NBP Narodowy Bank Polski

Monetary Policy Council

Report on monetary policy in 2017

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Warsaw, May 2018

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 2017* 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 2017* is a translation of the publication of Narodowy Bank Polski entitled *Sprawozdanie z wykonania założeń polityki pieniężnej na rok 2017*. In case of discrepancies, the Polish version prevails.

Content

1. Monetary policy strategy in 2017

In 2017, the Monetary Policy Council conducted monetary policy in line with the *Monetary Policy Guidelines for 2017*, adopted in September 2016. As in previous years, the primary 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 in the Act on Narodowy Bank Polski of 29 August 1997. According to Article 227 Section 1 of the Constitution of the Republic of Poland "Narodowy Bank Polski shall be responsible for the value of Polish currency". The Act on Narodowy Bank Polski of 29 August 1997 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".

NBP pursues the price stability objective within the inflation targeting framework. As part of this strategy, since 2004 the monetary policy objective has been to keep inflation at 2.5%, with the symmetric band for deviations of ±1 percentage point, in the medium term. The medium-term orientation of the target means that due to considerable changes in commodity prices or other macroeconomic and financial shocks, inflation may temporarily deviate from the target and even run outside the band for deviations. The monetary policy response to a shock depends on its cause, nature and the assessment of persistence of its consequences, including its impact on price developments and inflation expectations.

Stabilising inflation at a low level is a very important, yet insufficient, condition to keep the economy in equilibrium. Hence, the Council conducts monetary policy in a way that supports the stability of the financial system and mitigates the risk of imbalances building up in the economy. Therefore, in its decisions, the Council takes into account the prices of assets and growth in lending. Yet, the Council believes that, given free movement of capital and highly integrated financial markets, macroprudential policy should support monetary policy in containing macroeconomic imbalances. Given its ability to selectively influence credit aggregates, macroprudential policy can stabilise lending growth with a relatively low cost for economic growth compared to monetary policy.

The Council implements inflation targeting under a floating exchange rate regime. The floating exchange rate regime does not rule out interventions in the foreign exchange market whenever it is necessary to ensure the country's macroeconomic and financial stability.

2. Monetary policy and macroeconomic developments in 2017

In 2017, economic conditions in Poland were favourable and GDP growth picked up. Real GDP increased by 4.6% compared with 3.0% in 2016. The major factor behind GDP growth was consumer demand, supported by rising employment, acceleration in wage growth and disbursement of benefits. In addition, investment activity rebounded. GDP growth was also supported by relatively strong economic conditions abroad, most notably in the euro area, Poland's main trading partner. In consequence, the external trade balance remained in surplus and the current account balance was positive. In spite of economic recovery in Poland, lending was growing at a slower pace than the nominal GDP.

Consumer price growth accelerated in 2017, reaching 2.0% (against -0.6% in 2016). Thereby, CPI inflation approached the NBP’s inflation target, following several years of staying below it. This was attributable mainly to faster growth in food and energy prices, with core inflation remaining weak. Low core inflation in Poland resulted from still limited, in spite of a rise, domestic demand pressure, as well as low inflation abroad and the appreciation of the zloty. Despite a fall in unemployment and the acceleration in wage growth, the labour market did not create excessive inflationary pressure in 2017. Inflation forecasts in 2017 were suggesting that price growth in the coming years would remain close to the NBP’s inflation target.

Taking into account the above conditions, the Council kept the NBP policy interest rates unchanged in 2017, including the reference rate at 1.5%. When making decisions on the level of interest rates, the Council took into account that inflation, both current and projected for the following years, was close to the NBP’s target. Moreover, the stabilisation of the interest rates was conducive to maintaining balanced growth, including a recovery in investment and the stability of the financial system.

Monetary policy decision-making environment over the course of 2017 is presented in a greater detail below.

In the first half of 2017, global economic growth remained moderate, with strengthening signs of recovery in 2017 Q2, most notably in trade and industry, supporting GDP growth in the euro area. Favourable economic conditions continued also in the United States, fostered by further improvement in labour market conditions and a recovery in investment activity. Despite ongoing concerns about imbalances building up in China, GDP growth in this country remained relatively stable.

Following a sharp rise in December 2016, oil and other commodity prices were relatively stable in the first six months of 2017. In effect, global inflation, having increased in early 2017, was moderate in the remaining of the first half of the year. In the euro area and most Central and Eastern European economies, inflation was below their respective inflation targets. The core inflation rates in these economies picked up somewhat, yet were still lower than their long-term averages. In the United States, both headline and core inflation remained higher than in the euro area.

Against this background, the European Central Bank (ECB) was keeping the interest rates close to zero, including the deposit rate below zero, and maintained asset purchases, albeit on a smaller scale than in the previous year. At the same time, the Federal Reserve (Fed) raised the interest rates twice (in March and June), yet continued to reinvest debt securities purchased during quantitative easing.

Strengthening signs of global economic recovery, along with still expansionary monetary policy of the major central banks, supported improving global market sentiment. Global stock exchange indices rose, reaching all-time highs in some economies, most notably the United States. The improvement in the global market sentiment resulted also in a decline in the government bond yields of the emerging market economies and an appreciation of their currencies, including the zloty.

In Poland, following a temporary slowdown in 2016, economic growth rebounded in the first half of 2017. It was still driven primarily by increasing consumer demand, supported by rising employment and wages, very strong consumer sentiment and disbursement of benefits. At the same time, investment growth turned positive in 2017 Q1, yet was still weak and concentrated in the public sector, with a fall in corporate investment deepening further in the first half of the year. At the same time, improving global economic conditions translated into further growth in Polish exports, thus were supportive of growth in Poland in the first six months of 2017.

Improvement in economic conditions in Poland was accompanied by a further recovery in the labour market. Following a setback in the second half of 2016, employment growth re-accelerated, causing unemployment to decline further. In effect, nominal wage growth was higher than in previous years. Also unit labour costs rose slightly faster, yet still at a moderate pace.

Price growth in Poland, like in many other countries, increased at the turn of the year, as global commodity prices were remaining higher than a year before. Following that, however, price growth in Poland stabilised at a moderate level. In addition, with demand pressure still weak in spite of the recovery, moderate price growth abroad and stronger zloty, core inflation remained low.

Available forecasts were indicating that economic recovery in Poland would continue into the following quarters, supported by a rebound in investment and an ongoing rise in consumer demand. These forecasts were also pointing to moderate price growth going forward.

Given this background, the Council judged that the NBP interest rates should remain unchanged. The Council assessed that despite the increase in price growth, the risk of inflation running persistently above the target in the medium term was limited, and no imbalances were building up in the economy. Moreover, keeping the interest rates unchanged supported the expected recovery in investment.

In the second half of 2017, global recovery was gathering strength. In the euro area, economic growth accelerated again, yet available forecasts pointed to slower GDP growth in the following quarters. Also in the United States, economic conditions remained favourable. In China, in turn, GDP growth weakened, albeit less than expected.

Improving global economic conditions were translating into higher demand for oil. At the same time, supply of this commodity remained limited due to an earlier agreement between the Organization of Petroleum Exporting Countries (OPEC) and some other exporters. All these factors led to a rise in oil prices in the second half of 2017. There was also an increase in prices of other energy commodities, i.e. gas and coal, yet global agricultural commodity prices declined. As a result, global inflation remained moderate, in many countries additionally contained by low core inflation. In the euro area, inflation remained below the ECB's definition of price stability, while in the United States it was close to the Fed's inflation goal.

Under these conditions, the ECB, like in the first half of 2017, was keeping its interest rates close to zero, including the deposit rate below zero. In addition, the ECB extended its asset purchase programme until at least September 2018 and announced a reduction in the monthly amount of asset purchases by half starting from January 2018. The Fed embarked on winding down its balance sheet in October 2017 and raised its interest rates once again in December 2017. However, global financial market sentiment remained strong. Global stock prices rose and capital inflows to emerging markets, even if weaker than in previous quarters, continued. In effect, emerging market currencies appreciated, and emerging market government bond yields declined. These concerned also the zloty and Polish government bond yields, respectively.

In Poland, favourable economic conditions continued into the second half of 2017. GDP growth accelerated markedly. Rising consumer demand remained a key growth driver, supported by increasing employment, acceleration in wage growth, as well as still very strong consumer confidence and disbursement of benefits. At the same time, growth in investment was higher than in the first half of the year, yet was still focused mainly on the public sector. Economic activity was also supported by a considerable export growth, which, however, decelerated slightly towards the end of the year.

Improving economic conditions were translating into a higher demand for labour. In the second half of the year, employment was still on a rise, which was reflected in a further decline in unemployment. Under these conditions, nominal wage growth accelerated, yet with increasing labour productivity, unit labour cost growth remained moderate.

In the second half of 2017, consumer price growth in Poland was still moderate. This resulted from limited, despite a gradual increase, domestic demand pressure. In addition, import price growth stayed low due to moderate inflation abroad and the stronger exchange rate of the zloty. In consequence, core inflation remained low. However, food price growth accelerated on the back of limited domestic supply of some agricultural products. Along with steeper growth in energy prices stemming from a rise in global commodity prices, this was supporting price growth in Poland for the most of the second half of the year.

Macroeconomic projections from the last six months of 2017 did not indicate a risk of an excessive acceleration in economic growth, especially given the expectations that the impact of child benefits on consumption growth would dissipate and activity growth abroad would slow down. Furthermore, in line with the projections, inflation in Poland was to remain close to the NBP target in the coming years.

Against this background, the Council kept the interest rates unchanged in the second half of 2017. The Council assessed that in light of available information, inflation would run close to the NBP target over the projection horizon. In addition, the stabilisation of the interest rates was conducive to maintaining balanced economic growth, including investment recovery.

Like in the previous years, in 2017 communication with the public played an important role in the conduct of monetary policy. Thus, the Council informed about its decisions and provided an assessment of economic developments behind them. The key communication instruments used in 2017 included the cyclical publications: *Information from the meeting of the Monetary Policy Council* (with 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 in 2016* and *Monetary Policy Guidelines for 2018*.

[1] The *Minutes of the Monetary Policy Council decision-making meetings* (included in Appendix 6) contain a more detailed coverage of issues and arguments with an impact on the decisions made by the Council in 2017.

3. Monetary policy instruments in 2017

In 2017, NBP employed the range of instruments adopted by the Council in the *Monetary Policy Guidelines for 2017*.

Liquidity of the banking sector in 2017

In 2017, NBP pursued monetary policy amid liquidity surplus prevailing in the banking sector.[2] The level of excess liquidity averaged PLN 73,632 million,[3] thus being PLN 426 million (or 0.6%) higher than in 2016.

The average level of liquidity surplus stood at PLN 83,377 million in December 2017 and was PLN 6,433 million (or 8.4%) higher than in December 2016.

The key factors affecting the banking sector liquidity were changes in the level of currency in circulation, as well as FX transactions involving purchase of foreign currency from the Ministry of Finance. The change in the first of the abovementioned factors caused banking sector liquidity to decline by PLN 10,234 million. On the other hand, the surplus of foreign currency purchases by NBP in 2017 over their sales led to a rise of PLN 9,578 million in banking sector liquidity.

Banking sector liquidity was additionally boosted by the payment of PLN 8,741 million from NBP profit to the state budget, while the increase in the required reserve ratio triggered the opposite effect – equivalent to, on average, PLN 2,450 million.

NBP interest rates

In 2017, the instrument of utmost significance for the implementation of monetary policy 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.

Open market operations

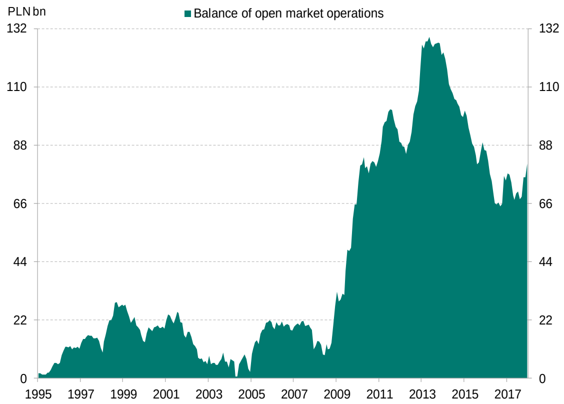
In 2017, as in the previous year, the operational target of monetary policy was to keep the POLONIA rate running close to the NBP reference rate. This was achieved mainly by open market operations, carried out on the initiative of the central bank. The central bank employed these instruments to manage 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 provided by the central bank.

By using the main open market operations, the central bank strived to ensure balanced liquidity conditions in the sector throughout the entire required reserve maintenance period. At the same time,

[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.

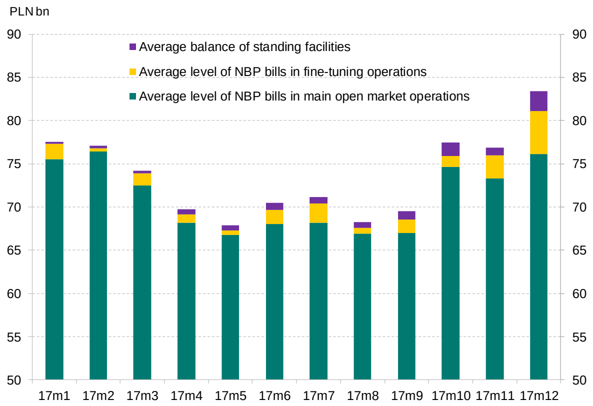
the yields on the individual operations, equal to the NBP reference rate at the date of the operation, had a direct impact on the cost of money determined in the interbank market (including the POLONIA rate).

Figure 1 Average monthly balance of open market operations 1995–2017



Source: NBP data.

Figure 2 Liquidity absorbing instruments in the respective months of 2017



Source: NBP data.

In 2017, the main open market operations were carried out on a regular weekly basis, in the form of issuance of NBP bills with a 7-day maturity. By using the main open market operations, the central bank absorbed most of the surplus liquidity in the banking sector. In 2017, the average volume of the NBP bills categorised as the main open market operations amounted to PLN 71,090 million, i.e. PLN 85 million less than in 2016.

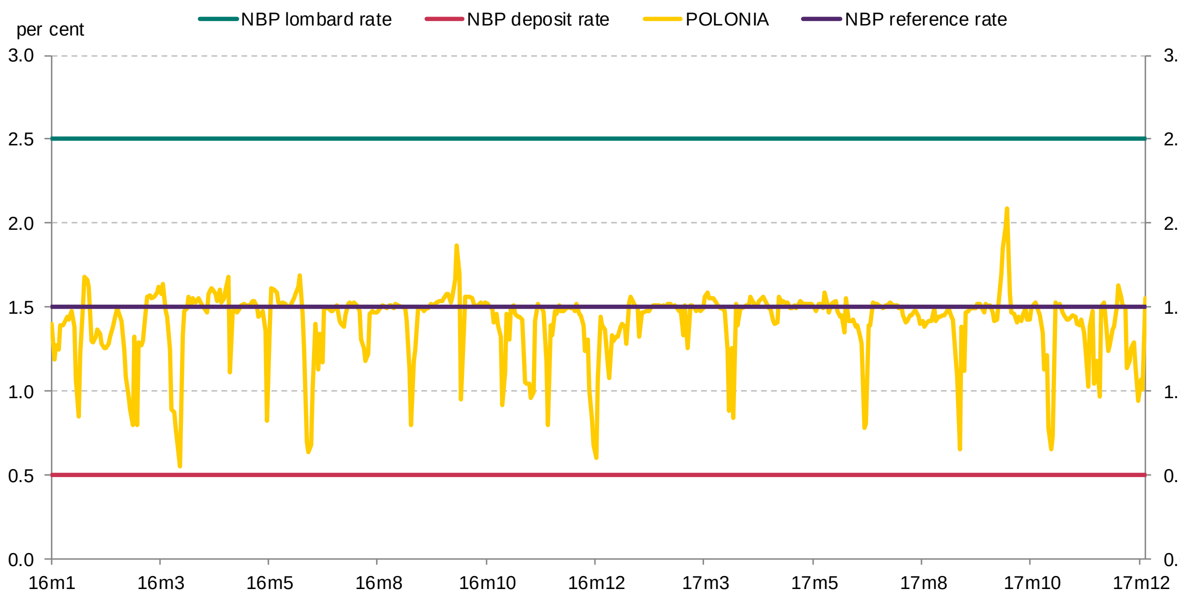
Apart from the main open market operations, in 2017 NBP also conducted fine-tuning open market operations, which played a complementary role in achieving the operational target of monetary policy. Fine-tuning operations were aimed to enable the banks to balance their liquidity positions throughout the 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 2017, NBP carried out 12 fine-tuning operations on the last day of the required reserve maintenance periods. In addition, NBP conducted 8 fine-tuning operations within the required reserve maintenance period. Under this category of operations, the NBP bills were issued with maturities of 1, 2, 3 and 4 days. The average issue of the NBP fine-tuning operations amounted to PLN 1,696 million in 2017 and exceeded the 2016 level by PLN 433 million.

The liquidity management by NBP enabled banks to balance their liquidity positions within the required reserve maintenance period, as reflected in the successful implementation of the monetary policy operational target by the central bank in 2017. The POLONIA rate was running close to the NBP reference rate in 2017, as its average absolute deviation from the NBP reference rate was 12 bps in 2017, compared with 16 bps in 2016.[4]

[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.

Figure 3 NBP interest rates and the POLONIA rate in 2016-2017



Source: NBP data.

Reserve requirement

The required reserves system 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 allowed the entities to decide on the amount of funds accumulated at the central bank during the reserve maintenance period, provided that the average holdings at NBP were at least equal to the required reserve level. At the same time, the obligation to maintain the required reserve limited the scale of the NBP open market operations necessary to absorb the excess liquidity prevailing in the banking sector in 2017.

In 2017, 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 Credit Union.

In 2017, 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%.

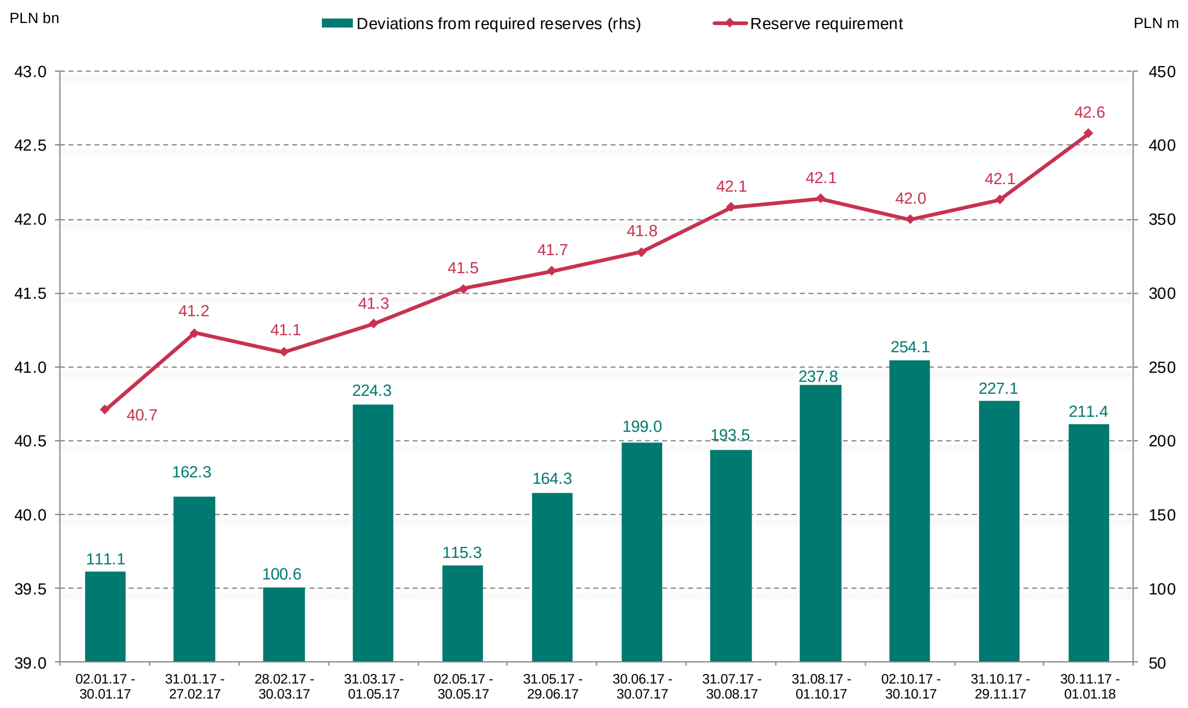
The amount of required reserves as at 31 December 2017 stood at PLN 42,581 million, including the required reserve of commercial and cooperative banks of PLN 42,282 million and the required reserves of credit unions and the National Credit Union of PLN 299 million. This represents an increase in the total required reserves of PLN 2,548 million, i.e. 6.36%, on the level recorded on 31 December 2016. The main factor responsible for the rise in the total amount of the required reserve holdings in 2017 were the increasing deposits of the banking sector, on which the required reserve was calculated.

In all the required reserve maintenance periods in 2017, entities' average holdings at NBP remained above the required level. The surplus ranged from the lowest point (of PLN 101 million) observed in

March to a peak (of PLN 254 million) in October. The average funds in excess of the required reserves holdings in 2017 amounted to PLN 183 million and accounted for 0.43% of the average level of the required reserves.

Two instances of commercial banks failing to maintain the required reserve level were recorded in 2017.

Figure 4 Changes in required reserves level and deviations from the reserve requirement in 2017



Source: NBP data.

The remuneration on reserve balances in 2017 was equivalent to 0.9 of the NBP reference rate. This means that on average it was equal to 1.35% during the year.

In 2017, the Council decided to introduce two changes in the required reserve system.

Pursuant to the decision of 8 November 2017, starting from the reserve maintenance period beginning on 30 April 2018, the required reserve ratio for banks and the credit union sector in relation to term deposits with a maturity of 2 years or more amounts to 0.0%. The abovementioned decision was motivated mainly by the need to align the treatment of funds received from domestic and foreign entities subject to the required reserve system.

On 5 December 2017, the Council decided to decrease, as of 1 January 2018, the remuneration on the required reserve holdings to 0.5%.

Both changes in the reserve requirement system are designed to help reduce the mismatch between the term structures of assets and liabilities of Polish institutions obliged to maintain the required reserve by supporting long-term savings.

In 2017, the NBP Management Board decided to prolong the exemption, granted to a cooperative bank, from the obligation to maintain the required reserve during the implementation of its rehabilitation programme.

Standing facilities

Standing facilities (overnight deposit and lombard credit) acted as an instrument for stabilising the level of liquidity in the banking sector and the scale of the fluctuations of interest rates in the interbank market. These operations were conducted at the initiative of banks. Banks used them to supplement their liquidity shortages, or to place surplus funds with NBP, in both cases for a term of one day.

The interest rate on 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 2017, like in previous years, banks used the lombard credit only occasionally. The total drawing on this credit in 2017 (set for the days of using this instrument) was PLN 13 million, compared to PLN 1,350 million in 2016. The average daily drawing on the lombard credit stood at PLN 35 thousand (compared with PLN 3,667 thousand in 2016).

In 2017, banks placed overnight deposits totalling PLN 309 billion at NBP (calculated for the period of their holding), i.e. 8.8% more than the previous year's figure calculated in the same manner (PLN 284 billion). The total amount of overnight deposits fluctuated between PLN 29 million and PLN 10,936 million. In 2017, the average daily overnight deposit amounted to PLN 846 million, as against PLN 772 million in 2016. 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 2017, the central bank did not conclude any such operations.

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 2017, the central bank did not conclude any such operations.

Appendix 1. Economic developments abroad

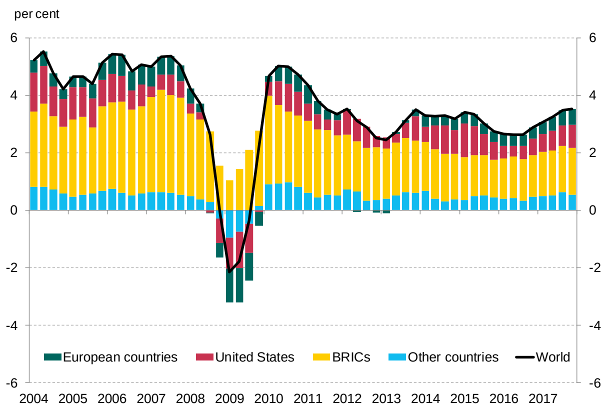
In 2017, global economic recovery continued (Figure 5, Figure 6). In many countries, favourable economic conditions were supported by rising consumer demand and investment activity, coupled with a recovery in global trade. Despite the global upturn, price growth abroad remained moderate.

In the euro area, Poland's main trading partner, GDP growth accelerated in 2017 (to 2.4% against 1.8% in 2016, Figure 6). Growth in this economy was still driven mainly by domestic factors, both private consumption and investment activity. Further increase in domestic demand was backed by a steady rise in employment and wages, good consumer and business sentiment as well as the ECB's expansionary monetary policy. In the second half of 2017, GDP growth was additionally propped up by increasing exports. Higher growth in the euro area translated into better conditions in the Central and Eastern European economies.

In the United States, GDP growth also accelerated (to 2.3% versus 1.5% in 2016), supported by a recovery in corporate investment. The major factor behind economic growth in this country was still consumption, backed by rising employment and wages and an increase in households' wealth amid growing financial asset prices.

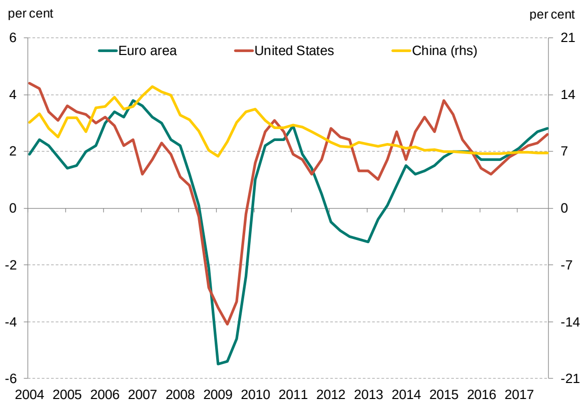
In 2017, economic conditions improved in the emerging market economies as well. Most notably, in China, GDP growth levelled off after a few years of slowdown, yet concerns about imbalances building up in this economy remained.

Figure 5 Annual global GDP growth in 2004–2017 by country groups



Source: Bloomberg, Eurostat, IMF data, 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).

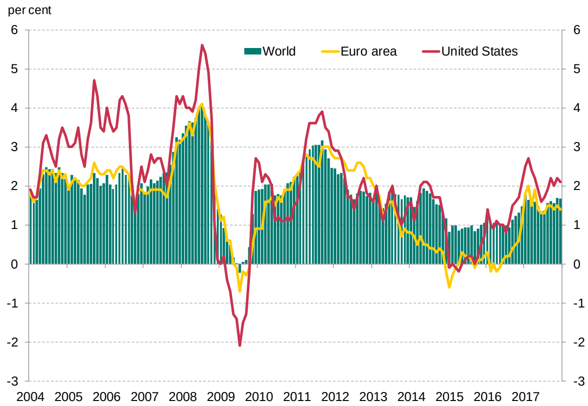
Figure 6 Annual GDP growth in selected economies in 2004–2017



Source: Bloomberg data.

Following a rise in early 2017, global inflation remained moderate amid low core inflation in many economies. This was especially true of the euro area, where price growth remained below the ECB's inflation target. In the United States, inflation was close to the Fed's target (Figure 7). The pick-up in global inflation resulted mainly from steeper growth in energy prices, stemming from a rise in energy commodity prices. The latter was related to improved global economic conditions, which translated into higher demand for energy commodities. Oil prices were boosted additionally by supply cuts agreed among OPEC members and some other exporters in late 2016. At the same time, global prices of most agricultural commodities declined, notwithstanding the robust global consumption growth.

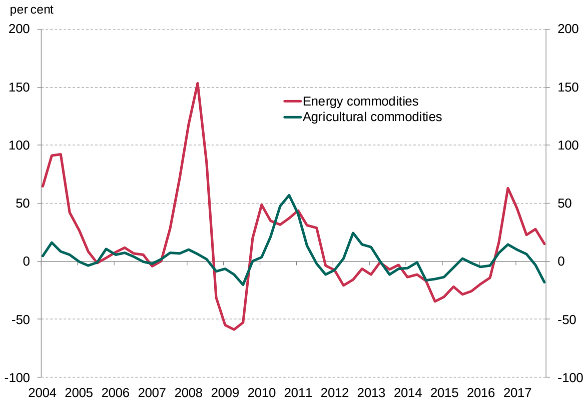
Figure 7 Annual consumer price growth in the environment of the Polish economy in 2004-2017



Source: Bloomberg data, NBP calculations.

World – GDP-weighted average annual consumer price inflation in the economies accounting for 80% of the global GDP. United States – annual CPI inflation. Euro area – annual HICP inflation.

Figure 8 Annual growth in energy and agricultural commodity prices in USD in 2004-2017



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 in Polish households. The energy commodity price index includes the prices of coal, oil and gas. The system of weights reflects the structure of primary energy carrier consumption in the Polish economy.

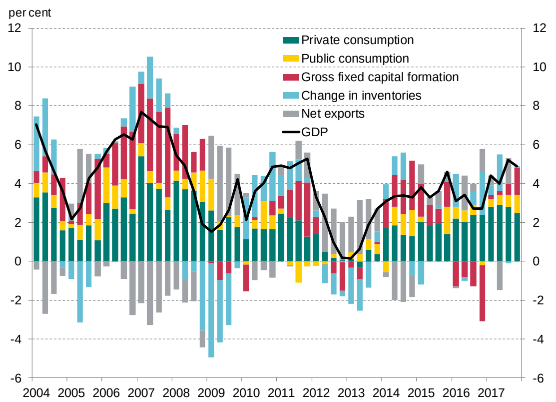
Given moderate inflation in the euro area, the ECB was keeping its interest rates close to zero in 2017, including the deposit rate below zero, and continued to purchase financial assets. In October 2017, the ECB also decided to extend the quantitative easing programme until at least September 2018, simultaneously reducing the scale of monthly purchases from EUR 60 billion to EUR 30 billion starting from January 2018. The ECB was also indicating that the interest rates would remain unchanged for some time after the end of the asset purchase programme. In the United States, in turn, the Fed raised the target range for the fed funds rate three times (by 0.25 percentage points each time) to 1.25-1.50%. Furthermore, it started to gradually reduce its balance sheet by limiting the reinvestment of assets. Yet, it signalled that in the coming years the balance sheet would not return to its pre-crisis level, and that the interest rates would probably stay lower than before the financial crisis.

Amid global economic recovery and relatively accommodative monetary policy of major central banks, global stock prices rose markedly in 2017. The expansionary monetary policy of these banks also contributed to an appreciation of emerging market currencies. It also helped to keep the government bond yields relatively low, particularly in the major euro area member states, where the yields, despite rising somewhat, were still close to zero. In the United States, in turn, given the gradual monetary policy tightening by the Fed, the yields were markedly higher than in the euro area.

Appendix 2. Gross domestic product

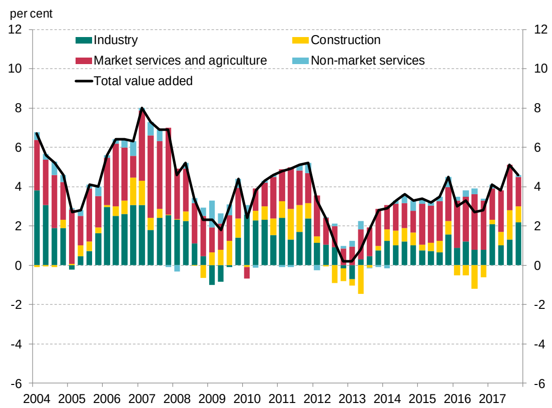
In 2017, real GDP growth accelerated to 4.6% from 3.0% a year before (Figure 9, Table 1). Economic growth was primarily driven by consumer demand. In addition, investment activity started to recover. GDP growth was also supported by good economic conditions abroad, even if, with a slight slowdown in exports and some acceleration in imports, net exports contributed to GDP growth only to a marginal extent.

Figure 9 Annual GDP growth and its components in 2004–2017



Source: GUS data.

Figure 10 Annual value added growth and its components in 2004–2017



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 catering, information and communication, financial and insurance activity, 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.

Private consumption growth in 2017 was backed by an increase in household disposable income resulting from a further rise in employment, wages growing faster than a year before and the disbursement of child benefits under the "Family 500 plus" programme. Private consumption growth also benefited from robust consumer sentiment. Yet, in real terms, it was hindered by consumer price growth that was higher than in previous years.

Following a fall in 2016, gross fixed capital formation rebounded in 2017. Public investment was the main contributor, which was related to a gradual increase in the absorption of EU funds under the 2014-2020 financial framework. Residential estate investment was also on a rise, along with an increase in housing affordability of households underpinned by higher disposable personal incomes and relatively low lending rates.

Net exports contributed positively to GDP growth in 2017, yet to a lesser extent than a year before. This resulted from somewhat weaker increase in exports coupled with an acceleration in import growth.

At the sectoral level, economic growth in 2017 was also broad-based, with services and industry being the major factors behind it. Construction, both residential and non-residential, also added to growth (Figure 10, Table 1).

Table 1 GDP and its components in 2009–2017

	2017		2009	2010	2011	2012	2013	2014	2015	2016	2017	2017			
	Current prices (PLN bn)	per cent of GDP	Annual growth at the previous year prices (in per cent)												
												Q1	Q2	Q3	Q4
GDP	1982.1	100.0	2.8	3.6	5.0	1.6	1.4	3.3	3.8	3.0	4.6	4.4	4.0	5.2	4.9
Domestic demand	1900.4	95.9	-0.2	4.2	4.2	-0.5	-0.6	4.7	3.3	2.2	4.7	4.1	5.8	4.0	5.1
Consumption	1510.9	76.2	3.6	2.8	2.0	0.5	0.8	2.8	2.8	3.4	4.4	3.9	4.4	4.3	4.9
Individual consumption	1145.6	57.8	3.5	2.6	3.3	0.8	0.3	2.6	3.0	3.9	4.8	4.5	4.9	4.7	5.0
Capital formation	389.6	19.7	-12.6	9.4	12.8	-3.9	-5.8	12.8	4.9	-2.4	6.2	5.0	11.9	2.8	5.5
Gross fixed capital formation	350.3	17.7	-2.7	0.0	8.8	-1.8	-1.1	10.0	6.1	-8.2	3.4	1.4	1.3	3.6	5.4
Exports	1070.9	54.0	-5.9	13.1	7.9	4.6	6.1	6.7	7.7	8.8	8.2	11.2	4.5	9.2	8.2
Imports	989.3	49.9	-12.4	14.3	5.8	-0.3	1.7	10.0	6.6	7.6	8.7	11.1	8.0	7.0	8.9
Value added	1743.3	88.0	3.1	3.5	5.0	1.7	1.5	3.3	3.7	2.9	4.4	4.1	3.8	5.1	4.6
Industry	473.4	23.9	0.3	8.4	7.9	2.8	0.9	4.5	3.8	3.5	6.2	7.3	3.9	5.4	7.7
Construction	128.0	6.5	10.1	4.9	13.5	-4.0	-5.0	9.0	6.4	-8.5	11.5	4.9	10.0	19.5	9.6
Market services and agriculture	893.8	45.1	2.7	1.9	3.4	2.6	2.9	2.3	3.7	4.9	3.5	3.1	3.8	4.3	3.0
Non-market services	248.1	12.5	5.3	-0.3	1.1	0.1	0.9	1.7	2.0	1.3	0.7	1.5	0.3	0.0	1.0
			Contribution to annual GDP growth at the previous year prices (in percentage points)												
Domestic demand	-	-	-0.2	4.2	4.3	-0.5	-0.6	4.7	3.2	2.2	4.5	3.9	5.5	3.9	4.9
Consumption	-	-	2.9	2.3	1.6	0.4	0.6	2.2	2.2	2.7	3.3	3.2	3.4	3.4	3.4
Individual consumption	-	-	2.1	1.6	2.0	0.5	0.2	1.5	1.8	2.3	2.7	2.8	2.9	2.8	2.5
Capital formation	-	-	-3.1	1.9	2.7	-0.9	-1.2	2.5	1.0	-0.5	1.2	0.7	2.1	0.5	1.5
Gross fixed capital formation	-	-	-0.6	0.0	1.8	-0.4	-0.2	1.9	1.2	-1.7	0.6	0.2	0.2	0.6	1.4
Net exports	-	-	3.1	-0.6	0.7	2.1	2.0	-1.4	0.6	0.8	0.1	0.5	-1.5	1.3	0.0
			Contribution to annual value added growth at the previous year prices (in percentage points)												
Industry	-	-	0.1	2.1	1.9	0.7	0.2	1.1	1.0	0.9	1.6	2.1	1.0	1.3	2.2
Construction	-	-	0.8	0.4	1.1	-0.3	-0.4	0.7	0.5	-0.7	0.8	0.2	0.7	1.5	0.8
Market services and agriculture	-	-	1.4	1.0	1.7	1.3	1.5	1.2	1.9	2.5	1.8	1.6	2.1	2.3	1.5
Non-market services	-	-	0.8	0.0	0.2	0.0	0.1	0.3	0.3	0.2	0.1	0.2	0.0	0.0	0.1

Source: GUS data, NBP calculations.

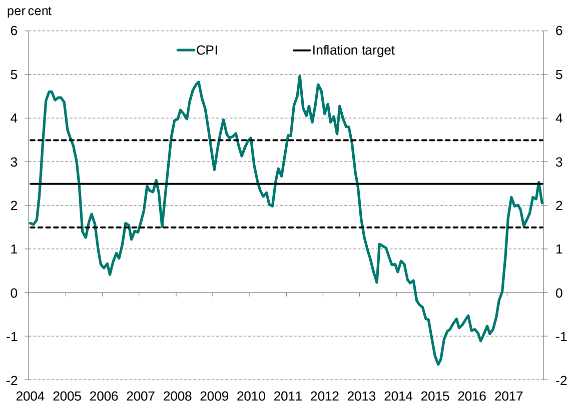
Market services and agriculture cover categories A and G-N of PKD classification (Polish equivalent of NACE): agriculture, trade, transportation, accommodation and catering, information and communication, financial and insurance activity, real estate activities, professional, scientific and technical 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. Contributions to GDP growth and value added growth may not add up to overall GDP growth and value added growth due to rounding.

Appendix 3. Consumer prices

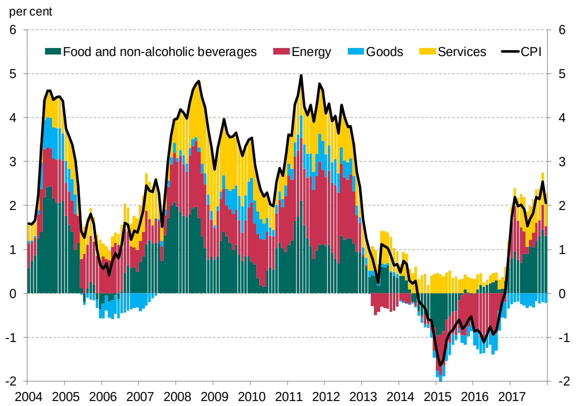
Average consumer price growth increased in 2017, reaching 2.0% (against -0.6% in the previous year), and thus was close to the NBP inflation target (Figure 11, Figure 12).

Figure 11 Annual growth in CPI and the inflation target in 2004–2017



Source: GUS data.

Figure 12 Consumer price growth and its components in 2004–2017



Source: GUS data, NBP calculations.

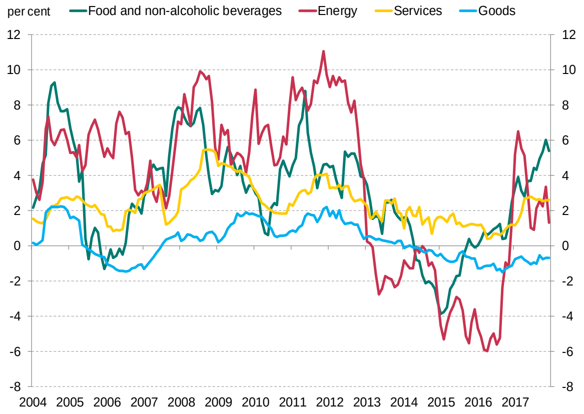
Faster average price growth in Poland in 2017 was driven mainly by stronger growth in food and energy prices, amid still low, albeit higher than in a year before, core inflation (Figure 12, Figure 13, Figure 14).

Higher food price growth was related to a decline in the global supply of some agricultural products (meat, dairy products and butter), amid robust global demand for these products. Another factor behind this development was unfavourable weather, first in southern Europe and then in Poland, which had a negative effect on the supply of fruit and vegetables. At the same time, together with rising households' income, consumer demand was increasing, additionally driving up domestic food prices.

Annual energy price growth in 2017 was markedly higher than in previous years (Figure 12, Figure 13). This resulted from a rise in global prices of oil and other energy commodities. In late 2017, energy price growth slowed down due to base effects.

The continued low core inflation in 2017 was supported by a further decline in prices of goods, related to moderate inflation abroad and the appreciation of the zloty. At the same time, domestic demand pressure, despite a gradual increase, remained subdued. Although rising consumer demand boosted prices of services, in the second half of 2017 their growth stabilised at a moderate level (Figure 13, Figure 14).

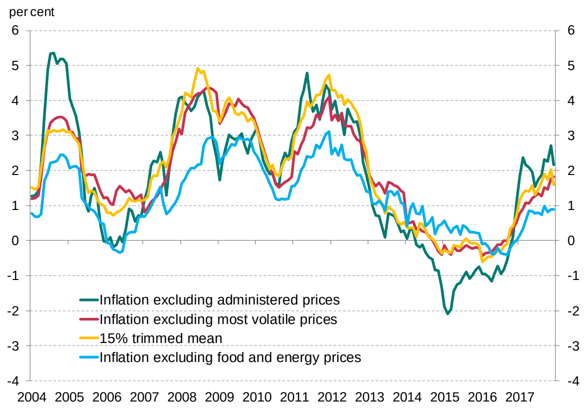
Figure 13 Annual growth in the prices of food and non-alcoholic beverages, energy, goods and services in 2004-2017



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 14 Core inflation indices in 2004-2017 (y/y)



Source: GUS data, NBP calculations.

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

	Weights 2017, per cent	Change (y/y, per cent) 2017 I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII	Annual average
CPI	100.0	1.7	2.2	2.0	2.0	1.9	1.5	1.7	1.8	2.2	2.1	2.5	2.1	2.0
Core inflation	59.6	0.2	0.3	0.6	0.9	0.8	0.8	0.8	0.7	1.0	0.8	0.9	0.9	0.7
Goods	31.1	-0.8	-0.7	-0.6	-0.8	-0.9	-1.1	-0.9	-1.0	-0.5	-0.8	-0.7	-0.7	-0.8
Services	28.5	1.2	1.4	1.9	2.7	2.7	2.8	2.7	2.6	2.6	2.6	2.6	2.6	2.4
Food and non-alcoholic beverages	24.2	3.3	3.9	3.1	2.8	3.7	3.7	4.4	4.3	5.0	5.4	6.0	5.4	4.2
Processed	13.2	2.6	2.7	2.9	2.5	3.3	3.5	4.1	4.6	4.8	4.6	5.6	5.2	3.9
Milk, cheeses and eggs	3.1	2.5	3.4	3.8	4.0	4.6	4.9	5.4	5.9	6.5	7.1	11.5	11.4	5.9
Oils and fats	1.0	9.6	10.4	11.4	8.9	12.3	12.8	16.9	21.5	23.9	23.2	21.9	17.5	16.0
Unprocessed	11.1	4.1	5.3	3.4	3.1	4.1	3.9	4.8	3.9	5.2	6.3	6.6	5.7	4.7
Meat	6.2	3.2	3.8	4.1	5.1	5.9	5.8	5.7	4.8	4.9	4.6	4.6	4.8	4.8
Vegetables	2.5	4.1	8.7	1.3	-1.0	-2.2	-2.0	1.6	0.8	5.2	7.6	8.0	4.9	2.9
Fruit	1.5	7.4	5.6	3.7	2.4	8.1	6.2	6.6	5.3	7.9	14.4	16.3	13.3	8.0
Energy	16.1	5.2	6.5	5.6	5.1	3.2	1.0	0.9	2.1	2.5	2.2	3.4	1.3	3.2
Energy carriers	11.3	0.7	0.8	0.6	1.4	1.3	1.3	1.4	1.6	2.1	2.5	2.8	2.6	1.6
Fuels	4.8	16.5	21.2	18.1	14.4	7.6	0.4	-0.1	3.5	3.6	1.6	4.7	-1.3	7.2
							According to COICOP							
Food and non-alcoholic beverages	24.2	3.3	3.9	3.1	2.8	3.7	3.7	4.4	4.3	5.0	5.4	6.0	5.4	4.2
Alcoholic beverages and tobacco products	6.4	0.9	1.1	1.3	0.8	0.9	0.7	1.0	0.9	1.2	0.9	1.0	0.9	1.0
Clothing and footwear	5.7	-5.5	-5.5	-5.5	-5.3	-5.1	-5.4	-5.7	-5.7	-4.6	-4.7	-4.6	-4.8	-5.2
Home maintenance and energy carriers	20.5	1.2	1.3	1.3	1.8	1.8	1.8	1.9	2.0	2.3	2.6	2.7	2.6	1.9
Home equipment and household maintenance	5.1	0.5	0.6	0.9	0.3	0.4	0.4	0.2	0.1	0.0	-0.1	0.3	0.1	0.3
Health	5.6	0.6	0.9	1.2	1.2	0.2	0.3	1.1	1.0	2.0	2.0	1.9	1.8	1.2
Transportation	8.7	8.7	11.2	9.4	8.7	4.2	0.0	-0.8	1.8	1.6	0.4	2.3	-0.8	3.8
Telecommunications	5.2	-1.1	-1.2	-1.3	-0.7	1.7	1.6	1.7	1.2	1.7	1.6	1.5	1.5	0.7
Recreation and culture	6.9	-1.2	-0.7	1.1	2.4	2.1	2.5	2.3	1.8	1.9	1.4	1.7	1.7	1.4
Education	1.0	0.8	0.8	0.8	0.9	1.0	0.9	1.0	1.0	1.3	1.8	1.8	1.9	1.2
Restaurants and hotels	5.2	1.8	1.9	1.9	1.8	1.9	2.1	2.3	2.4	2.2	2.5	2.7	2.8	2.2
Other goods and services	5.5	3.3	3.5	3.2	3.1	2.7	2.1	2.2	1.7	1.9	1.3	0.7	0.7	2.2
	Weights 2017, per cent	**Contribution to CPI growth (in percentage points) 2017 I**	**II**	**III**	**IV**	**V**	**VI**	**VII**	**VIII**	**IX**	**X**	**XI**	**XII**	**Annual average**
CPI	100.0	1.7	2.2	2.0	2.0	1.9	1.5	1.7	1.8	2.2	2.1	2.5	2.1	2.0
Core inflation	59.6	0.1	0.2	0.3	0.5	0.5	0.5	0.5	0.4	0.6	0.5	0.5	0.5	0.4
Goods	31.1	-0.2	-0.2	-0.2	-0.2	-0.3	-0.3	-0.3	-0.3	-0.2	-0.2	-0.2	-0.2	-0.2
Services	28.5	0.3	0.4	0.5	0.8	0.8	0.8	0.8	0.8	0.8	0.7	0.7	0.7	0.7
Food and non-alcoholic beverages	24.2	0.8	1.0	0.8	0.7	0.9	0.9	1.1	1.0	1.2	1.3	1.5	1.3	1.0
Processed	13.2	0.3	0.4	0.4	0.3	0.4	0.5	0.5	0.6	0.6	0.6	0.7	0.7	0.5
Milk, cheeses and eggs	3.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.4	0.4	0.2
Oils and fats	1.0	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Unprocessed	11.1	0.5	0.6	0.4	0.4	0.5	0.4	0.5	0.4	0.6	0.7	0.7	0.6	0.5
Meat	6.2	0.2	0.2	0.2	0.3	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3
Vegetables	2.5	0.1	0.2	0.0	0.0	-0.1	-0.1	0.0	0.0	0.1	0.2	0.2	0.1	0.1
Fruit	1.5	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.1
Energy	16.1	0.8	1.0	0.9	0.8	0.5	0.2	0.1	0.3	0.4	0.4	0.6	0.2	0.5
Energy carriers	11.3	0.1	0.1	0.1	0.2	0.2	0.1	0.2	0.2	0.2	0.3	0.3	0.3	0.2
Fuels	4.8	0.8	0.9	0.8	0.7	0.4	0.0	0.0	0.2	0.2	0.1	0.2	-0.1	0.3
							According to COICOP							
Food and non-alcoholic beverages	24.2	0.8	1.0	0.8	0.7	0.9	0.9	1.1	1.0	1.2	1.3	1.5	1.3	1.0
Alcoholic beverages and tobacco products	6.4	0.1	0.1	0.1	0.0	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Clothing and footwear	5.7	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3
Home maintenance and energy	20.5	0.2	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.6	0.5	0.4
Home equipment and household maintenance	5.1	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
Health	5.6	0.0	0.0	0.1	0.1	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Transportation	8.7	0.7	0.9	0.8	0.7	0.4	0.0	-0.1	0.2	0.1	0.0	0.2	-0.1	0.3
Telecommunications	5.2	-0.1	-0.1	-0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0
Recreation and culture	6.9	-0.1	0.0	0.1	0.2	0.1	0.2	0.2	0.1	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	5.2	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	5.5	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.1

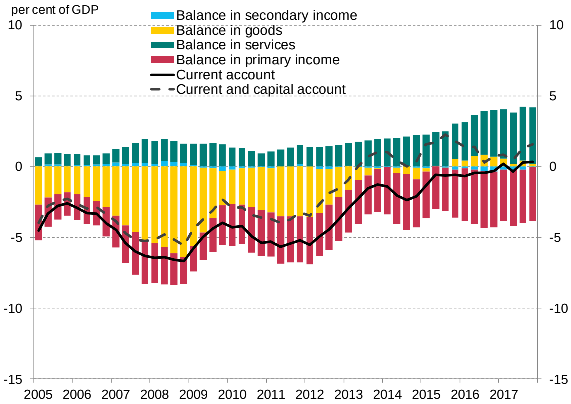
Source: GUS data, NBP calculations.

The core inflation quoted in the table denotes CPI inflation excluding prices of food and energy.

Appendix 4. Balance of payments

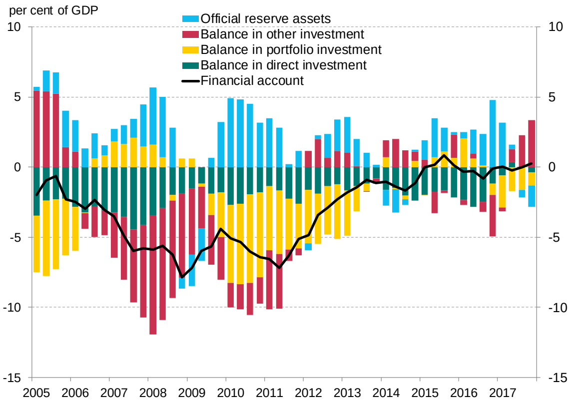
The current account balance was slightly positive in 2017 (amounting to PLN 6.5 billion and 0.3% of GDP against -0.3% of GDP in the year before). As a result, most external imbalance indicators improved or stayed at approximately the same level as in 2016 (Table 4).

Figure 15 Current and capital account balance and its decomposition (4-quarter rolling window) in 2005–2017



Source: NBP and GUS data, NBP calculations.

Figure 16 Financial account balance and its decomposition (4-quarter rolling window) in 2005–2017



Source: NBP and GUS data, NBP calculations.

The positive current account balance in 2017 resulted primarily from a large trade surplus (Figure 15, Table 3). A factor which kept the trade balance positive was the rising surplus in trade in services. The value of Polish merchandise exports also increased, supported by recovery abroad. At the same time, the value of merchandise imports rose on the back of higher global oil prices and the acceleration in domestic demand growth. As a result, the balance of trade was lower than in 2016, yet still positive. The primary income balance, in turn, remained significantly negative due to high income of foreign direct investors stemming from good financial standing of enterprises operating in Poland.

The surplus on the capital account also increased in 2017, propped up by higher inflow of EU funds, especially under the European Regional Development Fund and the Cohesion Fund. In effect, the combined balance of the current and capital accounts rose to 1.6% of GDP from 0.8% of GDP in 2016.

Table 3 Balance of payments (PLN million) in 2009–2017[5]

Balance of payments	2009	2010	2011	2012	2013	2014	2015	2016	2017
Current account	-54,261	-77,770	-81,497	-60,477	-21,039	-35,655	-10,229	-5,380	6,498
Balance of trade in goods	-33,187	-43,677	-54,790	-34,128	-1,345	-13,634	9,326	12,834	3,541
Balance of services	21,715	13,174	21,073	25,145	32,070	37,922	45,610	61,428	79,117
Balance of primary income	-38,603	-47,108	-50,914	-50,874	-50,016	-58,369	-61,535	-73,544	-75,712
Balance of secondary income	-4,186	-159	3,134	-620	-1,748	-1,575	-3,630	-6,098	-448
Capital account	22,097	25,705	30,618	35,711	37,857	41,990	42,510	19,536	25,038
Financial account	-60,189	-92,928	-80,227	-37,276	-18,676	-19,557	2,296	-2,111	5,523
Direct investment: assets	19,262	28,075	12,944	4,237	-10,502	21,297	18,194	44,732	16,247
Direct investment: liabilities	43,754	53,939	53,575	23,929	2,809	62,025	56,860	66,444	23,178
Portfolio investment: assets	4,270	-488	-2,796	1,395	6,891	17,603	41,711	-24,840	4,776
Portfolio investment: liabilities	47,935	87,130	47,426	65,455	7,289	9,964	29,846	-9,403	23,652
Other investment: assets	-17,026	11,878	11,060	7,179	5,286	12,751	19,478	9,547	19,182
Other investment: liabilities	25,254	39,231	18,942	-11,668	11,067	1,097	-10,166	64,316	-47,072
Derivative financial instruments	5,850	1,789	525	-8,942	-2,200	-62	-3,663	539	-4,372
Official reserve assets	44,398	46,118	17,983	36,571	3,014	1,940	3,116	89,268	-30,552
Balance of errors and omissions	-28,025	-40,863	-29,348	-12,510	-35,494	-25,891	-29,985	-16,267	-26,013

Source: NBP data.

The financial account balance remained nearly in balance in 2017, helped, in particular, by one substantial transaction of purchase by a domestic entity of one of the largest Polish banks from a foreign investor, which translated into lower participation of foreign investors in Poland (Figure 16). At the same time, considerable portfolio capital inflows to the Polish government bond market continued amid robust sentiment in the global markets and favourable data from the Polish economy. Yet, the greatest change on the current account was in other investment balance and the value of official reserve assets in the Polish zloty, mainly resulting from NBP transactions[6] (Figure 16, Table 3).

Table 4 Selected external stability indicators 2009-2017

	2009	2010	2011	2012	2013	2014	2015	2016	2017
Current account balance/GDP (per cent)	-4.0	-5.4	-5.2	-3.7	-1.3	-2.1	-0.6	-0.3	0.3
Current and capital account balance/ GDP (per cent)	-2.3	-3.6	-3.2	-1.5	1.0	0.4	1.8	0.8	1.6
Balance of trade in goods and services/GDP (per cent)	-0.8	-2.1	-2.2	-0.6	1.9	1.4	3.1	4.0	4.2
Official reserve assets in terms of monthly imports of goods and services	5.2	5.5	5.7	5.5	5.2	5.3	5.3	6.4	4.8
Gross foreign debt/GDP (per cent)	58.3	65.5	70.7	70.2	69.8	72.7	71.8	75.9	66.5
Net international investment position/GDP (per cent)	-57.3	-65.1	-62.4	-65.3	-68.9	-69.1	-62.1	-60.7	-60.7

Source: NBP and GUS data, NBP calculations.

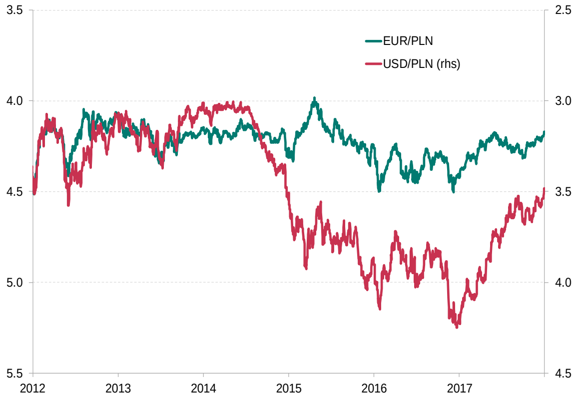
Favourable data from the Polish economy and robust sentiment in the financial markets, related in particular to the expansionary monetary policy of the major central banks, resulted in an appreciation of emerging market currencies, including the zloty. As a result, the zloty strengthened in 2017 against

[5] 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.

[6] The change in the balance in other investment was primarily connected with the closure of repo transactions by NBP. NBP transactions were aimed at managing the liquidity of the reserve assets and increasing their profitability. This was accompanied by a decline in the official reserve assets.

the major currencies, which also led to an appreciation of its effective exchange rate, i.e. against the currencies of Poland's most important trading partners (Figure 17, Figure 18).

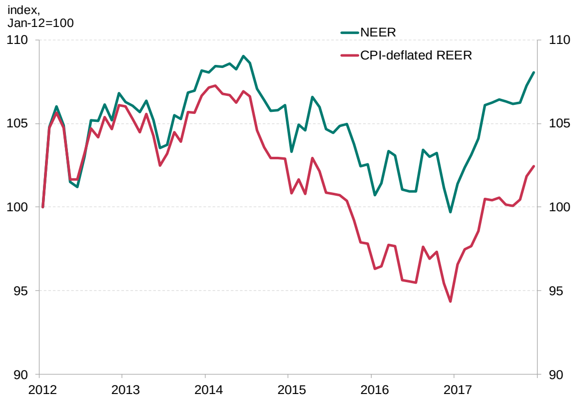
Figure 17 Nominal effective zloty exchange rate against major currencies in 2012–2017



Source: NBP data.

Values on the vertical axes are in a reverse order, so an increase denotes appreciation of the zloty.

Figure 18 Real and nominal zloty effective exchange rate in 2012–2017



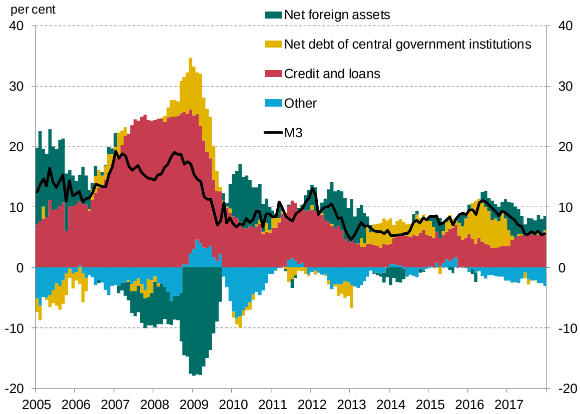
Source: BIS data.

Increase denotes appreciation of the zloty.

Appendix 5. Money and credit

Like in previous years, in 2017 the broad money aggregate (M3) increased, albeit at a slower pace than in 2016. The average annual M3 growth rate was 6.5% y/y in 2017 against 9.7% y/y in 2016 (Figure 19). M3 growth in 2017 was mainly driven by a stable, yet slower than nominal GDP growth, rise in loans to the non-financial sector (5.4% y/y compared with 5.1% y/y in 2016, Figure 20).[7] This was accompanied by a slower growth in net debt of central government institutions (1.6% y/y in 2017 compared with 37.7% y/y in 2016).

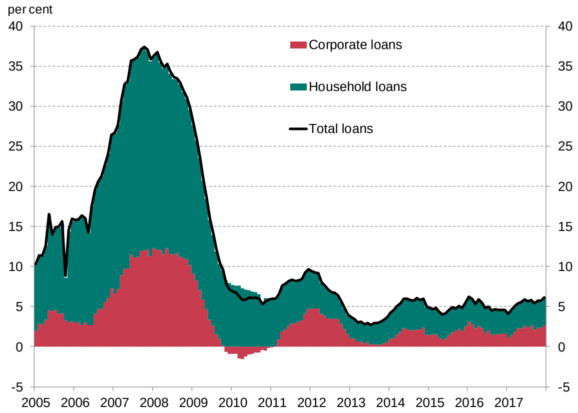
Figure 19 Annual growth rate of M3 aggregate and contribution of the main components in 2005-2017 (transaction data)



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 20 Annual growth rate of loans to non-financial sector and contribution of the main components in 2005–2017 (transaction data)



Source: NBP data.

Besides loans to enterprises and households, the series Total loans *comprises loans to non-profit institutions serving households. Due to its insignificant impact on total lending growth, it was not marked separately in the chart.*

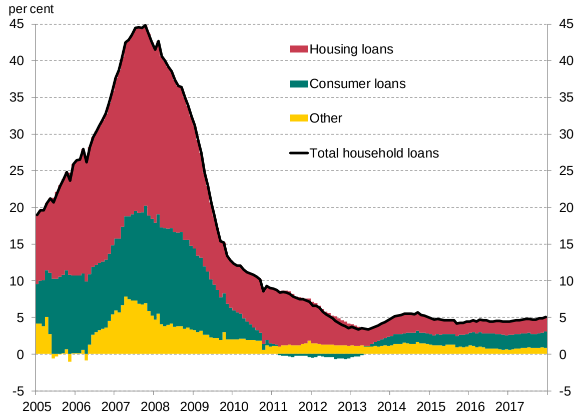
The main source of lending growth in 2017 was a steady rise in loans to households (4.7% y/y in 2017 compared with 4.5% y/y in 2016). The increase in this sector resulted almost equally from a rise in consumer loans (8.2% y/y, both in 2017 and in 2016) and housing loans (3.3% y/y in 2017 against 2.8% y/y in 2016, Figure 21). The growth in lending to households was underpinned by labour market conditions favourable for employees, robust consumer confidence and stable lending rates.[8]

Another substantial source of the 2017 growth in lending to the non-financial sector was an increase in corporate loans, which grew at a similar pace as a year before (6.8% y/y in 2017 versus 6.5% y/y in 2016, Figure 22). Corporate lending growth was backed by good financial standing of enterprises and lending rates for these entities remaining close to 2016.[9] It was still mainly driven by rising investment loans

[7] Nominal GDP growth stood at 6.7% y/y in 2017.
[8] Average interest on PLN-denominated loans to households and non-profit institutions serving households, according to new and renegotiated agreements, stood at 6.2% in 2017 compared with 6.3% in 2016.
[9] Average interest on PLN-denominated corporate loans, according to new and renegotiated agreements, stood at 3.7% in 2017 compared with 3.5% in 2016.

(8.0% y/y in 2017 against 8.2% y/y in 2016), resulting from the acceleration in economic growth. The growth rate of short-term loans picked up in 2017 (4.9% y/y in 2017 compared with 2.6% y/y in 2016).[10]

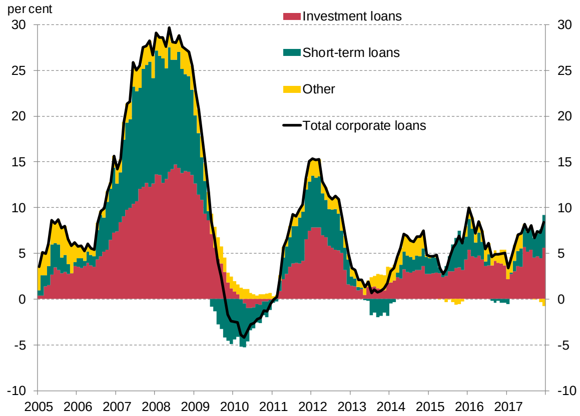
Figure 21 Annual growth rate of household loans and contribution of main components in 2005-2017 (transaction data)



Source: NBP data.

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

Figure 22 Annual growth rate of corporate loans and contribution of main components in 2005-2017 (transaction data)



Source: NBP data.

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

Lending growth stimulated an increase in deposits, mainly current deposits. Current deposits, which accounted for 60.9% of total deposits in 2017, rose at a similar pace as in 2016 (15.0% y/y, both in 2017 and in 2016). 2-year deposits declined by 5.7% y/y in 2017 (in 2016 they rose by 2.8% y/y). At the same time, the amount of cash in circulation increased, yet less than in 2016 (9.4% y/y in 2017 against 16.0% y/y in 2016).

[10] Higher growth in corporate loans in the first half of 2017 could result in part from a one-off transaction made by one economic entity in March. The transaction involved a conversion of foreign debt into domestic debt, in the amount of around PLN 7 billion, contributing to 32% of the total annual increase in corporate loans.

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

Minutes of the Monetary Policy Council decision-making meeting held on 11 January 2017

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

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

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

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

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

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

Council members assessed that the slowdown in GDP growth observed in the second half of 2016 had been temporary and that in 2017 economic growth should accelerate. In the opinion of the Council members, the acceleration in GDP growth in the coming quarters would be supported by a gradual increase in investment growth and stable rise in consumption. It was emphasised that monthly data signalled some improvement in economic activity over the recent past. It was indicated that industrial output, construction and retail sales growth in November 2016 all had come out higher than expected, while industrial sentiment had improved markedly in December. Certain Council members additionally drew attention to notable acceleration in production of minerals used in construction in late 2016. In their opinion, this could point to recovering investment in structures. In the assessment of certain Council members, investment growth would also be supported by the recently launched "Housing Plus" scheme. The majority of the Council members were of the opinion that – given good labour market conditions and the child benefit payments – consumer demand outlook remained favourable. However, it was pointed out that higher prices of energy, including fuels, would reduce spending capacity of households and companies, weighing on demand growth in the economy. Certain Council members pointed to recent downward revisions in economic growth forecasts by some institutions.

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

The Council members assessed that price growth would continue to increase in the coming months, supported by energy prices being higher than a year before and the expected acceleration in economic growth. Attention was also drawn to recent upward revisions of price growth forecasts for Poland.

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

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

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

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

Minutes of the Monetary Policy Council decision-making meeting held on 8 February 2017

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

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

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

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

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

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

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

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

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

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

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

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

Minutes of the Monetary Policy Council decision-making meeting held on 8 March 2017

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

The Council reviewed the developments abroad which affect economic conditions in Poland. It was assessed that global economic growth remained moderate, with signs of economic recovery strengthening in many economies. It was emphasised that the euro area economic growth was stable, yet in 2016 Q4 it had been slower than previously estimated. Attention was also drawn to very good sentiment in the European industry. However, a decline in export orders in Germany was also cited. It was indicated that the available forecasts suggested a deceleration of economic growth in the euro area in 2017. In addition, the Council members mentioned a likely increase in uncertainty associated with upcoming elections in several euro area member states.

While discussing economic activity in the environment of the Polish economy, it was noted that in the United States economic conditions were favourable, supported by a rise in investment as well as labour market improvement in the last few years. It was stressed that in line with the available forecasts, economic growth in the United States should accelerate in 2017. At the same time, a deterioration in residential real estate market conditions was not excluded given higher mortgage interest rates. As to emerging market economies, a recent stabilisation in economic conditions in China was cited. It was also mentioned that Russia had recovered from recession.

While discussing price developments abroad, it was emphasised that commodity price growth had recently come to a halt. It was stressed that oil prices had been stable for several months. As certain Council members assessed, the stabilisation in oil prices resulted from higher investment in shale oil extraction industry in the United States on the one hand and production cuts in many oil net exporters on the other. It was therefore highlighted that even though inflation in the environment of the Polish economy had increased again in February, reaching inflation targets in many countries, its pace had been weaker than a month earlier. In addition, it was stressed that in many economies, including the euro area, demand pressure stayed weak, and core inflation was still low as a result.

Some Council members assessed that oil prices were unlikely to follow an upward trend in the coming quarters, thus limiting the rise in global inflation. However, certain Council members were of the opinion that the signs of global economic recovery observed in recent quarters could translate into higher demand pressure in many economies, resulting in a rise in inflation. In the opinion of certain

Council members, a likely rise in wage growth associated with upcoming elections in some euro area member states was posing an additional upside risk to inflation in this economy.

Referring to monetary policy abroad, it was pointed out that the Federal Reserve had indicated a further rise in interest rates in 2017. It was pointed out that the probability of a hike in fed funds rate in March had increased of late. At the same time, it was assessed that tighter monetary policy in the United States had been translating into higher government bond yields in many countries, including in Poland. Yet, it was underlined that the rise in yields had been contained by ongoing quantitative easing and negative interest rates in the euro area.

While discussing the developments in Poland’s real economy, it was emphasised that GDP growth in 2016 Q4 had been slightly higher than a quarter earlier. It was indicated that economic growth had been mainly driven by increasing consumer demand, supported by improving labour market, very good consumer sentiment as well as child and social benefit payments. It was underlined that in 2016 Q4 a fall in investment had narrowed due to higher absorption of EU funds. Certain Council members mentioned in addition an ongoing expansion in housing investment.

Council members stressed that recent economic data had been indicating further recovery. Attention was drawn to an acceleration in industrial output and retail sales growth in January 2017. It was highlighted that construction and assembly output had posted a growth in annual terms in January for the first time in over a year. It was emphasised, however, that sentiment in manufacturing had weakened somewhat in February 2017. In addition, it was noted that better data readings in January had resulted to some extent from statistical effects. Some Council members also drew attention to a slowdown in corporate lending over recent months, suggesting that this might indicate still weak investment demand. In this context, certain Council members pointed to spare capacity in the economy.

While discussing the labour market conditions, attention was drawn to accelerating employment and wage growth in the enterprise sector in January 2017. At the same time, it was indicated that data for the entire economy was suggesting rather weak rise in the number of working persons and a slower increase in wages in 2016 Q4, translating into slower growth in unit labour costs.

Regarding the Poland’s macroeconomic outlook, it was emphasised that – according to the March GDP projection – economic growth in 2017 should pick up markedly, supported by a significant rise in investment amid higher inflow of EU funds, as well as ongoing robust consumption growth. Certain Council members indicated that a substantial acceleration in gross fixed capital formation in 2017 would result mostly from a stronger rise in infrastructural investment, with only a moderate increase in corporate investment. These Council members were of the opinion that such composition of the increase in gross fixed capital formation might be less supportive of economic growth over the medium term. Other Council members assessed, however, that corporate investment growth might be aided by lower legal uncertainty.

It was indicated that NBP’s GDP projection for 2017 was higher than external forecasts. Yet, it was stressed that GDP growth, having picked up considerably in 2017, might weaken slightly in the coming years and should not exceed potential output growth to a large extent. Some Council members pointed to downside risks to economic activity in the coming years, i.a. a likely negative impact of higher commodity prices on household consumption growth.

While analysing price developments in Poland, it was highlighted that annual consumer price growth had picked up considerably over recent months. It was stressed that price growth had resulted mainly from higher global commodity prices translating into a rise in energy prices, as well as from increase in agricultural commodity prices reflected in higher food price growth. It was emphasised that core inflation was still low, indicating ongoing weak demand pressure. It was pointed out that wage pressure was also limited, which was reflected in still moderate unit labour costs.

The Council members underlined that – in line with the March inflation projection – following a considerable increase in the first months of the year, inflation would stabilise at a moderate level in the following quarters. Certain Council members judged that in the coming quarters inflation might be higher than envisaged in the March projection. On the one hand, these Council members did not exclude stronger demand pressure, and on the other hand, they pointed to upside risks to wage growth related to a possible decline in labour force participation after the reduction of the statutory retirement age in Poland. They also drew attention to stronger cost pressure in recent months, reflected in rising PPI, which may translate into higher consumer price growth. Other Council members indicated, however, that as the effects of higher global commodity prices dissipated, cost pressure should be fading out. Moreover, some Council members assessed that domestic inflationary pressure would grow only gradually, as economic growth was to run close to potential product growth in the coming years and there was still spare capacity in the economy. In addition, certain Council members expressed an opinion that wage pressure in the Polish economy would probably stay subdued due to weak bargaining position of Polish employees.

While discussing NBP's monetary policy, the Council decided that the interest rates should be left unchanged at the current meeting. In the opinion of the Council, given the current data and forecasts, including the March inflation projection, the risk of inflation running persistently above the target in the medium term was limited. At the same time, the decline in the real interest rates, related to higher inflation, would support the acceleration of economic growth in 2017. The Council confirmed its assessment that the stabilisation of the nominal interest rates helped to keep the Polish economy on a sustainable growth path and maintain macroeconomic balance.

The majority of the Council members judged that in light of available information stabilisation of the NBP interest rates was likely also in the following quarters. Yet, certain Council members were of the opinion that should incoming data and forecasts suggest stronger inflationary pressure than assumed in the March projection, it might be justified to consider an increase in the NBP interest rates. According to certain Council members, the interest rate decisions ought to reflect the impact of real interest rates on asset prices and savings in Poland. However, other Council members emphasised that the level of the real interest rates was not the main factor determining the savings rate and asset prices in the Polish economy. Moreover, certain Council members stressed that the interest rate increases might adversely affect corporate investment growth. Certain Council members underlined that in the coming months the analysis of the robustness and scale of the recovery and the resulting price developments should factor in the impact of the negative real interest rates on macroeconomic developments and asset prices. Other Council members pointed out that a more comprehensive assessment of the monetary policy outlook would be possible after the following projections of inflation and GDP.

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 5 April 2017

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 assessed that the rise in global economic activity remained moderate, with signs of recovery strengthening in many economies. It was emphasised that growth in the euro area was stable, although it had slowed down slightly in 2016 Q4. Nonetheless, very strong sentiment in the European economy was also brought to attention. It was noted that in the United States economic conditions were favourable, supported by improving labour market and a rebound in investment, i.a. in shale oil extraction industry, yet recent data was indicating somewhat weaker GDP growth in 2017 Q1. It was pointed out that in China economic growth was stable and the risk of a more notable slowdown had diminished. However, it was underlined that GDP growth, in line with forecasts presented by the Chinese authorities, was to decelerate in 2017. It was also highlighted that in Russia economic conditions were still weak, despite the end of the recession.

Referring to price developments abroad, it was noted that, although the annual inflation rates in many countries were significantly higher than in 2016, their rise had recently come to a halt. Attention was drawn particularly to a notable decline in inflation in the euro area in March. It was assessed that the halt in inflation growth had resulted from abating effects of the earlier rise in global commodity prices. In this context, a fall in global commodity prices in March was cited. Certain Council members argued that the major factors behind lower energy commodity prices included higher shale oil production and falling extraction costs of this commodity in the United States, as well as measures taken by some oil producers to maintain their market share. During the discussion on price developments abroad, it was also stressed that core inflation was still low in many economies, and in the case of the euro area it had even posted a decline in March.

Turning to monetary policy abroad, attention was drawn to lower monthly pace of asset purchases by the ECB starting from April. However, it was underlined that the ECB's monetary policy was still expansionary, with its interest rates close to zero, including the deposit rate below zero. It was also pointed out that, although the Federal Reserve had increased its interest rates, it was indicating that monetary policy tightening would proceed at a similar pace to previously expected. It was noted that sentiment in the global financial markets had been positive, and many emerging market currencies, including the zloty, had appreciated as a result, while share prices had risen, also on the Warsaw Stock Exchange.

While discussing developments in Poland's real economy, it was highlighted that recent data had been pointing to an improvement in economic conditions in 2017 Q1. It was judged that GDP growth in 2017 Q1 had been slightly higher than in previous quarter, albeit still moderate. It was emphasised that economic growth was mainly driven by increasing consumer demand, supported by improving labour market conditions, reflected in further growth in employment and wages, and also by very good consumer sentiment and the child benefit payments. It was underlined that ongoing sound increase in consumer demand in 2017 Q1 was indicated by a rapid rise in retail sales. However, attention was also drawn to a deceleration in annual industrial production growth as well as a fall in construction and assembly output in February. At the same time, it was stressed that both could be attributed mainly to statistical effects. Certain Council members also pointed to industrial sector sentiment in 2017 Q1, which was the strongest in a year.

Regarding Poland’s economic outlook, the Council members underlined that in the coming quarters GDP growth should accelerate at a similar pace to the March GDP projection path. Economic growth will be supported by expected rise in investment resulting from higher inflows of EU funds, amid a steady rise in consumption. In this context, certain Council members pointed to an increasing number of contracts on the use of EU funds signed by local government units. In their opinion, good fiscal position recorded in previous years by local governments should be supportive of their investment expenditures in the coming quarters. According to certain Council members, it could not be excluded that economic growth in 2017 would be higher than envisaged in the March projection. Certain Council members judged, however, that the pace of corporate investment growth in the coming quarters was still uncertain. In addition, it was indicated that further acceleration in consumption growth could be contained by slower increase in real wages resulting from higher price growth compared to a year before.

When analysing inflation developments in Poland, it was stressed that the annual consumer price growth, after a significant rise at the beginning of the year, had declined somewhat in March. It was assessed that lower inflation had probably resulted from a fall in food prices and waning effects of the earlier global commodity price increases. Certain Council members cited a further rise in annual growth of producer prices in February, which, in their opinion, could point to intensifying cost pressure. According to certain Council members, improving economic conditions were contributing to a rise in demand pressure. Other Council members, however, emphasised that, given still negative output gap and spare capacity in the economy, demand pressure was still limited. It was also underlined that, despite improving labour market and a minimum wage hike at the beginning of 2017, wage growth, and hence the increase in unit labour costs, were still moderate. Some Council members noted in addition that the rise in the annual producer price growth rate in February originated mainly from a low base effect. In their assessment, this could indicate that the growth in cost pressure might have levelled off.

The majority of the Council members assessed that inflation would stabilise at a moderate level in the following quarters. They indicated that this would be supported by only gradual growth in domestic inflationary pressure related to improving economic conditions in Poland as well as decelerating growth in energy and food prices resulting from dissipating effects of the earlier increase in energy and agricultural commodity prices. At the same time, in the assessment of certain Council members, inflation might be higher than envisaged by forecasts available at the time of the meeting. These Council members did not exclude a stronger rise in demand pressure. They also pointed to an increase in inflation expectations in early 2017. Hence, they did not rule out that improving labour market could translate into stronger wage growth, and higher consumer price growth as a result.

While discussing NBP's monetary policy, the Council decided that the interest rates should remain unchanged. This decision was primarily justified by limited risk of inflation running persistently above the target in the medium term. At the same time, a decline in the real interest rates, related to higher inflation, should support the acceleration of economic growth in 2017. The Council confirmed its assessment that, given the available information, the stabilisation of the nominal interest rates helped to keep the Polish economy on a sustainable growth path and maintain macroeconomic balance.

The majority of the Council members assessed that in light of available information stabilisation of the NBP interest rates was likely also in the following quarters. According to certain Council members, should data and forecasts incoming in the following quarters suggest stronger inflationary pressure than expected at the time of the meeting, it might be justified to consider an increase in the NBP interest rates. In the opinion of these Council members, the interest rate decisions ought to reflect, in particular, the impact of negative real interest rates on asset prices and the savings rate in the Polish economy. These Council members drew attention to a gradual deceleration in household deposit growth over the previous six months, which, starting from early 2017, was accompanied by higher inflows to investment funds from the household sector.

Other Council members emphasised, however, that the level of the real interest rates was not the main factor determining the savings rate and asset prices. They highlighted that the real interest rates in Poland were higher than in other European economies, while interest on loans in real terms was still markedly positive, which contained a risk of excessive lending growth. In this context, they pointed to moderate lending growth and relatively stable residential real estate prices, despite ongoing recovery in that market.

Certain Council members assessed that a more comprehensive assessment of the impact of lower real interest rates on the economy, and hence on the monetary policy outlook, would be possible after the July inflation and GDP projection.

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 17 May 2017

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

The Council reviewed the developments abroad which affect economic conditions in Poland. Further signs of global recovery, particularly in industry and international trade, were observed. It was noted that in the euro area economic recovery continued, albeit still at a moderate pace, and that investment growth was estimated to decelerate in 2017 Q1. It was stressed that sentiment indicators in the euro area had improved substantially in recent months, which, however, had not yet been fully reflected in data on economic activity. The decline in the 2017 Q1 growth rate in the United States was also cited, with an emphasis on its temporary nature. The Council members also pointed to an unexpected pick-up in the GDP growth rate in China, yet stressed that the latest data did not indicate a sustained acceleration of growth in this economy.

With reference to price developments abroad, it was observed that in many countries the annual inflation rates were markedly higher than in 2016. Yet, it was emphasised that a bulk of the increase had taken place in early 2017, while more recently inflation had stabilised. It was assessed, however, that this had resulted mainly from fading effects of the earlier rise in energy commodity prices, which had been propping up the annual price growth rates over preceding months. A decrease in energy commodity prices since the previous Council meeting was cited in this context. During discussion on inflation, it was stressed that in many economies, including the euro area, wage growth was still moderate, and inflation expectations were low.

Turning to monetary policy abroad, it was pointed out that the European Central Bank was keeping the interest rates close to zero, including the deposit rate below zero, and was continuing its asset purchase programme. It was also observed that the Federal Reserve was indicating further monetary policy tightening. Despite this, it was emphasised that sentiment in the international financial markets had been improving, which had translated into an appreciation of many emerging market currencies in the period preceding the Council meeting.

While discussing developments in Poland’s real economy, the Council members pointed to flash GDP estimate which had indicated a considerable rise in the economic growth rate in 2017 Q1. It was assessed that economic growth was still driven primarily by increasing consumer demand, supported by rising employment and wages, good consumer sentiment and disbursement of child and social benefits. In the opinion of the Council members, improving conditions in industry and construction, confirmed by monthly data, may indicate that the 2017 Q1 economic growth had also benefited from a gradual recovery of investment demand. Some Council members noted that the pick-up in the annual GDP growth rate could result in part from a statistical base effect. In this context, they pointed to a downward revision to GDP growth data for 2016.

In the Council’s opinion, in the coming quarters GDP growth should be supported by further investment recovery amid rising inflow of EU funds, along with stable consumer growth. At the same time, exports should continue to rise rapidly, propped up by economic recovery abroad. As a result, GDP growth in 2017 should be markedly higher than in 2016. The Council members stressed that a more comprehensive assessment of Poland’s economic outlook for the coming quarters would be possible after becoming acquainted with NBP’s July projection of GDP.

When analysing inflation developments in Poland, it was stressed that annual growth in consumer prices had stabilised at a moderate level following a significant rise at the beginning of 2017. As certain

Council members underlined, inflation had stabilised somewhat earlier than expected. It was judged that this had resulted from fading effects of the previous increases in global commodity prices. At the same time, it was underlined that core inflation, though gradually increasing, remained low.

Certain Council members pointed to a rise in prices for services, which had been contributing to the increase in core inflation. Moreover, these Council members indicated that in 2017 Q1 labour costs were playing an increasingly important role in price developments. They also drew attention to a significant rise in the annual producer price growth rate over recent months.

However, other Council members emphasised that, despite higher wage growth in 2017 Q1, growth in unit labour costs was still moderate, amid rising labour productivity. It was also stressed that the increase in the annual producer price growth rate in February and March 2017 resulted from a low reference base.

The majority of the Council members assessed that in the coming quarters inflation would remain moderate. They judged that this would be supported by only a gradual rise in domestic inflationary pressure related to improving economic conditions in Poland, together with a fall in the annual growth rate of energy and food prices resulting from fading effects of the earlier increase in commodity prices. However, certain Council members assessed that inflation in the coming quarters could turn out to be higher than currently forecast. In their opinion, the risk that the wage pressure might intensify had grown over recent months. According to these Council members, upside risks might stem from lower immigration to Poland following the EU visa liberalisation with Ukraine and a possible decrease in the labour force participation rate after the introduction of lower retirement age. Moreover, certain Council members indicated that adverse weather conditions in the period preceding the Council meeting could translate into an increase in the food price growth rate in Poland.

While discussing NBP monetary policy, the Council decided that the interest rates should remain unchanged. The Council assessed that, despite improving economic conditions and good labour market conditions, inflationary pressure was limited and there were no imbalances building up in the economy. At the same time, the available forecasts indicate that inflation will remain moderate in the coming quarters. Therefore, in the Council's assessment, the risk of inflation running persistently above the target in the medium term is limited.

The majority of the Council members assessed that stabilisation of the NBP interest rates was likely in the following quarters, since – given the available information – it had been helping to keep the Polish economy on a sustainable growth path and maintain macroeconomic balance.

In the opinion of certain Council members, should data and forecasts incoming in the following quarters suggest stronger inflationary pressure than expected at the time of the meeting, it might be justified to consider an increase in the NBP interest rates.

The Council members concluded that a more comprehensive assessment of the monetary policy outlook would be possible after becoming acquainted with the incoming NBP’s inflation and GDP projections.

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 June 2017

Members of the Monetary Policy Council discussed macroeconomic developments abroad analysing their impact on economic conditions in Poland. Further signs of strengthening in global activity were indicated, particularly in industry and international trade. It was noted that the euro area recovery continued, as confirmed by an improvement in many economic activity indicators. However, certain Council members pointed out that despite better economic conditions in the euro area, growth in this economy remained relatively weak. The divergence of both current and prospective GDP growth rates among the euro area countries was also underlined. While discussing economic developments in other countries, attention was drawn to the slowdown in the 2017 Q1 GDP growth rate in the United States, with an emphasis on its temporary nature. At the same time, it was stressed that current data had slightly increased uncertainty about the pace of the pick up in the US economic activity in the coming quarters. It was also pointed out that in China, after a rise in GDP growth rate in 2017 Q1, current data did not indicate a sustained acceleration in economic activity, amid reinforced concerns about rising imbalances in the Chinese economy.

With reference to price developments abroad, it was emphasised that despite ongoing global recovery, inflation had stabilised at a moderate level or even slightly declined in some countries. It was judged that this had primarily resulted from the fading effects of the earlier rise in commodity prices, alongside still low domestic inflationary pressure in many countries. At the same time, attention was drawn to the fall in energy commodity prices since the previous Council meeting. In particular, it was indicated that despite the extension of the OPEC countries agreement on restrictions in oil production, oil prices had been lower than in recent months. This was the result of the increased extraction of shale gas in the United States and the still high stocks of this commodity. In the opinion of certain Council members, geopolitical factors related to increased tensions in the Middle East might have some impact on the energy commodity prices in the coming quarters.

During the discussion on monetary policy abroad, it was pointed out that the European Central Bank – amid still weak domestic inflationary pressure despite economic recovery – was keeping interest rates close to zero, including the deposit rate below zero, and was continuing its asset purchase programme. It was also observed that the Federal Reserve was continuing monetary policy tightening, signalling further interest rate increases and the possibility of decreasing its reinvestment of the principle payments from securities in the coming quarters.

Turning to situation in the international financial markets, it was emphasised that the sentiment in these markets had clearly improved since the beginning of the year, which was translated into an inflow of portfolio capital to many emerging economies and an appreciation of their currencies. Attention was also drawn to the relatively high equity prices in the largest markets and their historically low volatility, which could reflect low risk aversion of investors.

While discussing developments in Poland's real economy, the Council members stressed that GDP data indicated a marked acceleration in economic growth in 2017 Q1. It was emphasised that growth continued to be driven primarily by increasing consumer demand, supported by rising employment and wages, very good consumer sentiment and disbursement of child and social benefits. At the same time, it was pointed out that investment growth rate in 2017 Q1 had been close to zero. As a consequence, as certain Council members stressed, the ratio of investment to GDP remained at a historically low level. Certain Council members judged that if investment growth stayed low, it would reduce the growth of potential output.

When referring to the monthly data on domestic economic activity, it was pointed out that in April a fall in industrial output as well as a slowdown in both construction and assembly output and retail sales were recorded, which, however, partly resulted from the lower number of working days than a year ago. At the same time, attention was drawn to the weakening of some leading economic indicators. The Council members judged that the recent data – though somewhat softer than expected – signalled stable economic growth in 2017 Q2. The Council members emphasised that economic growth in the coming quarters would be supported by the increased inflow of EU funds, translating into higher public investment. Certain Council members pointed out that a marked increase in public investment, along with a high degree of capacity utilisation, very good financial results of firms and growing domestic and foreign demand, should also boost the recovery in private sector investment activity. The Council members underlined that a more comprehensive assessment of Poland’s economic outlook for the coming quarters would be possible after becoming acquainted with NBP’s July projection of GDP.

When analysing inflation developments in Poland, it was underlined that annual growth of consumer prices remained moderate. At the same time, it was emphasised that core inflation, albeit gradually increasing, remained low. In addition, certain Council members drew attention to the higher growth in prices of services, which signals, in their opinion, the rising impact of the improvement in domestic economic conditions on consumer prices.

The Council members assessed that in the coming quarters consumer price inflation would remain moderate. They judged that this would be supported by the fading effects of the earlier increase in global commodity prices, with only a gradual rise in domestic inflationary pressure related to improving economic conditions in Poland. At the same time, it was stressed that wage growth in enterprises, despite the observed wage pressure amid historically low unemployment, recently had not picked up markedly. It was indicated that, as a result, growth of the unit labour costs remained moderate owing also to continued labour productivity growth. However, according to certain Council members, in the coming quarters wage growth could increase due to the possibly lower migration to Poland after the lifting of visas for Ukrainian citizens by the EU, and also a possible decrease in the labour force participation in Poland following the introduction of lower retirement age. Moreover, certain Council members did not rule out that a recovery could translate into stronger growth of core inflation than currently forecasted.

While discussing NBP monetary policy, the Council decided that interest rates should remain unchanged. The Council assessed that, despite favourable economic conditions and good labour market conditions, inflationary pressure remained limited and there were no imbalances building up in the economy. At the same time, available forecasts indicate that inflation will remain moderate in the coming quarters. Therefore, in the Council's assessment, the risk of inflation running persistently above the target in the medium term was limited.

The majority of the Council members assessed that stabilisation of the NBP interest rates was likely in the following quarters, since – given the available information – it had been helping to keep the Polish economy on a sustainable growth path and maintain macroeconomic balance. In addition, certain Council members argued that the stabilisation of interest rates would support the expected recovery in investment.

In the opinion of certain Council members, should data and forecasts incoming in the following quarters suggest stronger inflationary pressure than expected at the time of the meeting, it might be justified to consider an increase in the NBP interest rates.

The Council members concluded that a more comprehensive assessment of the monetary policy outlook would be possible after becoming acquainted with the incoming NBP's inflation and GDP projections.

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 July 2017

Members of the Monetary Policy Council discussed macroeconomic developments abroad analysing their impact on economic conditions in Poland. Further signs of strengthening in global activity were indicated, including the ongoing recovery in the euro area confirmed by an improvement in many economic indicators. It was pointed out that – besides a rise in consumption – euro area GDP growth was currently supported also by a recovery in investment. The Council members also considered the diminishing growth differentials among euro area countries as a sign of consolidation of the recovery in the euro area. Yet, certain Council members underlined that, despite the improved business conditions, growth in the euro area remained relatively weak. While analysing economic developments in other economies, it was judged that GDP growth in the United States probably increased in 2017 Q2. It was noted, however, that recent data on activity in the US economy were slightly weaker than expected. Attention was also drawn to the relatively high equity prices in the US market and their historically low volatility. Moreover, during the discussion it was pointed out that current data in China indicated a gradual slowdown in country's economic growth.

While discussing price developments abroad, it was emphasised that despite the ongoing global recovery, inflation had remained moderate and had even slightly declined in some countries. In this context, attention was drawn to the stabilisation of global energy commodity prices in the recent period. In the opinion of the Council members, owing to the increased use of shale oil in the United States and the high oil stocks, the prices of oil have currently become less sensitive to changes in global economic conditions and to OPEC decisions to restrict oil production.

During the discussion on monetary policy abroad, it was pointed out that, despite the strengthening of the economic recovery in the euro area, the European Central Bank had revised downward its medium-term inflation forecasts for the euro area economy. Currently it is expected that also in the coming years inflation in the euro area will remain below the ECB's inflation target. Taking this into account, the European Central Bank keeps interest rates close to zero, including the deposit rate below zero, and continues its asset purchase programme. In reference to the United States, it was pointed out that the Federal Reserve was continuing monetary policy tightening by raising interest rates and signalling the possibility of decreasing its reinvestment of the principal payments from securities in the coming quarters.

While discussing developments in Poland's real economy, the Council members stressed that monthly data on economic activity signalled a continuation of stable GDP growth in 2017 Q2. It was judged that a further rise in retail sales amid very good consumer sentiment indicated still high private consumption growth. Moreover, attention was drawn to the increased growth in both industrial output and construction and assembly output in May after their marked weakening in April. Similarly, leading economic indicators suggest a continuation of favourable trends in the corporate sector. It was assessed that – along with the expected growth in the use of EU funds – this should support gross fixed capital formation, while also stressing that under the July projection investment growth in 2017 Q2 was probably only slightly positive. In reference to the July projection, it was underlined that economic growth over the coming quarters would remain close to its current level, and would then run close to potential output growth. The Council members indicated that, although rising consumer demand remained the main driver of growth, in the coming quarters its role would diminish due to the gradual fading of the statistical effects of the "Family 500 plus" programme introduced in 2016 on consumption growth. At the same time, a further recovery in investment is forecast beginning from the second half of 2017. Certain Council members pointed to the still low investment rate in the Polish economy compared to many other European countries, which could have a negative effect on potential output growth.

When analysing inflation developments in Poland, it was emphasised that annual growth of consumer prices remained moderate and even decreased in June. At the same time, it was pointed out that core inflation, although gradually increasing, remained low. The Council members judged that these developments in inflation followed from fading effects of the past increase in global commodity prices, with only a gradual rise in domestic inflationary pressure stemming from improving domestic economic conditions.

While discussing the outlook for price developments in Poland, it was emphasised that – under the July projection – consumer price inflation should remain moderate and approach the target towards the end of the projection horizon. This will result from the gradual increase in core inflation related to the continuation of favourable economic conditions, amid lower growth in import prices. The majority of the Council members judged the risk to price stability in the medium term to be limited. Yet, in the opinion of certain Council members, the impact of factors increasing inflation over the coming years could prove stronger than had been forecast in the July projection, while the impact of factors holding back inflation could be weaker than anticipated in the projection.

With reference to the situation in the labour market, attention was drawn to a further increase in employment and wages in the corporate sector. In the opinion of the Council members, in the coming quarters wage growth could continue to increase due to the likely further rise in employment amid the emerging labour supply-side constraints. At the same time, the expected continuation of increases in labour productivity growth was highlighted, which would limit the unit labour cost growth in the coming years. In this context, certain Council members pointed to the risk of lower labour immigration of Ukrainian citizens to Poland, and also a possible decrease in the labour force participation rate following the introduction of the lower retirement age.

The Council members also discussed the consequences of interest rates remaining unchanged for a prolonged time amid expectations of a gradual growth in inflation in the coming years. Certain Council members pointed out that the prolonging of the period of negative real interest rates could increase the risk of the emergence of the negative effects of this phenomenon. In particular, these Council members emphasised that low interest on deposits encourages households to search for assets offering higher yields and therefore also associated with higher risk. In this context, certain Council members pointed to the decrease in the level of household deposits in May. At the same time, it was observed that the relatively low interest on loans supported the rise in household debt. However, other Council members stressed that so far no negative consequences of interest rates remaining at the current level could be observed. In this context, they underlined that, although the structure of household assets could gradually change, deposits were still their largest component, while loan growth and the stable share of non-performing loans in banks' credit portfolios, did not indicate excessive indebtedness of households.

While discussing NBP monetary policy, the Council decided that interest rates should remain unchanged. The Council members assessed that, despite favourable economic conditions, good labour market conditions and gradual rise in wage growth, inflationary pressure remained limited and there were no imbalances building up in the economy. At the same time, available forecasts, including the July projection, indicate that inflation will remain moderate in the coming quarters. Therefore, in the Council's assessment, the risk of inflation running persistently above the target in the medium term was limited.

The majority of the Council members assessed that stabilisation of the NBP interest rates was likely in the following quarters, since – given the available information – it had been helping to keep the Polish economy on a sustainable growth path and maintain macroeconomic balance. In addition, the majority of the Council members assessed that the stabilisation of the interest rates would support the expected recovery in investment.

In the opinion of certain Council members, should data and forecasts incoming in the following quarters suggest stronger inflationary pressure than expected at the time of the meeting, it might be justified to consider an increase in the NBP interest rates. In the opinion of these Council members, decisions on the level of interest rates should take into account in particular the impact of negative real interest rates on lending, asset prices and savings rate in the Polish economy.

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 September 2017

Members of the Monetary Policy Council discussed macroeconomic developments abroad analysing their impact on economic conditions in Poland. Further signs of strengthening in global activity were indicated. In particular, attention was drawn to the pick-up in GDP growth rate in the euro area in 2017 Q2 and the improvement in many euro area economic indicators and sentiment indicators in 2017 Q3. While analysing economic developments in other economies, it was underlined that in 2017 Q2 higher GDP growth was also observed in the United States as compared to 2017 Q1, and monthly indicators suggested a continuation of favourable economic situation in that economy. It was also stressed that in both the euro area and the United States consumption remained the most important demand factor of economic growth. During the discussion it was also pointed out that GDP growth had stabilised in China in 2017 Q2, although at the same time attention was drawn to the imbalances that remained in this economy.

While discussing price developments abroad, it was emphasised that despite the ongoing global recovery, inflation abroad had remained moderate. In particular, it was pointed out that in the major advanced economies inflation continued to run below their respective inflation targets. While discussing factors impacting inflationary pressure abroad, attention was drawn to a slight increase in oil prices and their expected stabilisation in the coming years. In the opinion of Council members, owing in particular to the increased use of shale oil in the United States, oil prices have become less sensitive to changes in global economic conditions. Council members also pointed to the growth in US activity in the global gas market. In the opinion of Council members, as a result, the upward impact of energy commodity prices on inflation will probably be limited.

During the discussion on monetary policy abroad, it was pointed out that the European Central Bank was keeping interest rates close to zero, including the deposit rate below zero, and continuing its asset purchase programme. The persistence of moderate inflation in the euro area, related to low wage pressure in this economy and the appreciation of the euro, spoke in favour of preserving the strongly accommodative monetary policy of the ECB. It was indicated that low wage pressure and the appreciation of the euro increased the risk of another downward revision of inflation forecasts in euro area economy, despite the strengthening recovery there. As a result – as it was emphasised – inflation in the euro area would probably remain below the ECB's inflation target also in the coming years. In reference to the United States, it was underlined that the Federal Reserve would probably continue to gradually reduce the accommodative stance of its monetary policy, announcing in the near future the phasing out of reinvestment of maturing securities. At the same time, due to the decline in inflation, the pace of further interest rate increases by the Fed may be slower than previously expected.

While discussing developments in Poland's real economy, Council members pointed out that in 2017 Q2 GDP growth was close to that observed in 2017 Q1. It was underlined that growth continued to be driven primarily by increasing consumer demand, supported by rising employment and wages, disbursement of benefits and very good consumer sentiment. However, investment growth was still weak, as the fall in corporate investment had deepened somewhat, despite high capacity utilization and a further improvement in business conditions. Council members judged that the gradual recovery in investment financed with EU funds suggested that total investment growth would be higher in the second half of 2017. At the same time, export growth proved slower than import growth in 2017 Q2, and as a result, the contribution of net exports to GDP turned negative. Council members indicated that the weakening of export growth could be related to the slowdown in Germany's export growth due to the strong ties between Polish and German producers within global supply chains. In view of the improving economic situation abroad, the weakening of export growth may, however, be a temporary phenomenon.

When referring to monthly data on economic activity in Poland at the beginning of 2017 Q3, Council members underlined that the data indicated a continuation of stable GDP growth. It was judged that further stable growth in retail sales amid very good consumer sentiment suggested continued high growth in private consumption. At the same time, attention was drawn to a certain slowdown in industrial output growth and a strong acceleration in construction and assembly output growth in July. Moreover, it was stressed that leading economic indicators suggested a continuation of favourable trends in the corporate sector.

When analysing inflation developments in Poland, it was indicated that the annual growth of consumer prices remained moderate and stood at 1.8% in August. At the same time, it was underlined that core inflation continued at a low level. Council members judged that inflation would remain moderate also in the following quarters. This will result from a gradual rise in domestic inflationary pressure stemming from improving domestic economic conditions, alongside a decline in import price growth due to the expected stabilisation of energy commodity prices and low inflationary pressure abroad. However, certain Council members indicated that further growth in food prices could be a factor increasing inflation in the coming quarters. In the opinion of some Council members, the November projection, taking into account the latest data, will be important for an assessment of the inflation outlook.

With reference to the situation in the labour market, it was stressed that the further growth in employment and reduction in unemployment in 2017 Q2 was accompanied by a pick-up in wage growth in the corporate sector and the economy as a whole. It was pointed out that compared to other countries of the region wage growth in Poland remained moderate and continued to be curbed by the inflow of employees from Ukraine as well as by the further rise in the labour force participation rate among Poles. In the opinion of Council members, in the coming quarters wage growth could continue to increase due to the likely further rise in employment amid the emerging labour supply-side constraints. In the opinion of certain Council members, in particular the lowering of the retirement age could adversely affect the labour supply. However, other Council members judged that many people who will take retirement could remain active in the labour market, thus the impact of this factor on the labour supply may be limited.

Council members also discussed the size and structure of savings in the economy. It was pointed out that the total savings rate – with enterprises contributing the largest share of savings in Poland –

exceeded the investment to GDP ratio. In reference to households, some Council members judged that their propensity to save depended to a large extent on the level of their disposable income, and should increase alongside a rise in employment and wages. At the same time, in the opinion of these Council members, the expected income from investing funds has less impact on the decision to save. However, other Council members argued that keeping NBP interest rates unchanged amidst gradually rising inflation could adversely affect households' propensity to save or encourage them to shift funds towards riskier assets.

While discussing NBP monetary policy, the Council decided that interest rates should remain unchanged. The Council assessed that, despite favourable economic conditions, good labour market conditions and wage growth continuing to exceed nominal productivity growth, inflationary pressure remained limited and there were no imbalances building up in the economy. At the same time, available forecasts indicate that in the coming quarters inflation will remain moderate. Therefore, in the Council's assessment, the risk of inflation running persistently above the target in the medium term was limited.

The majority of the Council members assessed that stabilisation of the NBP interest rates were likely in the coming quarters, since – given the available information – it had been helping to keep the Polish economy on a sustainable growth path and maintain macroeconomic balance. In addition, the majority of Council members assessed that the stabilisation of interest rates would support the expected recovery in investment.

In the opinion of certain Council members, should data and forecasts incoming in the following quarters suggest stronger inflationary pressure than expected at the time of the meeting, it might be justified to consider an increase in the NBP interest rates. In the opinion of these Council members, decisions on the level of interest rates should take into account in particular the impact of negative real interest rates on lending, asset prices and the savings rate in the Polish economy, while according to other Council members also on changes in unit variable costs.

A view was also expressed that in the event of a significant decline in economic indicators accompanied by a marked deterioration in consumer and corporate sentiment, it may be justified to consider a decrease in 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%, the rediscount rate at 1.75%.

Minutes of the Monetary Policy Council decision-making meeting held on 4 October 2017

Members of the Monetary Policy Council discussed macroeconomic developments abroad analysing their impact on economic conditions in Poland. It was indicated that global economy continued to recover. Particular attention was drawn to a rise in GDP growth in the euro area over previous quarters, supported mainly by consumption, with somewhat slower investment growth in 2017 Q2. It was emphasised that, according to available data and forecasts, in 2017 GDP growth in the euro area should be stable and somewhat higher than previously expected. At the same time, it was noted that forecasts for growth in exports of the euro area, Poland's main trading partner, had been revised downwards. In addition, it was assessed that economic conditions in the United States were strong. Yet, it was also judged that adverse weather conditions could have had a temporarily negative impact on the US economic activity over recent months. In turn, in China, monthly indicators suggested that GDP growth might slow down slightly in 2017 Q3.

Referring to price developments in the world economy, it was pointed out that despite the ongoing global recovery, inflation abroad remained moderate. It was emphasised that this was caused by persistently low domestic inflationary pressure in many countries. Certain Council members stressed that the reasons for the persistence of low global inflation were highly uncertain, with stronger economic connections within global value chains being cited as one of the likely reasons. It was pointed out that, according to available forecasts, in the coming years inflation should remain moderate, particularly in the euro area, where it was to run below the level consistent with the ECB’s definition of price stability.

During the discussion it was noted that prices of some commodities, including oil, had risen somewhat of late. However, it was judged that the rise in oil prices had resulted from temporary factors, including the adverse weather conditions in the United States and geopolitical factors. Yet, the Council members underlined that the rise in oil price was still contained by high oil supply attributable, most notably, to heightened shale oil production in the United States. It was pointed out that following a decline caused by weather conditions, shale oil extraction had rebounded at the beginning of October, while exports of this commodity from the United States had surged.

Regarding the 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 was continuing its asset purchase programme. It was indicated that the market participants expected that the ECB would probably continue to purchase financial assets in 2018, albeit at a diminishing pace. Moreover, the ECB still signals that it will keep its interest rates unchanged, even after asset purchases come to an end. It was observed also that the interest rates were low in Central and Eastern European economies. Referring to the US monetary policy, it was noted that the Federal Reserve continued to gradually reduce the amount of monetary policy accommodation. In particular, the US central bank is starting to wind down its balance sheet, though at a gradual pace. It was underlined that, in line with the Federal Reserve’s announcements, the bank's balance sheet would not return to the pre-crisis level in the coming years. It was also emphasised that the Federal Reserve had lowered its expectations regarding the interest rates over the longer run. As a result, the interest rates in the coming years will probably remain lower than before the global financial crisis.

While discussing developments in Poland's real economy, the Council members judged that the economic conditions in Poland were favourable. It was underlined that economic growth was still driven primarily by increasing consumer demand, supported by rising employment and wages, disbursement of benefits and very good consumer sentiment. Yet, it was indicated that investment expenditures remained low. However, it was assessed that higher use of EU funds and an acceleration in construction and assembly output growth pointed to a gradual recovery in fixed capital formation. In the opinion of certain Council members, the scale of the expected recovery in investment remained unclear. It was also noted that industrial output growth had picked up in August, whereas economic activity indicators in this sector had improved again in September. At the same time, certain Council members cited still moderate leading economic indicators.

With reference to labour market conditions, it was pointed out that further growth in employment was accompanied by an acceleration in wage and unit labour cost growth. However, it was stressed that wage growth, even though it had accelerated, remained moderate and markedly lower than in some Central and Eastern European economies. It is contained by the inflow of foreign employees to Poland as well as higher labour force participation among Poles. At the same time, many Council members were pointing to a risk of further intensification in wage pressure. In this context, it was indicated that enterprises were reporting growing difficulties in finding employees. However, some Council members emphasised that, at the time of the meeting, it was hard to assess whether these difficulties would translate into higher wage growth or rather become a barrier to growth for enterprises. Certain Council members expressed the opinion that protracted low investment growth might restrain productivity growth over longer run and thereby add to unit labour cost growth.

When analysing price developments in Poland, it was indicated that the annual growth in consumer prices remained moderate and stood at 2.2% in September, i.e. was slightly higher than expected. At the same time, it was stressed that core inflation continued at a low level. The majority of the Council members underlined that, given available forecasts, inflation would remain moderate in the following quarters. They argued that this would result from moderate price growth in the environment of the Polish economy, alongside a gradual rise in domestic inflationary pressure stemming from improving economic conditions at home.

At the same time, in the opinion of some Council members, in the coming quarters inflation could be higher than forecasted at the time of the meeting due to stronger growth in wage and cost pressures. In this context, they pointed to a pick-up in producer price growth, also with energy prices excluded. Certain Council members expressed an opinion that the gas mandatory stock requirement imposed recently on importers of this commodity could be a factor supportive of an increase in its prices. Certain Council members were of the opinion that, given the underlying trends in some economic variables, inflation might exceed the target in the medium term, particularly in the event of a negative supply shock.

Referring to developments in monetary aggregates, it was stressed that lending to the non-financial sector was growing steadily, in line with the nominal GDP growth rate. In particular, it was emphasised that, despite the ongoing recovery in the real estate market, mortgage lending growth was stable. It was also noted that a decline in the value of household deposits had come to a halt in August. However, certain Council members judged that households could still be shifting funds from bank deposits towards riskier assets.

While discussing NBP monetary policy, the Council decided that interest rates should remain unchanged. The Council assessed that, despite the favourable economic conditions and wage growth higher than labour productivity growth, inflationary pressure remained limited and there were no imbalances building up in the economy. The majority of the Council members judged that in the coming quarters inflation would remain moderate, thus the risk of inflation running persistently above the target in the medium term was limited. As a result, the majority of the Council members assessed that stabilisation of the NBP interest rates was likely in the coming quarters. It was underlined that the stabilisation of interest rates would allow to meet the inflation target, and at the same time support the expected recovery in investment.

In the opinion of some Council members, should data and forecasts incoming in the following quarters suggest stronger inflationary pressure than expected at the time of the meeting, it might be justified to consider an increase in the NBP interest rates. In the opinion of these Council members, decisions on the level of interest rates should take into account in particular the impact of negative real interest rates on lending, asset prices and savings in the Polish economy, and also changes in unit variable costs. An opinion was also expressed that future decisions of the Council should account for developments in inflation expectations.

A view was expressed that in the event of a significant decline in economic indicators accompanied by a marked deterioration in consumer and corporate sentiment in the longer run it might be justified to consider a decrease in interest rates.

The Council judged that – given the available information – the stabilisation of interest rates helped to keep the Polish economy on a sustainable growth path and maintain macroeconomic stability. Some Council members stressed that the next projection of inflation and GDP would be important for an assessment of the outlook for monetary policy in the coming quarters.

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 November 2017

Members of the Monetary Policy Council discussed macroeconomic developments abroad analysing their impact on economic conditions in Poland. It was indicated that GDP growth in the euro area in 2017 Q3 was close to that observed in the first half of the year, thus significantly higher than in the previous year. It was pointed out that GDP growth in the euro area was still driven mainly by growth in consumption, although in 2017 Q3 it was probably accompanied by a recovery in investment and exports. It was underlined that, according to the November projection, in 2018 economic conditions in this economy would remain favourable, although GDP growth would slow down slightly. While analysing economic conditions in other economies, it was pointed out that in 2017 Q3 economic growth in the United States – despite the negative impact of adverse weather conditions on economic activity –

was close to that observed in the previous quarter. In China, in turn, GDP growth decelerated somewhat in 2017 Q3.

Referring to price developments in the world economy, it was underlined that inflation abroad remained moderate, and continued good economic conditions in many economies were not accompanied by a significant rise in inflationary pressure. It was judged that the observed weakened correlation between economic conditions and price growth could result from several structural factors. The opinion was expressed that under current conditions the risk of a sharp rise in inflation in the majority of developed countries was limited. However, certain Council members drew attention to the recent slight increase in price growth in some economies.

While analysing commodity price developments, it was pointed out that oil prices were higher than in the previous month, but that in recent days there had been signs of their stabilisation. It was judged that oil prices were boosted by the decrease in oil inventories, as well as expectations of a possible extension of the agreement between oil exporting countries. Certain Council members were of the opinion that fundamental factors – in particular, the elastic supply of shale oil in the United States – should lower oil prices in the coming quarters. Referring to remaining energy commodities, other Council members drew attention to the significantly higher coal prices compared to the first half of the year.

Regarding 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 to announce that they would remain at their current levels even after the end of the asset purchase programme. At the same time, the ECB extended the duration of the asset purchase programme to at least September 2018, while limiting the monthly scale of purchases by half from 2018. In turn, in the United States, the Federal Reserve began reducing its balance sheet, although – as it was stressed – the scale of monetary expansion was being reduced gradually.

While discussing developments in Poland's real economy, the Council members judged that GDP growth in 2017 Q3 was probably higher than in the previous quarter. It was emphasised that economic growth was still driven primarily by increasing consumer demand, supported by rising employment and wages, disbursement of benefits and very good consumer sentiment. It was underlined that the faster construction and assembly output growth than in the first half of the year pointed to a probable recovery in investment. However, certain Council members pointed out that information incoming in the last month – including data on industrial output, construction and assembly output, and the PMI – was somewhat worse than earlier readings.

It was indicated that – in accordance with the November projection – in 2018 the favourable economic conditions were expected to continue, although GDP growth would probably slow down. It was underlined that the expected weakening in economic activity in the euro area, including in Germany, would result in some slowdown in economic growth. The gradual fading of the statistical effects of the "Family 500 plus" programme would also dampen GDP growth. At the same time, the recovery in both public and corporate investment should support GDP growth next year. However, certain Council members assessed that the scale of the recovery in investment in 2018 – particularly corporate investment – was subject to significant uncertainty. Moreover, it was pointed out that even with the expected investment growth, the investment rate in the economy would remain relatively low. However, other Council members were of the opinion that the increasing scale of child benefit payments along with the rising birth rate, the improvement in the financial situation of some consumers due to the lowering of the statutory retirement age, and in 2019 also the possible increase in social benefits and wages in the budget sector, could boost GDP growth.

With reference to labour market conditions, attention was drawn to the gradual growth in employment and fall in unemployment. It was underlined that this was accompanied by higher wage growth in enterprises and faster rise in unit labour costs than in the previous quarters. While certain Council members drew attention to the high growth in the wage bill in enterprises, other Council members underlined that in September wage growth in the corporate sector had slowed down somewhat. It was judged that the inflow of foreign employees to Poland as well as higher labour force participation among Poles continued to contain wage growth.

It was pointed out that in the coming years wage growth and unit labour cost growth – according to the November projection – would increase slightly. At the same time, some Council members stressed that there was still uncertainty about the impact of the lowering of the statutory retirement age on labour supply and wage pressure, although – according to certain of these members – the scale of this impact would be reduced by the high proportion of non-working persons among those retiring. Certain Council members expressed the opinion that the low propensity of firms to increase wages amid high competition and a fall in profitability in the recent period could contain wage growth in the coming quarters. However, other Council members pointed out that a possible restriction to the inflow of foreign employees and a likely increase in wage pressure in the budget sector could lead to faster than expected wage growth.

When analysing price developments in Poland, it was pointed out that the annual consumer price growth remained moderate. Some Council members underlined that in October annual inflation had decreased somewhat. These Council members stressed that price growth was currently driven up by the rise in oil and food prices, thus the factors beyond the direct impact of domestic monetary policy. At the same time, internal inflationary pressure remained – in the assessment of these Council members – limited, and no significant influence of accelerated wage growth on consumer price growth could be seen. Certain Council members also underlined that price growth took place amid continued moderate lending growth. Other Council members, in turn, drew attention to the increase in all core inflation measures in the recent period, which – in their assessment – indicated an intensification of domestic inflationary pressure. These Council members also pointed to a certain increase in the inflation expectations of households and enterprises as well as the gradually rising producer price growth.

While discussing the outlook for price growth, it was indicated that according to the November projection, it would gradually rise to reach the annual average level of 2.3% in 2018 and 2.7% in 2019. The majority of Council members recognised that the results of the November projection indicated that in the coming years inflation would remain close to the target. However, some Council members underlined that the inflation path in the November projection was higher than in the previous forecasting round, and that in 2019 inflation would exceed 2.5%. These Council members judged that the expected inflation growth would be driven by an intensification of domestic inflationary pressure as evidenced by the forecast growth in both core inflation and the value added deflator. They also pointed out that inflation could be higher than forecast by the current projection due to the possible stronger growth in wage and cost pressure. Certain of these Council members drew attention to higher coal prices compared to the previous year, which – in their opinion – would boost production costs of many goods, including food products, and would impact directly the prices of some consumer goods.

While discussing NBP monetary policy, the Council decided that currently interest rates should remain unchanged. The Council judged that – given the available information – in the coming years inflation would run close to the inflation target. As a result, the current level of interest rates was conducive to keeping the Polish economy on a sustainable growth path and maintaining macroeconomic stability.

The majority of Council members expressed the opinion that, taking into account the present information, interest rates were also likely to remain stable in the coming quarters. These Council members judged that the stabilisation of interest rates would allow to meet the inflation target, which – as they underlined – is of a symmetric nature. At the same time, taking into account the expected slowdown in GDP growth in the coming years, it was indicated that a stabilisation of interest rates would support the maintenance of balanced economic growth, including the expected recovery in investment. Moreover, these Council members pointed out that the need to take into account monetary conditions in the immediate environment of the Polish economy, including the prospect of maintaining negative interest rates in the euro area next year, also spoke in favour of keeping the current level of interest rates.

In the opinion of some Council members, should data and forecasts incoming in the following quarters suggest a more marked intensification of inflationary pressure, it might be justified to consider an increase in the NBP interest rates in the quarters to come. In the opinion of these Council members, interest rate decisions should take into account in particular the impact of negative real interest rates on lending, asset prices and savings in the Polish economy, as well as growth in the unit variable costs. An opinion was also expressed that future decisions of the Council should account for developments in inflation expectations. Certain of these Council members judged that a possible increase in interest rates would have a limited impact on investment growth.

A view was expressed that in the event of a significant decline in economic indicators accompanied by a marked deterioration in consumer and corporate sentiment, in the longer run it might be justified to consider a decrease in interest rates.

Some Council members underlined that in the face of uncertainty about the determinants of monetary policy in the longer term, the March projection of inflation and GDP would be an important prerequisite for an assessment of its prospects.

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%.

During the meeting the question of lowering the reserve requirement ratio on funds raised from domestic entities for at least a two-year period was also discussed. It was indicated that this ratio currently stood at 3.5%. Taking into consideration that funds raised from abroad for the same period are not subject to reserve requirements, it was judged that it would be justified not to calculate reserve requirements also for the remaining funds raised for at least a two-year period, which would mean the equal treatment of such funds. It was indicated that the application of uniform reserve requirement ratios for all funds raised for at least 2 years would bring the Polish reserve requirement system closer to the solutions applied by the Eurosystem. Moreover, it was pointed out that the introduction of the discussed change could help to lower the scale of the maturity mismatches between assets and liabilities of Polish institutions subject to mandatory reserve requirements.

The Council adopted a resolution according to which the reserve requirement ratio for funds raised for at least a two-year period will stand at 0%. The resolution will come into force on 1 March 2018 and will apply starting with the reserve requirement to be maintained from 30 April 2018.

Minutes of the Monetary Policy Council decision-making meeting held on 5 December 2017

Members of the Monetary Policy Council discussed macroeconomic developments abroad, analysing their impact on economic conditions in Poland. It was emphasised that recovery continued in the global economy, as reflected in the data on industrial output, labour market, sentiment of economic agents and international trade. It was indicated that the recovery in international trade was supporting economic conditions in the euro area, where economic growth remained higher than in 2016. Attention was also drawn to improvement in labour market conditions in the euro area. Yet, it was observed that the unemployment rate in this economy, in spite of ongoing decline, was still higher than before the global financial crisis. During the discussion on the external environment of the Polish economy, it was indicated that economic conditions in the United States remained favourable, while industrial output growth in this economy had accelerated and employment reached record highs, translating into higher than in previous quarters retail sales growth.

Referring to price developments in the world economy, it was underlined that, despite the global recovery, inflation abroad remained moderate. It was assessed that this was caused by the persistently weak domestic inflationary pressure in many countries. It was observed that core inflation remained low in many advanced economies. It was highlighted that price growth was moderate particularly in the immediate environment of the Polish economy, most notably in the euro area, and also in Central and Eastern Europe in spite of a sizeable economic recovery and robust wage growth there. It was indicated that in recent years the links between economic conditions, wage growth and inflation had weakened in many countries.

While analysing commodity price developments, it was pointed out that oil prices were higher than in previous quarters, yet signs of their stabilisation had appeared in recent weeks. It was observed that the prices of this commodity might remain stable in the coming quarters. The Council members stipulated flexible supply of shale oil in the United States and some producers striving to retain their market shares as the likely factors behind the stabilisation of oil prices. With reference to the remaining energy commodities, it was indicated that prices of coal and natural gas were higher than in previous quarters.

Regarding monetary policy abroad, it was highlighted that the Federal Reserve had started reducing its balance sheet in October, and that in December it would probably raise its interest rates. However, it was observed that uncertainty persisted as to the scale and timing of further interest rate rises by the US central bank. Moreover, in this part of the discussion it was emphasised that the European Central Bank was keeping interest rates close to zero, including the deposit rate below zero, and continued to purchase financial assets. It was also observed that the ECB was still announcing that interest rates would remain at their current levels, even after the end of the asset purchase programme. It was emphasised that in other countries in the immediate environment of the Polish economy, particularly in Central and Eastern Europe, interest rates also remained close to zero.

Turning to developments in Poland's real economy, the Council members pointed out that annual GDP growth had accelerated to 4.9% in 2017 Q3, i.e. it was higher than envisaged in the projection. It was observed that growth was still driven primarily by consumer demand, supported by rising employment and wages, disbursement of benefits and very good consumer confidence. It was also indicated that stronger than projected GDP growth was mainly due to a significantly higher export growth rate related to the recovery in the external environment of the Polish economy, particularly in the euro area. It was underlined that gross fixed capital formation had also risen in 2017 Q3, albeit at a slower pace than expected in the projection. Attention was drawn to the fact that the rise in investment had resulted mainly from higher public investment. In this context, it was observed that investment growth in firms outside the mining and energy sectors had increased substantially in 2017 Q3. Yet, certain Council members emphasised that the level of corporate investment was still lower than before 2016.

It was judged that the favourable economic conditions would continue in Poland in the coming quarters, although GDP growth might decelerate slightly in the following years. Economic activity will still be supported by stable consumption growth, accompanied with a further rise in investment growth rate. As certain Council members emphasised, the latter is indicated by the rising absorption of EU funds. Yet, these members noted that the trend had so far been observed mainly in the public sector. It was also judged that, given high capacity utilisation and a concurrent rise in demand, a further rise in the corporate investment growth rate was likely in the coming quarters. However, gradual fading of the statistical effects of the "Family 500 plus" programme and the expected deceleration of economic growth in the euro area would contain GDP growth.

With reference to labour market conditions, it was noted that the number of persons working in the economy had continued to rise, albeit at a slower pace than in previous quarters and, consequently, the unemployment rate continued to fall. It was highlighted that, although in the corporate sector growth in wages and wage bill had accelerated somewhat, in the entire economy wage growth had remained stable in 2017 Q3. It was judged that wage growth in the economy could have been limited by the wage freeze in the public sector, and, possibly, a slower pace of wage growth in smaller enterprises, which employ a large proportion of workers. It was stressed that, in line with the most recent data, the wages of a considerable part of the employed were still only slightly higher than the minimum wage, additionally curbing inflationary pressure. Attention was also drawn to the relatively high labour participation rate which, along with a significant number of foreign employees, may be containing wage growth in Poland. Certain Council members emphasised, however, that the percentage of companies with wage growth increasing faster than labour productivity growth was lower than in the previous year. It was also underlined that unit labour cost growth in the entire economy had decelerated considerably in 2017 Q3. As a result, the majority of the Council members judged that despite low unemployment and recruitment difficulties reported by some companies, the labour market did not generate any significant inflationary pressure for the time being.

As regards inflationary developments in Poland, it was pointed out that annual consumer price growth had increased in November to 2.5%. It was noted that the main factors behind the rise in inflation was high food price growth and markedly higher than in previous years energy price growth. It was also pointed out that the higher energy price growth was associated with rising energy commodity prices in the global markets. In addition, it was emphasised that core inflation net of food and energy prices remained low, despite relatively high consumption growth.

When discussing the outlook for inflation, the majority of the Council members assessed that, given the available information, inflation would remain close to the target over the projection horizon. These members pointed out that core inflation was likely to rise only gradually in the following quarters. It was judged that the price growth would most likely be contained by low inflation in the environment of the Polish economy and a decline in GDP growth rate expected in the coming quarters. In addition, statistical base effects would dissipate in the coming months, which should constrain growth in energy prices.

At the same time, some Council members drew attention to the upside risks to inflation. In their opinion, low corporate investment might translate into weaker labour productivity growth, thus boosting unit labour costs and inflation in the longer term. They also expressed the opinion that ongoing low investment in the mining and energy sectors could prop up energy price growth. Certain Council members argued that costs incurred by natural gas importers could be increased due to the requirement to hold natural gas reserves.

While discussing NBP monetary policy, the Council decided that currently interest rates should remain unchanged. The Council judged that the current interest rate level helped to keep the Polish economy on a sustainable growth path and maintain macroeconomic stability. It was pointed out that in the light of the available information, inflation would remain close to the target in the projection horizon. At the same time, attention was drawn to external trade surplus, persisting despite relatively fast GDP growth, as well as to the fact that lending growth remained close to nominal GDP growth.

The majority of the Council members expressed an opinion that, taking into account the present information, interest rates were also likely to remain stable in the coming quarters. These Council members judged that the stabilisation of interest rates would continue to help meet the inflation target, while supporting the maintenance of balanced economic growth, including the further expected recovery in investment. Moreover, these Council members pointed out that the need to take into account the monetary conditions in the immediate environment of the Polish economy also spoke in favour of keeping the current level of interest rates.

In the opinion of some Council members, should data and forecasts incoming in the following quarters suggest a more marked intensification of inflationary pressure, most notably associated with a possibility of a stronger acceleration in wage growth, it might be justified to consider an increase in the NBP interest rates in the quarters to come. In the opinion of these Council members, interest rate decisions should also take into account the impact of negative real interest rates on lending, asset prices and savings in the Polish economy. The Council members judged that developments in inflation expectations would also be important for monetary policy decisions.

A view was expressed that in the event of a significant decline in economic indicators accompanied by a marked deterioration in consumer and corporate sentiment, in the longer run it might be justified to consider a decrease in 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%.

During the meeting the remuneration on the required reserve was also discussed. Certain Council members pointed out that decreasing the remuneration on the required reserve should help manifest its mandatory character. The majority of the Council members pointed out that the remuneration of the required reserve, combined with the decision not to calculate the reserve requirement ratio on funds raised from domestic entities for at least a two-year period, should help to lower the scale of the maturity mismatches between assets and liabilities of Polish institutions that are subject to mandatory reserve requirements. An opinion was also expressed that the reserve requirement system should not be modified until the decision not to calculate the reserve requirements on funds raised from domestic entities for at least a two-year period came into effect.

The Council adopted a resolution on the remuneration on the required reserve. In line with this resolution, the remuneration of the required reserve will amount to 0.50%. The resolution comes into force on 1 January 2018.

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 2017 are presented below.

Date: 4 April 2017

Subject matter of motion or resolution:
Resolution No. 1/2017 of 4 April 2017 on approving the Annual Financial Report of Narodowy Bank Polski prepared as of 31 December 2016.

Voting of the MPC members:

For:
A. Glapiński
G. M. Ancyparowicz
Ł. J. Hardt
E. M. Łon
E. J. Osiatyński
R. Sura
J. Żyżyński

Against:
E. Gatnar
J. J. Kropiwnicki
K. Zubelewicz

Date: 17 May 2017

Subject matter of motion or resolution:
Resolution No. 2/2017 of 17 May 2017 on approving the report on monetary policy in 2016.

Voting of the MPC members:

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

Against:

J. J. Kropiwnicki was absent.

Date: 17 May 2017

Subject matter of motion or resolution:
Resolution No. 3/2017 of 17 May 2017 on the evaluation of the activities of the NBP Management Board as regards the implementation of monetary policy guidelines for 2016.

Voting of the MPC members:

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

J. J. Kropiwnicki was absent.

Date: 30 May 2017

Subject matter of motion or resolution:
Resolution No. 4/2017 of 30 May 2017 on approving the report on the operations of Narodowy Bank Polski in 2016.

Voting of the MPC members:

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

E. Gatnar and R. Sura were absent.

Date: 4 July 2017

Subject matter of motion or resolution:
Resolution No. 1/DRF/2017 of 4 July 2017 on the appointment of a registered auditor for the Annual Financial Statements of Narodowy Bank Polski for years 2017 and 2018.

Voting of the MPC members:

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

Date: 19 September 2017

Subject matter of motion or resolution:
Resolution No. 5/2017 of 19 September 2017 on adopting monetary policy guidelines for 2018.

Voting of the MPC members:

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

Date: 8 November 2017

Subject matter of motion or resolution:
Resolution No. 6/2017 of 8 November 2017 amending the resolution on the required reserve ratios for banks, cooperative savings and credit unions and the National Association of Cooperative Savings and Credit Unions and the remuneration of required reserves.

Voting of the MPC members:

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

J. J. Kropiwnicki and E. J. Osiatyński were absent.

Date: 5 December 2017

Subject matter of motion or resolution:
Resolution No. 7/2017 of 5 December 2017 amending the resolution on the required reserve ratios for banks, cooperative savings and credit unions and the National Association of Cooperative Savings and Credit Unions and the remuneration of required reserves.

Voting of the MPC members:

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

■ Date: 19 December 2017

Subject matter of motion or resolution:
Resolution No. 8/2017 of 19 December 2017 on approving the Financial Plan of the National Bank of Poland for 2018.

Voting of the MPC members:

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

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