP growth, amid accelerating wage growth and higher child benefits. However, certain Council members were of the opinion that, due to downside risks to oil prices in the global markets, it could not be ruled out that the period of deflation in Poland might extend. In turn, certain Council members expressed a view that the price growth rate could be higher than indicated by the forecasts available at the time of the

meeting. Stronger acceleration in price growth could, in their opinion, be backed by faster closure of the output gap and higher growth in unit labour costs. At the same time, these Council members underlined that the impact of unit labour cost growth on price developments could be mitigated for some time if companies reduced their profit margins.

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

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

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

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

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

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

the highest in several years due to i.a. a significant increase in export orders. It was argued that this could support growth in Polish industrial output, most notably export manufacturing.

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

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

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

While discussing the developments in Poland's real economy, the Council members assessed that stable economic growth continued in Poland, even though data on production and retail sales in 2016 Q3 pointed to weaker GDP growth. Attention was also drawn to a deterioration in manufacturing confidence in October. A further fall in construction output was also observed. It was attributed to a decline in investment, related to a temporarily lower absorption of EU funds stemming from the completion of the previous financial framework. Some Council members judged that lower investment activity, especially of small and medium enterprises, could have been determined by the

uncertainty about the regulatory environment of business. Alongside that, some Council members pointed to ongoing recovery in the housing market, which was supportive of residential investment growth. At the same time, it was stressed that the main driver of economic growth was still rising consumer demand, supported by the gradual improvement in the labour market, favourable household sentiment and the child benefit payments under the "Family 500 plus" programme.

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

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

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

While discussing the level of the NBP interest rates, the Council judged that they should remain unchanged. The Council members confirmed their assessment that the stabilisation of interest rates helped to keep the Polish economy on a sustainable growth path and maintain macroeconomic stability. The majority of Council members assessed that an argument for keeping the interest rates unchanged was in particular the gradual increase in price growth, which – in line with the November projection – should approach the lower bound for deviations from the NBP target in the coming years.

According to certain Council members, the present level of the NBP interest rates may also be conducive to a rise in the household savings rate. In the opinion of the Council, an additional argument for the NBP interest rate stabilisation was uncertainty regarding domestic and external conditions for monetary policy.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

While discussing the level of the NBP interest rates, the Council members judged that they should remain unchanged. The Council members confirmed their assessment that the stabilisation of the interest rates helped to keep the Polish economy on a sustainable growth path and maintain

macroeconomic stability. The majority of the Council members assessed that an argument for keeping the interest rates unchanged was in particular the gradual increase in price growth. As a result, despite the nominal interest rates being kept unchanged, their level will decline markedly in real terms. In the opinion of the Council, an additional argument for the stabilisation of the NBP interest rates was uncertainty regarding domestic and external conditions for monetary policy.

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

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

Appendix 7. Voting records of the Monetary Policy Council members on motions and resolutions

Voting records of the Monetary Policy Council members on motions and resolutions in 2016 are presented below.

■ Date: 5 April 2016

Subject matter of motion or resolution:

resolution No. 1/2016 of 5 April 2016 on approving the Annual Financial Report of Narodowy Bank Polski prepared as of 31 December 2016.

Voting of the MPC members:

For: M. Belka

G. M. Ancyparowicz

M. Chrzanowski

E. Gatnar

Ł. J. Hardt

J. J. Kropiwnicki

E. M. Łon

E. J. Osiatyński

K. Zubelewicz

J. Żyżyński

Against:

■ Date: 5 May 2016

Subject matter of motion or resolution:

resolution No. 2/2016 of 5 May 2016 on approving the report on monetary policy implementation in 2015.

Voting of the MPC members:

For: M. Belka

G. M. Ancyparowicz

M. Chrzanowski

E. Gatnar

Ł. J. Hardt

J. J. Kropiwnicki

E. M. Łon

K. Zubelewicz

J. Żyżyński

Against:

E. J. Osiatyński was absent.

■ Date: 5 May 2016

Subject matter of motion or resolution:

resolution No. 3/2016 of 5 May 2016 on the evaluation of the activities of the NBP Management Board as regards the implementation of monetary policy guidelines in 2015.

Voting of the MPC members:

For: M. Belka

G. M. Ancyparowicz

M. Chrzanowski

E. Gatnar

Ł. J. Hardt

J. J. Kropiwnicki

E. M. Łon

K. Zubelewicz

J. Żyżyński

Against:

E. J. Osiatyński was absent.

■ Date: 24 May 2016

Subject matter of motion or resolution:

resolution No. 4/2016 of 24 May 2016 on approving the report on the operations of Narodowy Bank Polski in 2015.

Voting of the MPC members:

For: M. Belka

G. M. Ancyparowicz

E. Gatnar

Ł. J. Hardt

J. J. Kropiwnicki

E. M. Łon

K. Zubelewicz

J. Żyżyński

Against:

M. Chrzanowski and E. J. Osiatyński were absent.

■ Date: 7 September 2016

Subject matter of motion or resolution:

resolution No. 5/2016 of 7 September 2016 on adopting Monetary Policy Guidelines for 2017.

Voting of the MPC members:

For: A. Glapiński

G. M. Ancyparowicz

M. Chrzanowski

E. Gatnar

Ł. J. Hardt

J. J. Kropiwnicki

E. M. Łon

E. J. Osiatyński

J. Żyżyński

Against: K. Zubelewicz

■ Date: 20 December 2016

Subject matter of motion or resolution:

resolution No. 6/2016 of 20 December 2016 on approving the Financial Plan of the National Bank of Poland for 2017.

Voting of the MPC members:

For: A. Glapiński

G. M. Ancyparowicz

E. Gatnar

Ł. J. Hardt

E. M. Łon

R. Sura

J. Żyżyński

Against: E. J. Osiatyński

K. Zubelewicz

J. J. Kropiwnicki was absent.

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