

**NBP**

Narodowy Bank Polski

Monetary Policy Council

July 2015

# Inflation Report



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

The time horizon of the analysis presented in the Report is conditioned by the availability of macroeconomic data. In turn, the periodisation of the analysis (breakdown into sub-periods) is conditioned by the development of particular variables. The cut-off date for the data in this Report was 26 June 2015.

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

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## Summary

Global economic growth remains moderate. In the United States, the activity rebounded following a temporary setback in 2015 Q1. In the euro area, the economic conditions have been improving but GDP growth remains moderate, held back by structural problems in some member states, which include in particular high private and public debt. Improving conditions in the euro area support economic recovery in other European Union member states, particularly in Central and Eastern Europe. In main emerging market economies, including China and Russia, GDP growth weakened in 2015 Q1.

A rise in oil prices over recent months has supported price growth in many countries. Nonetheless, the price growth stays low worldwide. In the United States, it remained close to zero. Prices grow in a slow pace also in the immediate environment of the Polish economy, i.e. in the euro area and Central and Eastern Europe.

Nominal interest rates of the major central banks remain close to zero. However, the Fed points to a likely interest rate increase in the coming quarters. In recent months, however, financial market participants have put off their expectations regarding the timing of the first increase in the fed funds rate. At the same time, the ECB continues asset purchases. Several other central banks in Europe have also eased their monetary policies. Due to the economic slowdown, the People's Bank of China has also been loosening monetary conditions.

Improving economic outlook in the advanced economies and the setback in the expected interest rate increase in the United States were supporting financial market sentiment. In consequence, the share prices rose in many economies and the appreciation of the US dollar in early 2015 came to a halt. However, an increase in risk of Greece turning insolvent resulted in weakening of the euro and other European currencies, and a fall in share prices, particularly in Europe. At the same time, government bond yields increased, particularly in the euro area and other European economies, following their sharp fall earlier in the year resulting from the introduction of quantitative easing by the ECB.

Annual consumer price growth in Poland remains negative, but since March 2015 the consumer prices have been falling at a diminishing pace. The fall in consumer prices has been mostly due to developments in food and energy prices, which – in spite of a limited increase – remain lower than a year ago. Deflation in consumer prices has also resulted from moderate output growth, still low cost pressure and low inflation in the environment of the Polish economy. Most core inflation measures are at their historical lows, while producer and import prices continued to decline. In addition, inflation expectations remain low.

Economic growth in Poland accelerated slightly in 2015 Q1, mainly due to strong exports growth supported by recovery in the environment of the Polish economy. However, domestic demand remained the major driver of GDP growth, amid a significant acceleration in investment, particularly enterprise investments and stable consumption growth, helped by recovery in the labour market and acceleration in real wage growth. Economic recovery supported moderate increase in loans. Recent data releases indicate that GDP growth in 2015 Q2 might have stabilized close to 2015 Q1.

Having lowered the NBP interest rates by 0.50 percentage points, including the reference rate to 1.5%, the Monetary Policy Council has kept the NBP rates unchanged. Faded expectations for further monetary policy easing have contributed – coupled with an increase in government bond yields abroad – to an increase in government bond yields in the longer end of the yield curve in recent months. In addition, since the publication of the previous *Report* stock indices in Poland rose somewhat, driven by an acceleration in economic growth in 2015 Q1, which has been supporting financial standing of Polish enterprises. However, the stock prices were undermined by increasing risk of Greece turning insolvent. This contributed also to a depreciation of the zloty against major currencies.

In 2015 Q1, the current account balance turned positive for the first time since 2004. Significant improvement in the current account balance was mainly driven by an increase in trade surplus resulting from a significant increase in exports and a decline in the value of crude oil imports along with the fall in its prices in global commodity markets. As a consequence of the surplus in the current account in 2015 Q1, the external imbalance indicators have improved.

The *Report* is structured as follows. Chapter 1 discusses developments in the environment of the Polish economy, which might influence inflation developments in Poland. These developments and domestic factors that might affect them are discussed in Chapter 2. Minutes of the Monetary Policy Council decision-making meetings held in March – June 2015, along with the Information from the meeting of the Monetary Policy Council in July 2015, are presented in Chapter 3. Minutes from the MPC meeting held in July will be published on 20 August 2015 and so will be included in next *Report*. The MPC voting records in meetings held in February – June 2015 can be found in Chapter 5. This *Report* also includes two boxes: “Negative central bank interest rates” and “Assessment of macroeconomic imbalances: Poland vs other European Union countries”.

Chapter 4 of the *Report* presents the projection of inflation and GDP based on the NECMOD model, which is one of the inputs into the Council's decision-making process on the NBP interest rates. In line with the July projection – prepared under the assumption of unchanged NBP interest rates and taking into account data available until 22 June 2015 – there is a 50-per cent probability that the annual price growth will be in the range of -1.1 – (-0.4)% in 2015 (compared to -1.0 – 0.0% in the March 2015 projection), 0.7 – 2.5% in 2016 (as against -0.1 – 1.8%) and 0.5 – 2.6% in 2017 (compared to 0.1 – 2.2%). At the same time, the annual GDP growth – in line with this projection – will be, with a 50-per cent probability, 3.0 – 4.3% in 2015 (as compared to 2.7 – 4.2% in the March 2015 projection), 2.3 – 4.5% in 2016 (as against 2.2 – 4.4%) and 2.5 – 4.7% in 2017 (compared to 2.4 – 4.6%).

# 1 External environment of the Polish economy

## 1.1 Global economic activity

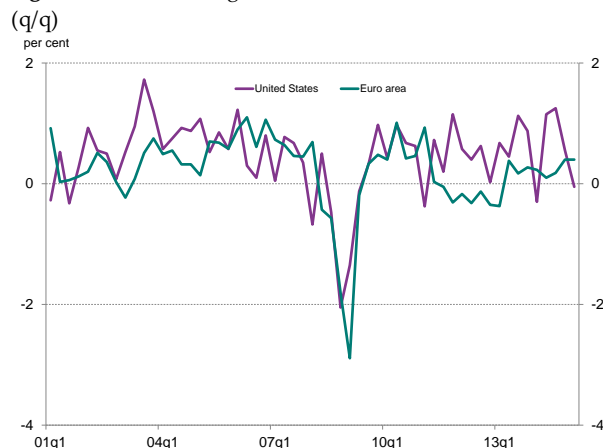
Global economic activity remains moderate, with persisting differences in business conditions across economies.

In the United States GDP growth in 2015 Q1 fell below zero (Figure 1.1),<sup>1</sup> which was primarily due to temporary factors. The fall in GDP was mainly caused by declining domestic demand associated with the extremely cold winter and lower investment by US oil producers stemming from the previous fall in this commodity prices.<sup>2</sup> In addition, the strong appreciation of the US dollar (related to the upcoming tightening of monetary policy by Fed) resulted in a marked decline in exports, which adversely affected output growth.

The data released in 2015 Q2 indicated a rebound in economic activity. Labour market conditions were further improving (Figure 1.2), accompanied by still good consumer sentiment and accelerating growth in retail sales. Corporate sentiment also indicated a continued recovery, though industrial production decreased, which might be attributed to lower economic activity in the sectors connected with oil and gas production.

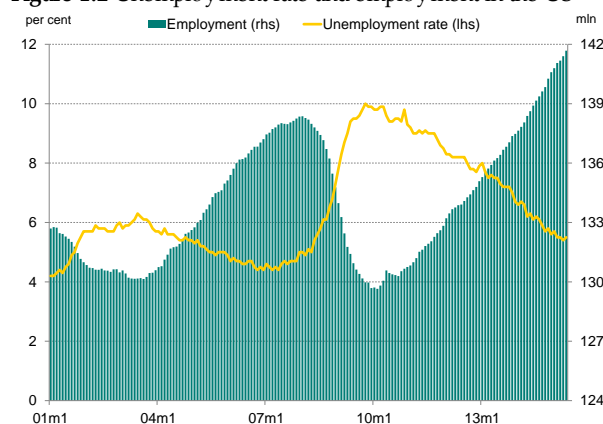
In 2015 Q1, economic growth in the euro area was mainly fuelled by higher household income and improving consumer sentiment, which were supported by a gradual improvement in the labour market conditions (Figure 1.3). The increase in real income was also accounted for by lower fuel prices driven by the decline in oil prices.

**Figure 1.1** Economic growth in selected advanced economies



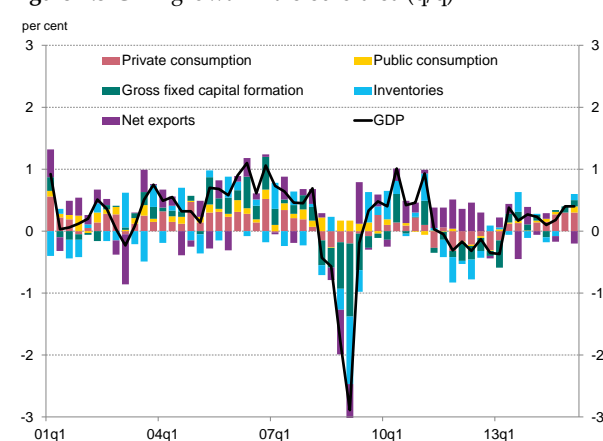
Source: Bloomberg data.

**Figure 1.2** Unemployment rate and employment in the US



Source: BLS data.

**Figure 1.3** GDP growth in the euro area (q/q)



Source: Eurostat data.

<sup>1</sup> The data on quarter-on-quarter GDP growth presented in this chapter are seasonally adjusted.

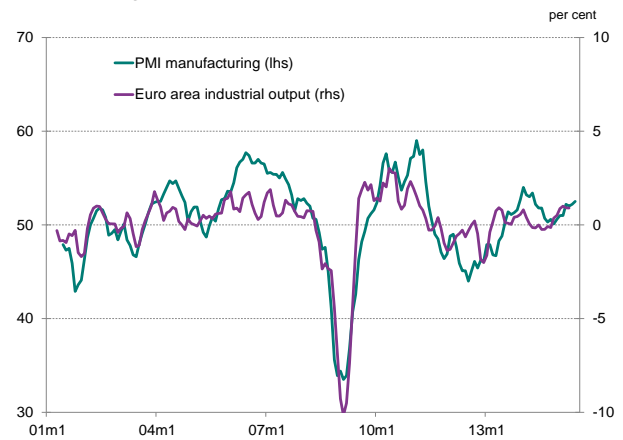
<sup>2</sup> Lower oil prices boosted real disposable income, yet, failed to translate into higher consumption and were reflected in higher households' saving rate only.

Moreover, the factors behind the pick-up in economic growth included the depreciation of the euro associated with the ECB's quantitative easing, which supported growth in exports and a recovery in industrial production. The data released at the beginning of 2015 Q2, including primarily these on retail sales, unemployment as well as consumer and business sentiment, point to a continued recovery in economic activity in the euro area (Figure 1.4, Figure 1.5).

The economic upturn in the euro area, including a pick-up in industrial output growth supported a marked rebound in economic growth in the Central and Eastern European countries, which are Poland's relevant trading partners (Figure 1.6). In these countries, growth in domestic demand associated with improving situation in the labour markets (including gradual reduction in unemployment and rise in employment) continued to be the key driver of economic growth. Increasing employment, together with falling energy and food prices, boosted real household disposable incomes and improved consumer sentiment. In many of these economies, domestic demand was also fuelled by high investment growth.

At the same time, in most major emerging economies, growth in economic activity weakened in the recent period. China's GDP growth fell for another consecutive quarter, which was associated with continuing decline in investment, including investment in the real estate market (Figure 1.7). In Brazil, further tightening of macroeconomic policies led to a decrease in consumption and investment demand, which contributed to deeper fall in GDP. In Russia, GDP growth in 2015 Q1 fell below zero due to the previously observed strong decline in oil prices, a significant depreciation of the ruble and economic sanctions. In Ukraine, in turn, a slump in economic activity caused by the

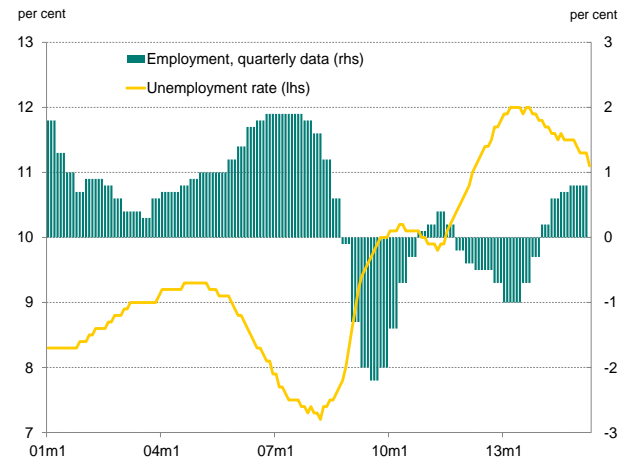
**Figure 1.4** Industrial output growth\* and PMI index in manufacturing in the euro area



Source: Eurostat data, Markit.

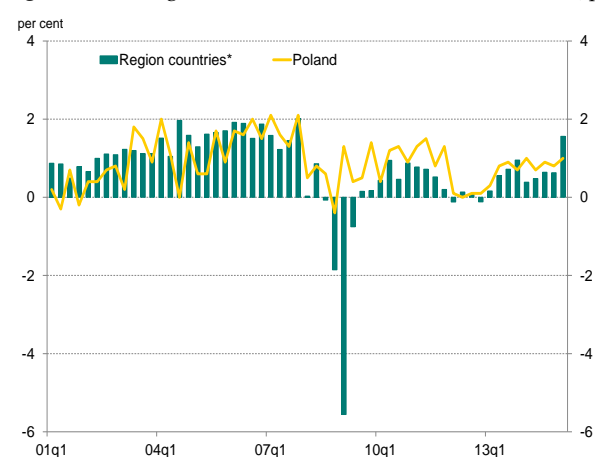
\* Change in the 3M moving average of the industrial output.

**Figure 1.5** Employment (y/y) and unemployment rate in the euro area



Source: Eurostat data.

**Figure 1.6** GDP growth in Poland and the CEE countries\* (q/q)



Source: Eurostat data.

\* Czech Republic, Slovakia, Hungary, Lithuania, Romania, Latvia, Estonia, Bulgaria, weighted average (by the share of Polish exports).



military conflict in the east of the country continued.

## 1.2 Inflation developments abroad

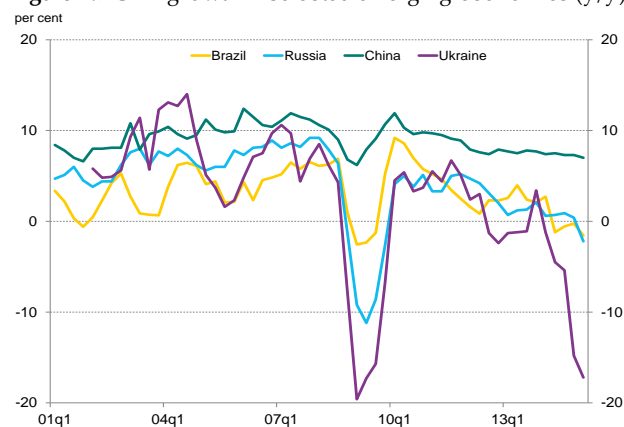
Consumer price growth in most economies remains very low (Figure 1.8), which is primarily the result of the earlier sharp fall in oil prices in the global commodity markets (see Chapter 1.4 *Global commodity markets*), as well as a continued moderate growth in global economy. In some emerging economies (including Russia, Brazil, Ukraine and Turkey), inflation has recently risen due to factors specific for these economies, including earlier depreciation of their currencies.

In the United States, price growth in the recent months has been close to zero. Inflation was mainly dragged down by a strong fall in energy prices. At the same time ongoing – despite a marked slowdown in GDP growth in the 2015 Q1 – economic recovery brought a slight increase in core inflation, which however remained below its long-term average.

In the immediate environment of the Polish economy, i.e. in the euro area and most countries of the Central and Eastern Europe, price growth – despite a certain pick-up over the recent past – remains very low (Figure 1.9, Figure 1.10). The persistence of very sluggish – and in many cases negative – price growth in Europe is mainly due to the earlier fall in energy prices as well as the reduced demand pressure as indicated by low core inflation. Yet, a certain rise in prices growth in the recent months was driven by an increase in fuel and food prices, and in the case of the euro area also by the significant depreciation of the euro.

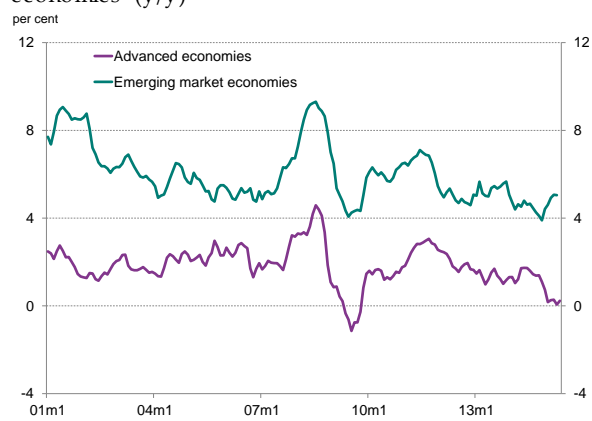
In the first months of 2015, inflation has followed an upward trend in some major emerging economies. In Russia, higher inflation was triggered by the earlier depreciation of the Russian ruble and embargo on food imports from many

**Figure 1.7** GDP growth in selected emerging economies (y/y)



Source: Bloomberg data.

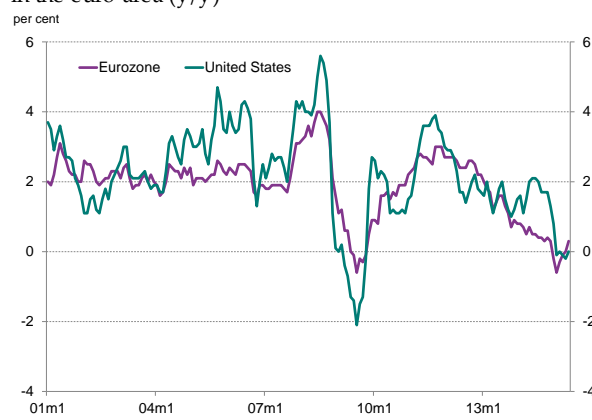
**Figure 1.8** Inflation in major advanced and emerging market economies\* (y/y)



Source: Bloomberg data, NBP calculations.

\* GDP-weighted average of advanced and emerging market economies (EMEs of 80% of EME GDP in 2012). Country groups in line with the IMF classification.

**Figure 1.9** CPI inflation in the United States and HICP inflation in the euro area (y/y)



Source: Bloomberg data.

countries. In Brazil, the increase in inflation was mainly due to a growth in regulated prices related to fiscal policy tightening and – to a lesser extent – the earlier depreciation of the Brazilian real. China, in turn, posts persistently low inflation, and its slight increase in the recent period reflected a rise in food prices.

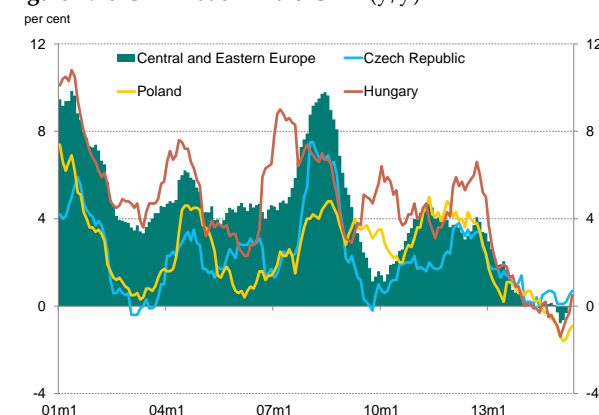
### 1.3 Monetary policy abroad and international financial markets

The interest rates of the Fed and the ECB remain near zero, but their monetary policies and the expectations regarding their future interest rates keep diverging (Figure 1.11, Figure 1.12).

For several months, the Fed has been pointing to a possible increase in the fed funds rate, but also indicating that its timing will depend on the level of employment and inflation. Considerable uncertainty about the outlook for economic growth in the United States (see chapter 1.1 *Global economic activity*) results in volatile expectations about the timing of the first increase in the fed funds rate. According to current market expectations, the first interest rate increase in the United States may take place in 2016 Q1 (Figure 1.11), somewhat later than was expected a couple of months ago<sup>3</sup>.

The ECB, in turn, has been purchasing financial instruments (mainly government bonds) since March 2015. The asset purchases are likely to continue at least until September 2016. According to the ECB, the quantitative easing and previous

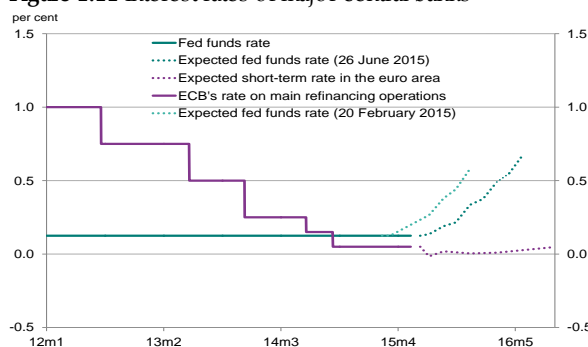
**Figure 1.10** CPI inflation in the CEE\* (y/y)



Source: Bloomberg data.

\* The average of inflation indices in Bulgaria, the Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Romania and Slovakia.

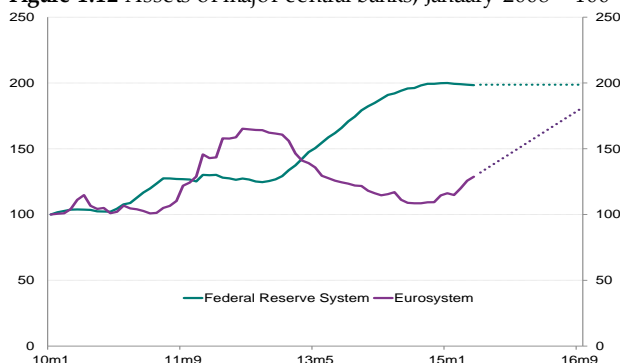
**Figure 1.11** Interest rates of major central banks\*



Source: Bloomberg data.

\*Expected fed funds rate implied from fed funds futures, expected short-term rate in the euro area implied from EURIBOR options.

**Figure 1.12** Assets of major central banks, January 2008 = 100



Source: Bloomberg data, NBP calculations.

\*Dotted lines denote forecasts, prepared under an assumption of constant Fed's balance sheet and the Eurosystem's assets growing by 60 bn EUR a month.

<sup>3</sup> At the same time, the Fed continues to reinvest maturing debt securities that it purchased during the quantitative easing programme, which was concluded in 2014.

measures have led to a considerable improvement in sentiment and greater availability of loans to the non-financial sector, and in consequence a better economic growth outlook for the euro area. In addition, due to a risk of Greece turning insolvent and the resultant rise in capital outflows from this country, the ECB several times increased the limit of the Emergency Liquidity Assistance for Greek banks.<sup>4</sup>

Due to a setback in market expectations for the first interest rate increase in the United States and improvement in economic conditions in the euro area, the US dollar appreciation against the euro came to a halt. Nonetheless, an increase in risk of Greek insolvency was conducive to a weaker euro. The currencies of Central and Eastern European countries and economies with lower investment grades also weakened following a strong appreciation in 2015 Q1 (Figure 1.13, Figure 1.14).

As the ECB's quantitative easing continued, some other central banks in Europe have been easing their monetary policies.<sup>5</sup> Since the previous *Report*, interest rates have been lowered in Hungary, Romania and Sweden. In addition, the Riksbank introduced an asset purchase programme, which was subsequently extended. At the same time, lower risk perception in the global markets and the appreciation of exchange rates in early 2015 allowed for lowering central bank interest rates in several emerging market economies, including Russia. The People's Bank of China also eased its monetary policy, but this was mostly due to a slowdown in economic growth in this country.

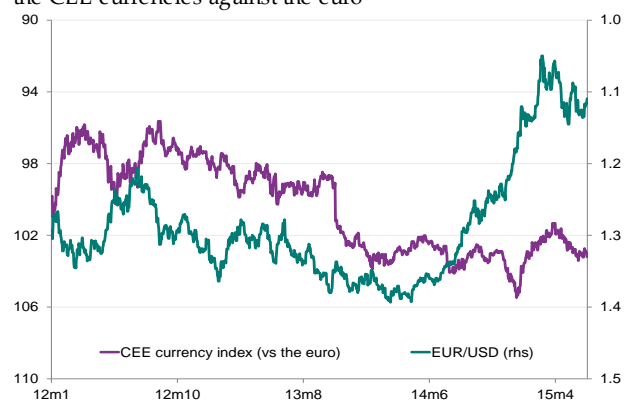
Until mid-April 2015, the monetary policy easing by the ECB was contributing to a sharp decline in government bond yields in the euro area and other

**Figure 1.13** Exchange rates of selected EM currencies against the US dollar (an increase denotes a depreciation)



Source: Bloomberg data.

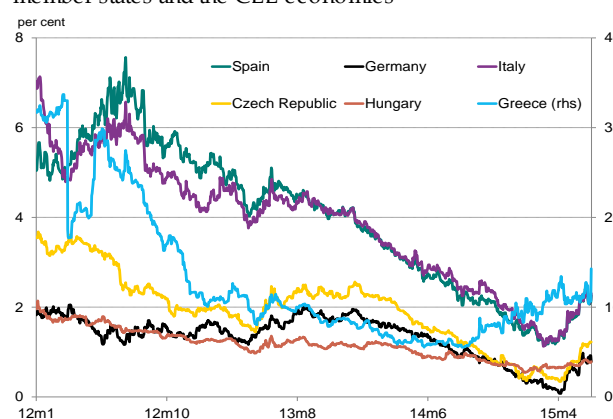
**Figure 1.14** Exchange rates of the euro against the US dollar and the CEE currencies against the euro\*



Source: Bloomberg data.

\*The Czech koruna, the Hungarian forint, the Polish zloty and the Romanian leu, an increase denotes an appreciation of the CEE currencies or of the US dollar.

**Figure 1.15** 10-year government bond yields of selected euro area member states and the CEE economies



Source: Bloomberg data.

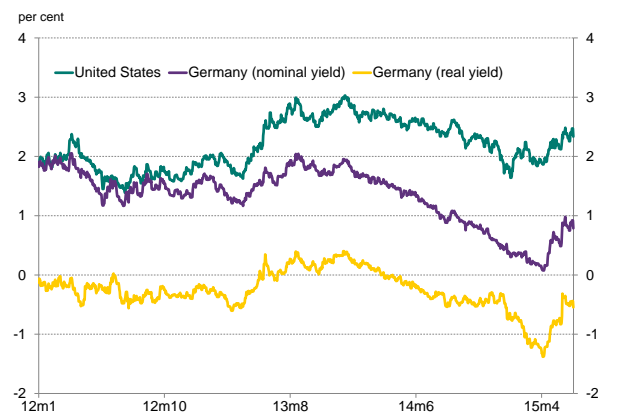
<sup>4</sup> After the cut-off date for this *Report*, the ECB decided not to increase the limit of the Emergency Liquidity Assistance for Greek banks and to adjust the haircuts for collateral accepted for this type of assistance, as Greece had failed to reach a deal with its creditors and the fiscal adjustment measures had been rejected in a referendum. In addition, the Greek government decided to temporarily close the banks, put a limit on cash withdrawals from ATMs and impose capital controls.

<sup>5</sup> Some central banks in Europe increased their interest rates (Sedlabanki Islands) or pointed to possible interest rate increases (the Bank of England).

European economies. In some countries, government bond yields turned strongly negative (see Box 1 *Negative central bank interest rates*). However, since mid-April in the euro area member states as well as in other countries, government bond yields have risen, which was mainly driven by an increase in real interest rates, amidst relatively stable inflation expectations (Figure 1.15). In some euro area countries, the risk of Greece turning insolvent and leaving the euro area added to a rise in the government bond yields. Also in the United States the government bond yields have recently risen, albeit to a limited extent due to the setback in expectations for the first increase in the fed funds rate (Figure 1.16).

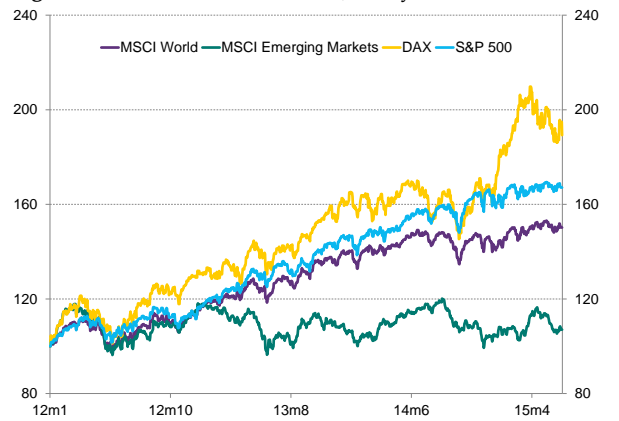
Since the previous *Report*, the global stock indices have continued to rise, supported by a setback in the expected fed funds rate increase. In China and Europe, however, the stock market indices fell. In Europe, the share prices were dragged down by a rise in risk of Greece turning insolvent and leaving the euro area (Figure 1.17).

**Figure 1.16** 10-year government bond yields in Germany and the United States



Source: Bloomberg data.

**Figure 1.17** Global stock indices, January 2012 = 100



Source: Bloomberg data.

### Box 1: Negative central bank interest rates

Over recent years, many central banks had substantially decreased their interest rates in response to the recession and the deflationary pressure resulting from the global financial crisis. In effect, the central bank interest rates in most advanced economies have been close to zero, while in some even negative (Switzerland, Denmark, Sweden, and the euro area, Figure B.1.1, Figure B.1.2). This has cast doubt on a common theoretical view that nominal interest rates could not be negative (the zero lower bound).<sup>6</sup> The situation is even more unusual as market rates (notably at the short end) followed the central bank rates and declined below zero (Figure B.1.3, Figure B.1.4).

#### The European Central Bank

The ECB decreased its deposit rate below zero, which accompanied cutting the rate on the main refinancing operations close to zero (initially to 0.15% and then to 0.05%). This encouraged commercial banks to deposit more liquid reserves outside the Eurosystem, and contributed to easier monetary conditions in the euro area, as the interbank interest rate (EONIA) is influenced more by the ECB's deposit rate than by the rate on the main refinancing operations (Cœuré 2014)<sup>7</sup>.

<sup>6</sup> The zero lower bound results from a possibility of exchanging negative interest-bearing reserves (in the case of banks) or deposits (in the case of households) into zero interest-bearing cash.

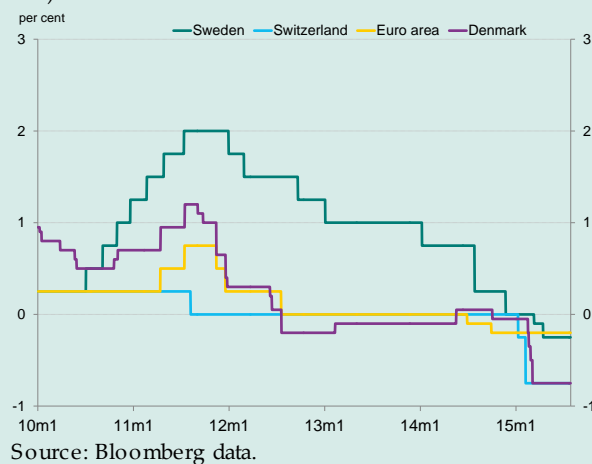
<sup>7</sup> This results from excess liquidity in the euro area banking system and the fact that the ECB's open market operations are liquidity-providing and are conducted on a fixed rate full allotment basis (see Cœuré B., (2014), *Life below zero: Learning about negative interest rates*, speech delivered to the ECB's Money Market Contact Group in Frankfurt, 9 September).

### The Riksbank

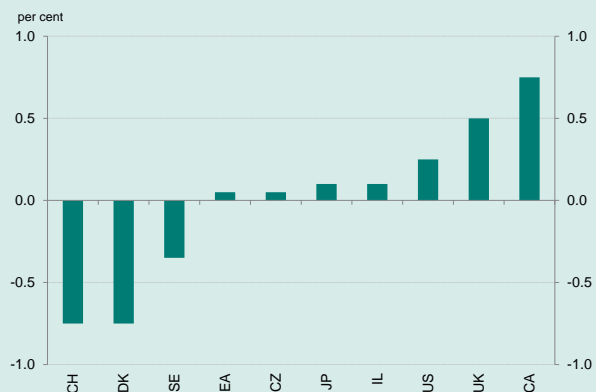
The Riksbank's decision was motivated by the similar reasoning as in the case of the ECB. Lowering the deposit rate below zero in July 2014 was related to lowering the key interest rate (the repo rate) to slightly above zero.

These measures were meant to ease the monetary policy conditions and at the same time to preserve the interbank market activity.<sup>8</sup> Following that, the Riksbank also decreased its repo rate to -0.1% in February 2015, and to -0.25% in March 2015,<sup>9</sup> aiming to ease monetary policy further given the prolonging period of inflation remaining markedly below the Riksbank's target. The expansionary effect of the Riksbank's monetary policy was magnified by a sovereign bond purchase programme. This policy was also influenced by a launch of the ECB's asset purchase programme, which could have resulted in an upward pressure on the Swedish krona and delay the return of inflation to the target.

**Figure B.1.1** Central bank interest rates in Denmark (the rate on certificates of deposit), Sweden (the repo rate), Switzerland (the deposit rate) and the euro area (the deposit rate)



**Figure B.1.2** Level of the basic<sup>10</sup> interest rates of central banks with near-zero interest rates



### The Swiss National Bank

The Swiss National Bank decided to lower the rate on deposits with the central bank below zero in December 2014.<sup>11</sup> The decision was meant to limit portfolio capital inflows and the upward pressure on the Swiss franc. The deposit rate – which is the Swiss National Bank's primary instrument influencing the market rates – was decreased to -0.25% and a month later to -0.75%. Decision to lower the interest rate below zero could be related to the simultaneous floating of the franc and the resulting need to counteract the excessive appreciation of the currency.<sup>12</sup>

### The Danmarks Nationalbank

Denmark is a part of the ERM II and so the main aim of the Danmarks Nationalbank's monetary policy is to keep the Danish krone stable against the euro.<sup>13</sup> Therefore, the changes in the Danmarks Nationalbank's interest rates must be largely in line with the changes in the monetary policy conducted by the ECB. The rate on Danmarks Nationalbank's open market operations has been negative since July 2012 (except for the period April –

<sup>8</sup> The Riksbank deposit rate had been negative even earlier, from July 2009 to September 2010.

<sup>9</sup> In July 2015 the Riksbank lowered again the interest rates, including the repo rate to -0,35%.

<sup>10</sup> Switzerland – the deposit rate, Denmark – the rate on certificates of deposit, Sweden – the repo rate, euro area – the rate on the main refinancing operations, the Czech Republic – the repo rate, Japan – the overnight call rate, Israel – the Bank of Israel interest rate, the USA – the fed funds rate, United Kingdom – the Bank rate, Canada – the overnight target rate.

<sup>11</sup> This referred to the deposits exceeding a threshold set by the SNB. The threshold determination is based on complicated principles, which can be found in the SNB's press release informing about the introduction of negative interest rates of 18 December 2014 ([http://www.snb.ch/en/mmr/reference/pre\\_20141218/source/pre\\_20141218.en.pdf](http://www.snb.ch/en/mmr/reference/pre_20141218/source/pre_20141218.en.pdf)).

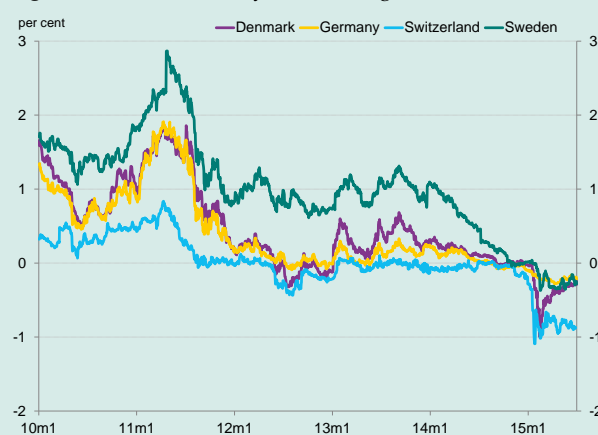
<sup>12</sup> See: Box 3, *Inflation Report – March 2015*, NBP.

<sup>13</sup> With a tolerance band of  $\pm 2.25\%$  (*de jure*) and  $\pm 0.5\%$  (*de facto*).

September 2014). In response to an increase in capital inflows following the announcement of the ECB's QE programme, the Danmarks Nationalbank lowered the rate on open market operation by 0.7 percentage points, to -0.75%.

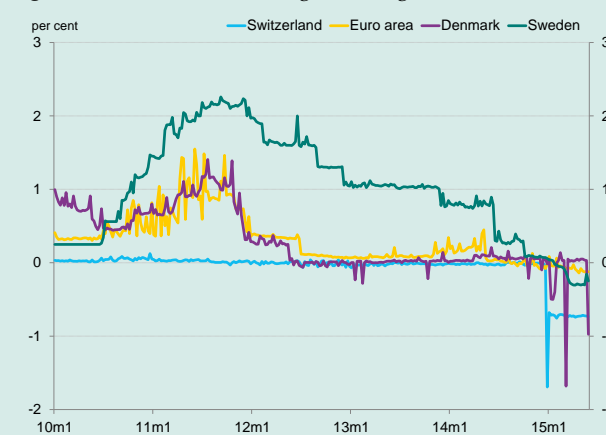
The above examples show that in practice it is possible for a central bank to lower its interest rates below zero. This is because holding cash entails costs (transaction costs, costs of keeping cash in a safe deposit box, insurance and transport costs), which discourages attempts to avoid negative interest. The costs of holding cash are hard to estimate precisely and vary across economic agents. The existence of these costs means that households accept additional fees for keeping a non-interest bearing account (which is equivalent to accepting negative interest on a deposit) and sellers accept the interchange fee (of 1-3%) of the transaction<sup>14</sup> for card payments. The EU average social cost of using cash is estimated at 2.3%.<sup>15</sup>

**Figure B.1.3** Yields on 2-year sovereign bonds



Source: Bloomberg data.

**Figure B.1.4** Interbank overnight lending rate



Source: Bloomberg data.

The efficiency of negative interest rates as a monetary policy instrument employed to counteract deflation is still hard to assess due to lags in monetary policy transmission mechanism. The effects of negative interest rates are also difficult to separate from other simultaneous unconventional monetary policy measures. However, it seems that monetary policy easing by the central banks described in this box so far has been achieving its aim, being conducive to weaker exchange rate and lowering the loan costs.

Negative interest rates may result in an increase in risks to financial stability, related primarily to possible exchange of deposits held with the commercial banks for cash. Taking this risk into account, the commercial banks pass on the negative interest to depositors only to limited extent, which results in lower profitability of the banks. So far, no abrupt exchange of deposits into cash has been recorded in economies with negative central bank interest rates. This notwithstanding, the amount of withdrawals could be increasing faster with the nominal rates slipping more into negative territory. The economic agents may be able to accept slightly negative interest on their deposits, yet deeply negative interest rate could trigger the considerable outflow of deposits (although it would also depend on the ratio at which deposits could be exchanged into cash<sup>16</sup>). Other risks to financial stability involve excessive risk taking by economic agents and formation of asset price bubbles.

<sup>14</sup> Such a level of interchange fees is indicated as acceptable for firms in many countries by Barclay's study (2015) *Three Questions Quantum Evolution*, Foreign Exchange Research, 27 January.

<sup>15</sup> Schmiedel H., Kostova G., Ruttenberg W., (2012), *The social and private costs of retail payment instruments. A European perspective*, ECB Occasional Papers Series, nr 137.

<sup>16</sup> When discussing this issue it is indicated that, deposits could be exchanged into cash at a rate below 100% after the negative interest rates have been introduced.



## 1.4 Global commodity markets

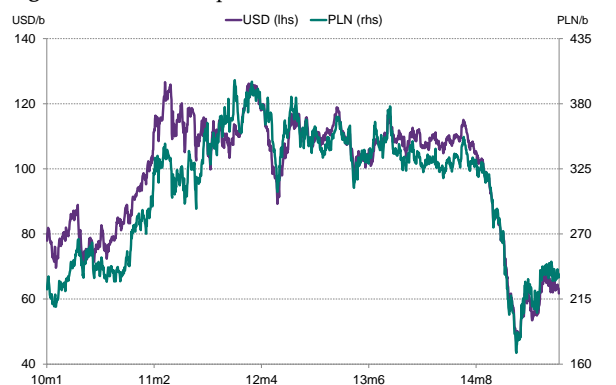
In H1 2015, the performance of commodity prices was mixed. Crude oil prices – after a sharp fall in H2 2014 and in the early 2015 – have gone up in the recent months, yet remained significantly below last year's level. In contrast, prices of other energy commodities continued to decline. Prices of many agricultural commodities have picked up, which was mainly related to unfavorable weather conditions.

Brent crude oil prices – after hitting, in January 2015, the lowest point in almost six years – have picked up again (slightly exceeding 60 USD/b, Figure 1.18) in response to the surging global demand for oil. Yet, the supply-side factors, in particular a rise in oil exports from the OPEC countries, have continued to act as a drag on further oil prices increases.

Coal and gas prices continued on a downward trend in the first half of 2015, driven by a several-year decline in demand. The scale of the fall in gas prices was significant and resulted from weakening demand, mainly due to the mild winter in Europe (Figure 1.19).

Since the publication of the previous *Report*, prices of the key agricultural commodities increased due to unfavorable weather conditions (Figure 1.20). In Europe, meat prices and above all pork prices, were supported mainly because of the implementation of the Private Storage Aid by the European Commission. Among agricultural commodities, the downward trend was only confined to dairy products, mainly because of the milk market deregulation in the EU.

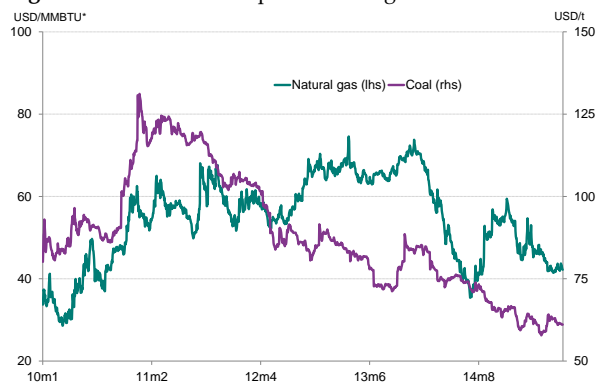
**Figure 1.18** Brent oil prices in USD and PLN



Source: Bloomberg data.

Data for February 2015 are the average for the first three weeks of this month.

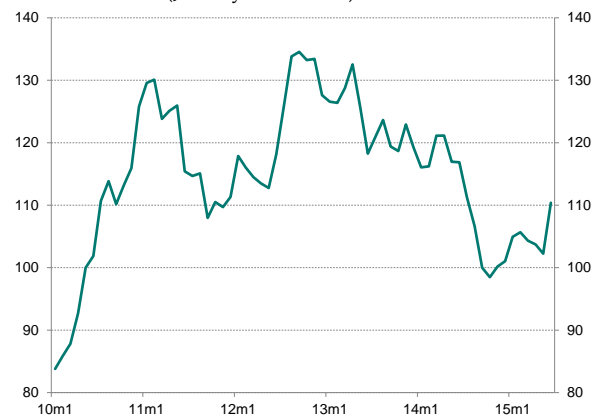
**Figure 1.19** Gas and coal prices in the global markets



Source: IMF data.

\* MMBTU – Million British Thermal Unit, 1 BTU is the amount of energy needed to raise the temperature of one pound of water by one degree Fahrenheit.

**Figure 1.20** Index of agricultural commodity prices in the global markets in EUR (January 2010=100)\*



Source: Bloomberg, Reuters data, NBP calculations.

\* The index comprises prices of: wheat, rape, pork, potatoes, sugar, cocoa, coffee, skimmed milk powder, butter, frozen orange juice concentrate. The system of weights used in the IACP reflects the consumption structure of Polish households.





## 2 Domestic economy

### 2.1 Inflation developments

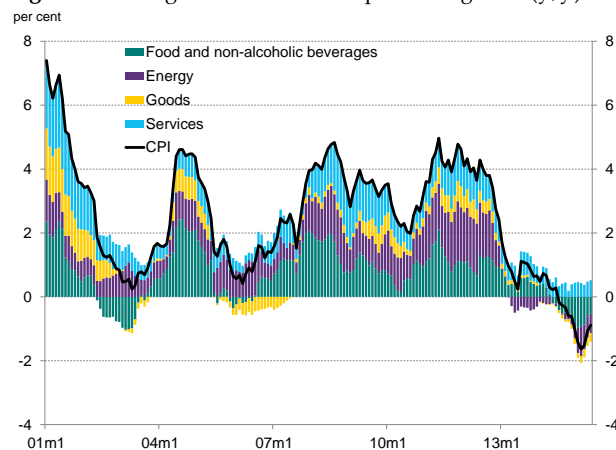
#### 2.1.1 Consumer prices

Annual consumer price growth has been negative since July 2014, although since March 2015, prices have been falling at an increasingly slower pace (Figure 2.1, Table 2.1). The 2015 trends in consumer prices have been largely determined by movements in fuel and food prices.

In the first two months of the year, fuel prices continued along the lines observed in the second half of 2014 – falling steadily on the back of the decline in global oil prices (see Chapter 1.4 *Global commodity markets*). Since February 2015, oil prices have picked up somewhat. As a result, the annual growth of fuel prices edged up a little while remaining negative, and thus continued to be the main driver of the negative CPI index.

A second component with a deflationary effect on consumer prices was food prices, which have declined below their previous year level. This was linked to the relatively low global prices of agricultural commodities, persistently favourable weather conditions in the years 2014-2015 as well as the Russian embargo on food imports from many countries including Poland.<sup>17</sup> Yet, since February 2015, food price deflation has been mitigated by a pick-up in the annual growth of vegetable prices, resulting from cutbacks to the scale of this production (caused by concerns that its profitability would be low – as observed in the previous year).<sup>18</sup>

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



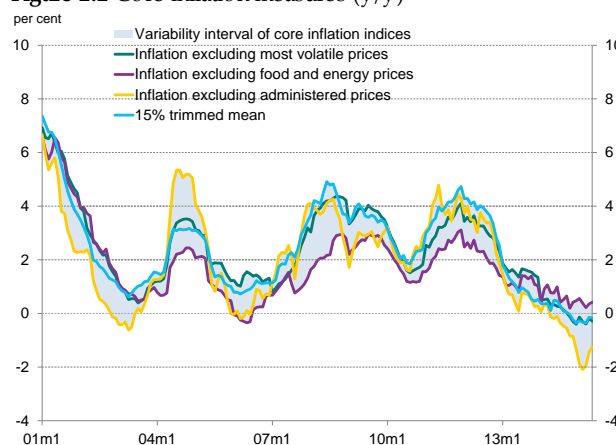
Source: GUS data, NBP calculations.

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

	2011	2012	2013	2014	2015				
	Annual average				Jan	Feb	Mar	Apr	May
<b>CPI (per cent)</b>	4.3	3.7	0.9	0.0	-1.4	-1.6	-1.5	-1.1	-0.9
<b>Food and non-alcohol beverages (pps)</b>	1.3	1.0	0.5	-0.2	-1.0	-0.9	-0.9	-0.6	-0.5
<b>Energy (pps)</b>	1.5	1.4	-0.3	-0.2	-0.8	-0.9	-0.8	-0.7	-0.6
<b>Goods (pps)</b>	0.5	0.4	0.1	-0.1	-0.1	-0.2	-0.3	-0.3	-0.3
<b>Services (pps)</b>	1.0	0.9	0.6	0.4	0.5	0.4	0.4	0.5	0.5

Source: GUS data, NBP calculations.

**Figure 2.2** Core inflation measures (y/y)



Source: GUS data, NBP calculations.

<sup>17</sup> Supply in the agricultural produce market was additionally boosted by the deregulation, as of 1 April 2015, of the European market for milk, which had a hampering effect on milk prices.

<sup>18</sup> Vegetable price growth was additionally driven up by the positive base effect related to the unusual decline in their prices in the corresponding period of the previous year.

Adding to consumer price deflation was moderate demand growth accompanied by the absence of cost pressure, near-zero price growth in the environment of the Polish economy and the stronger than the year before exchange rate of the zloty (see Chapter 1.2 *Inflation developments abroad* and Chapter 2.5 *Financial markets and asset prices*).

### 2.1.2 Core inflation

Core inflation measures are running at historical lows, with most of them remaining in negative territory (Figure 2.2, Table 2.2). The relatively low level of core inflation reflects moderate demand growth and the absence of cost pressure in the economy. Low core inflation is the product of both slow – but positive – growth in service prices supported by moderately expanding demand, and a concurrent further decline in goods prices, deepened by low inflation abroad and the stronger than the year before zloty exchange rate.

### 2.1.3 Producer prices in industry

Deflation of producer prices, observed in Poland for three years now, intensified in the first quarter of 2015. (Figure 2.3).<sup>19</sup> This was related to a deepening decline in global commodity prices in annual terms, in particular those of oil. The decline in producer prices was also driven by a slight fall in unit labour cost in industry, as well as weak price growth worldwide. The downward trends in producer prices were observed in both goods sold domestically and those destined for exports, even though the scale of the decline was larger in the former case.

### 2.1.4 Import prices

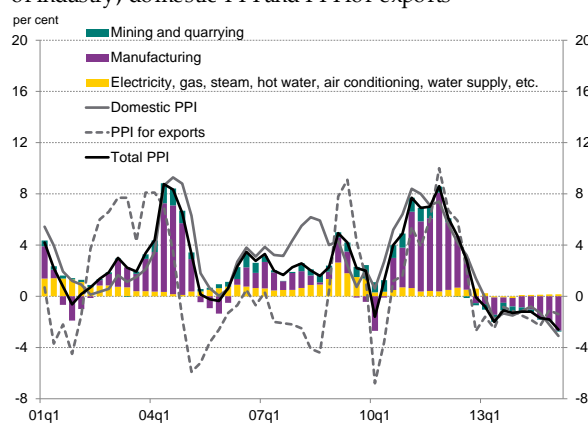
The annual growth in prices of imported goods in zloty terms – following an increase in 2014 Q4 to near-zero – in 2015 Q1 again turned negative

**Table 2.2** Core inflation measures (in per cent, y/y)

	2011	2012	2013	2014	2015				
	Annual average				Jan	Feb	Mar	Apr	May
<b>CPI excluding food and energy prices</b>	2.4	2.2	1.2	0.6	0.6	0.4	0.2	0.4	0.4
<b>CPI excluding administered prices</b>	3.9	3.2	0.6	-0.3	-1.9	-2.1	-2.0	-1.4	-1.3
<b>CPI excluding most volatile prices</b>	3.3	3.1	1.6	0.2	-0.1	-0.3	-0.4	-0.2	-0.3
<b>15% trimmed mean</b>	3.9	3.7	1.0	0.2	-0.3	-0.3	-0.4	-0.1	-0.2

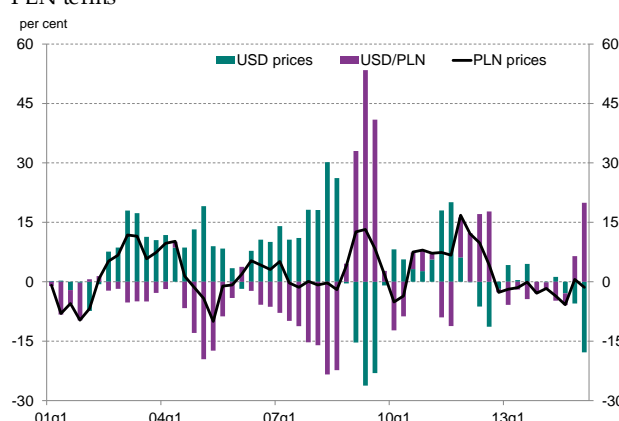
Source: GUS data, NBP calculations.

**Figure 2.3** Composition of annual growth of total PPI by sections of industry, domestic PPI and PPI for exports



Source: GUS and Eurostat data.

**Figure 2.4** Composition of annual growth of import prices in PLN terms



Source: GUS data, NBP calculations.

<sup>19</sup> In April 2015, PPI dropped to -2.6% y/y (as against -2.5% y/y in the previous month), rising to -2.2% y/y in May.

(Figure 2.4). The fall in import prices resulted from a decline in dollar-term prices of imported goods, mainly oil. This was, however, partly compensated by a weaker zloty exchange rate against the dollar in annual terms as compared with the previous year.

### 2.1.5 Inflation expectations

Since the publication of the previous *Report*, all the measures of inflation expectations have remained low, some of them have even declined further (Table 2.3, Table 2.4). In particular, there was a decrease in the expectations of the respondents to the *NBP Survey of Professional Forecasters*,<sup>20</sup> and those of the financial sector analysts, concerning inflation in 2015. Yet consumer and corporate expectations have remained close to zero. All the surveyed respondent groups expect the 2015 price growth to be very slow. In the subsequent years – in line with what is envisaged by the financial sector analysts and the participants in the *NBP Survey of Professional Forecasters* – inflation will gradually return close to the NBP's target.

The decline in inflation expectations for the nearest months was accompanied by a substantial increase in the probability perceived by *NBP Survey of Professional Forecasters* participants that prices would decline on average in 2015. In the June 2015 survey, this probability rose to about 80% against 35% in the December 2014 survey, yet for the next two years it dropped to a very low level (3%). This is accompanied by a rising percentage of economic agents expecting prices to stabilise in the next 12 months.

**Table 2.3** Inflation expectations of consumers, enterprises, bank analysts and participants of the *NBP Survey of Professional Forecasters* (in per cent)

	Feb	Mar	2015 Apr	May	Jun
<b>CPI inflation expected in 12 months</b>					
<b>Consumers</b>	0.2*	0.2*	0.2*	0.2*	0.2*
<b>Enterprises</b>	0.1**	0.1	-	-	0.2
<b>Expected average annual CPI inflation</b>					
<b>Bank analysts</b>					
- in 2015	-0.2	-0.4	-0.5	-0.6	-0.6
- in 2016	1.7	1.5	1.6	1.6	1.5
- in 2017	2.3	2.0	2.1	2.3	2.0
<b>NBP Survey of Professional Forecasters</b>					
- in 2015	0.2**	-0.4	-	-	-0.6
- in 2016	1.8**	1.4	-	-	1.4
- in 2017	-	2.1	-	-	2.0

Source: GUS, NBP and Thomson Reuters data.

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

\*\*Data from the September 2014 survey.

**Table 2.4** Forecasts of CPI inflation derived from individual interval forecasts (in per cent)

Horizon	Central forecast	50% probability	90% probability	Probability of 1.5-3.5% range
<b>2015</b>	-0.6	-0.7 – -0.3	-1.1 – 1.2	2
<b>2016</b>	1.4	1.1 – 1.9	0.4 – 3.0	44
<b>2017</b>	2.0	1.6 – 2.6	0.4 – 3.8	71

Source: NBP Survey of Professional Forecasters, June 2015.

<sup>20</sup> The *NBP Survey of Professional Forecasters* is conducted on a quarterly basis. The respondents include experts from financial institutions, research centres and employer and employee organisations. Their forecasts are framed in terms of probability, which allows taking into account various economic scenarios and assessing the compatibility of forecasts. For a detailed description of the survey results – see <http://amakro.nbp.pl>.

## 2.2 Demand and output

Economic growth in Poland accelerated slightly in 2015 Q1, running at 3.6% y/y (as against 3.3% y/y in 2014 Q4, Figure 2.5, Table 2.5). The increase in economic growth was mainly driven by a sharp rise in the contribution of net exports, occurring on the back of considerably higher exports, amidst weakening import growth. Nevertheless, it was domestic demand that continued to be the primary driver of GDP growth. This was due to a sharper investment growth, with consumption expanding at stable rates.

### 2.2.1 Consumption demand

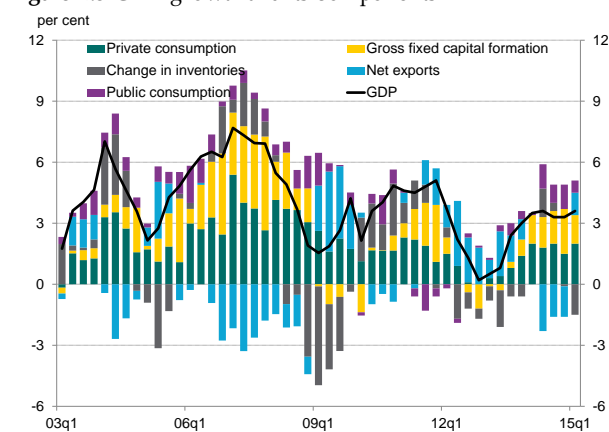
Households' consumption expenditure rose steadily in 2015 Q1 at a rate close to that observed in the previous quarter (3.1%, Figure 2.6). The increase in consumption was supported by improving labour market conditions (see Chapter 2.4 *Labour market*), including a material pick-up in real wage growth related to declining food and energy prices. The rise in lending to households worked in the same direction (see Chapter 2.6 *Credit and money*). Consumption expenditure was also stimulated by households' upbeat sentiment (Figure 2.7).

Data released in 2015 Q2 suggest further consumption growth at previous rates. In April and May, retail sales growth – despite some decline – stayed at a moderate level. Rise in consumption is supported by still optimistic consumer sentiment and the further improvement in labour market conditions.

### 2.2.2 Investment demand

In 2015 Q1, investment growth picked up substantially (running at of 11.4% y/y<sup>21</sup> against

**Figure 2.5** GDP growth and its components



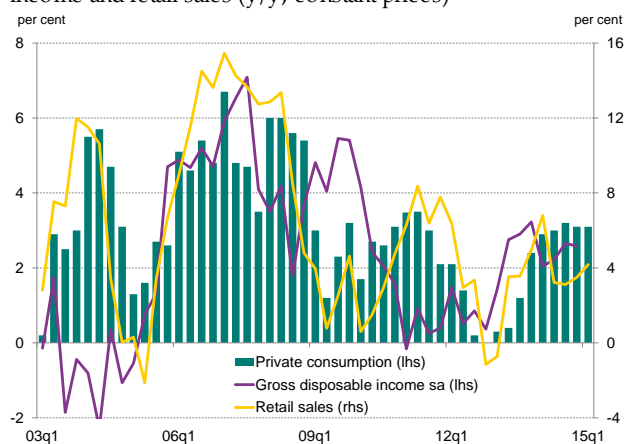
Source: GUS data.

**Table 2.5** Growth of GDP and its selected components (y/y) and contribution of inventories and net export to GDP

	2011	2012	2013	2014				2015
				q1	q2	q3	q4	q1
<b>GDP (per cent)</b>	4.8	1.8	1.7	3.4	3.5	3.3	3.1	3.6
<b>Private cons. (per cent)</b>	3.0	1.0	1.1	2.9	3.0	3.2	3.1	3.1
<b>Public cons. (per cent)</b>	-2.3	0.2	2.1	0.1	3.7	3.5	3.7	3.3
<b>Gross fixed capital form. (per cent)</b>	9.3	-1.5	0.9	11.2	8.7	9.9	9.0	11.4
<b>Change in inventories (pps)</b>	0.7	-0.7	-1.0	0.0	1.4	0.4	-0.1	-1.5
<b>Net exports (pps)</b>	0.9	2.2	1.5	0.0	-1.9	-1.6	-1.5	1.1

Source: GUS data.

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



Source: GUS data, NBP calculations.

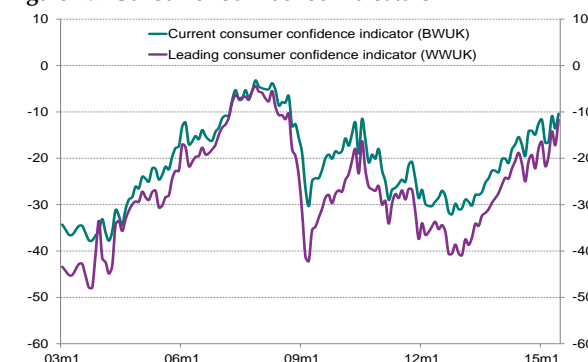
<sup>21</sup> Investment growth based on a preliminary GDP estimates by GUS, the remaining data based on estimates derived from the NECMOD model.

8.6% y/y in 2014 Q4), which was driven by a steeper growth in corporate investment amidst a moderate rise in residential investment (Figure 2.8). Growth in gross fixed capital formation was, in turn, contained by a slowdown in public sector investment (to 4.0% y/y from 12.6% y/y in 2014 Q4), which, however, could be partly due to one-off factors.<sup>22</sup>

Corporate investment activity continued to be the key driver of investment growth in the economy in 2015 Q1.<sup>23</sup> Robust corporate investment growth (running at 11.8% y/y as compared to 10.6% y/y in 2014 Q4) was supported by the sustained high capacity utilisation (Figure 2.9) combined with an optimistic demand outlook declared by enterprises at the end of 2014. Investment growth additionally benefited from firms' good financial performance – which enabled them to finance projects from their own funds – as well as a higher affordability of credit and a decline in interest on corporate loans. These factors will probably continue into the next quarter, supporting corporate investment activity, which should remain relatively high.

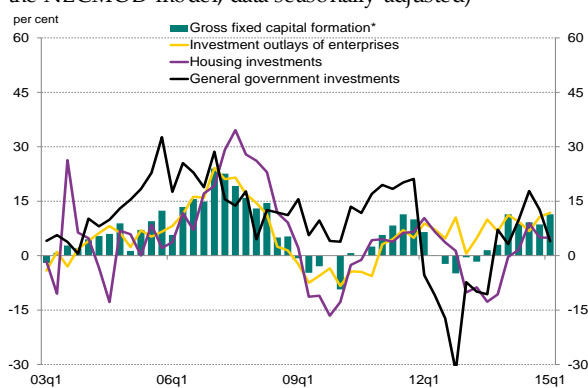
In 2015 Q1, growth of housing investment stabilised at a level close to its long-term average (running at 4.9% y/y compared to 4.5% y/y on average in 2004-14 and 5.0% y/y in the previous quarter). Home purchases were supported by high housing loan affordability, accounted for by favourable labour market conditions and low interest rates on mortgage loans. Housing investment growth may also have benefited from the historically low nominal interest rates, which increased the relative rate of return on this type of investment. At the same time, growth in housing investment was hampered by a material tightening of banks' mortgage loans policy, resulting mainly

**Figure 2.7** Consumer confidence indicators



Source: GUS data.

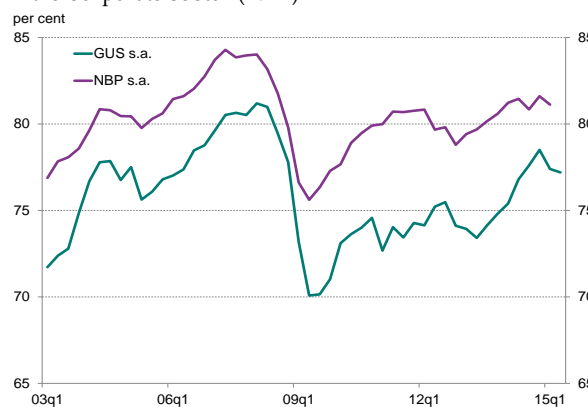
**Figure 2.8** Investment in the economy (y/y, NBP estimates for the NECMOD model, data seasonally adjusted)



Source: NBP data.

\*GUS data (not seasonally adjusted).

**Figure 2.9** Production capacity utilisation in industry (GUS) and in the corporate sector (NBP)



Source: GUS data, NBP economic climate survey.

The degree of capacity utilisation based on the GUS business tendency survey is significantly lower than that quoted in NBP surveys. However, trends in both indicators are similar in both surveys. The difference in the data results from the difference in the enterprise sample on which surveys are based on. The difference may also stem from the fact that large enterprises are overrepresented in the NBP sample, while the GUS sample is representative in terms of the enterprise size.

<sup>22</sup> Related to the waning effect of the 2014 reclassification of the PKP PLK S.A. as a general government sector company.

<sup>23</sup> Also the GUS survey still indicates high corporate investment growth (of 16.4% y/y vs 19.5% y/y in 2014 Q4). Corporate investment was driven by accelerating investment in buildings and machinery. The slowdown was due to a minor decline in vehicle investment owing to a statistical base effect (temporarily tax-deductible purchases of LCV-certified cars in 2014 Q1).

from a reduction in the acceptable level of LtV,<sup>24</sup> in line with the Recommendation S.

### 2.2.3 Government demand

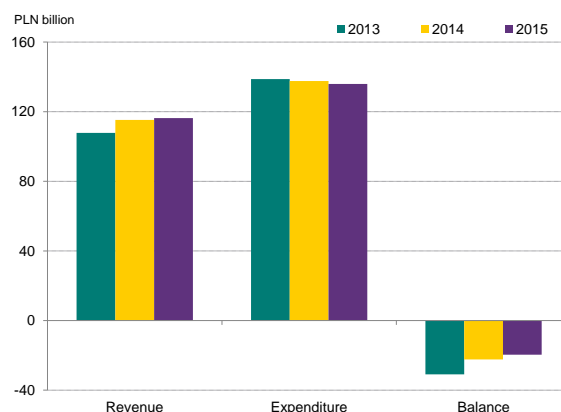
The fiscal position of general government has been improving as evidenced, among others, by the narrowing central budget deficit and an improvement in the fiscal position of the local governments (Figure 2.10).<sup>25</sup> The ongoing improvement in the general government's fiscal conditions allowed the EU Council to close the Excessive Debt Procedure for Poland in June 2015.

The reduction in the deficit in early 2015 occurred in spite of the relatively weak growth in the central government revenue. Between January and May 2015, central government revenue was 0.9% higher than in the corresponding period of 2014. Yet, this increase resulted mainly from a rise in the government's non-tax revenue.<sup>26</sup> Tax revenue decreased by 0.9% y/y, largely due to falling VAT revenue. The reduction in the deficit was thus primarily related to lower central budget expenditure (of 1.2% y/y), which was largely driven by a decline in the public debt servicing costs.

The surplus of local government units in 2015 Q1 was higher than in the corresponding period of 2014. This was driven by a relatively high growth of tax revenue, amidst a slow rise in expenditure, despite strong investment growth.

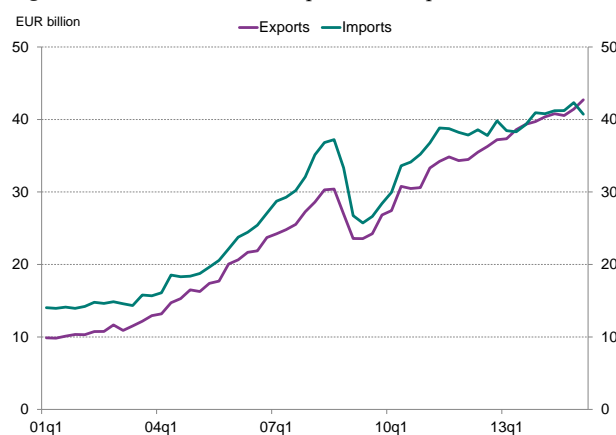
The financial position of the main special purpose funds was slightly better than in the previous year. The debt of the Social Insurance Fund (FUS) has not changed, and the balance of the National Health Fund (NFZ) was comparable to last year's

**Figure 2.10** Central budget performance in January – May



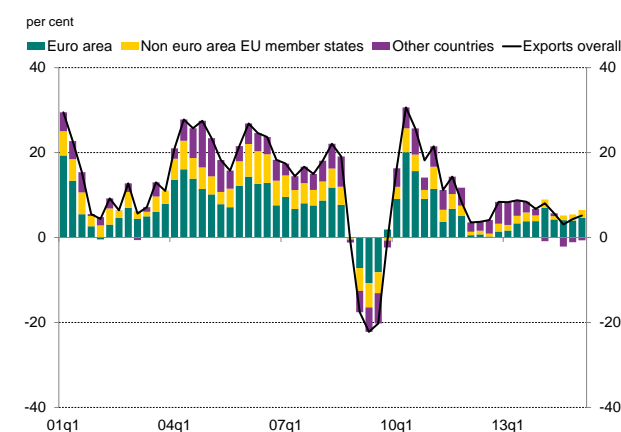
Source: NBP and Ministry of Finance.

**Figure 2.11** Value of Polish exports and imports



Source: GUS data.

**Figure 2.12** Polish export growth by destination



Source: NBP calculations based on GUS data.

<sup>24</sup> The LtV (Loan-to-Value) ratio – the ratio of the outstanding value of loan principal to the value of the property which is the collateral of the loan.

<sup>25</sup> Data on central budget refer to the period January-May 2015, while data on the budget of the local government units – to 2015 Q1.

<sup>26</sup> The rise in the non-tax revenue of the central budget derived, to a great extent, from the increase in the dividends paid by the state-controlled companies.



figure.

The *Convergence Programme 2015 Update* assumes a further improvement in the fiscal conditions of general government sector. In line with the *Programme*, the general government deficit in ESA-2010 terms is due to decline below 3% of GDP in 2015. In particular, this should be driven by a rise in the revenue from social security contributions, resulted from the changes in the pension system, and a further decrease in the public debt servicing costs.

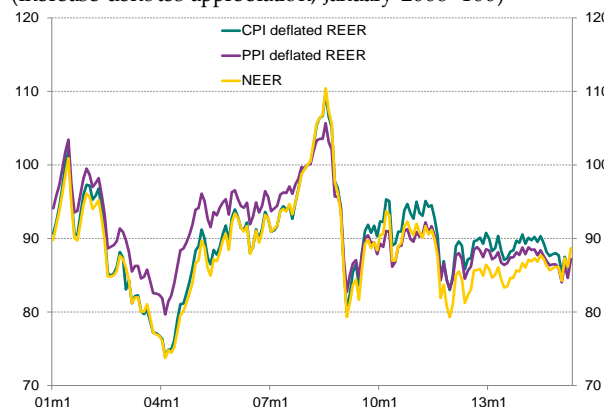
## 2.2.4 Exports and imports

In 2015 Q1, Poland reached the largest surplus in foreign trade since the 1990s<sup>27,28</sup> (Figure 2.11). This was driven by falling commodity prices in the world markets in the previous months, which reduced the value of imports, and a simultaneous acceleration in export growth.<sup>29</sup>

Growth in exports was still mainly accounted for by increased sales to the euro area, which were supported by economic recovery in this region. The increase in exports was also fuelled –albeit to a lesser extent –by a somewhat higher growth of export sales to the EU countries outside the euro area (in particular to Great Britain).

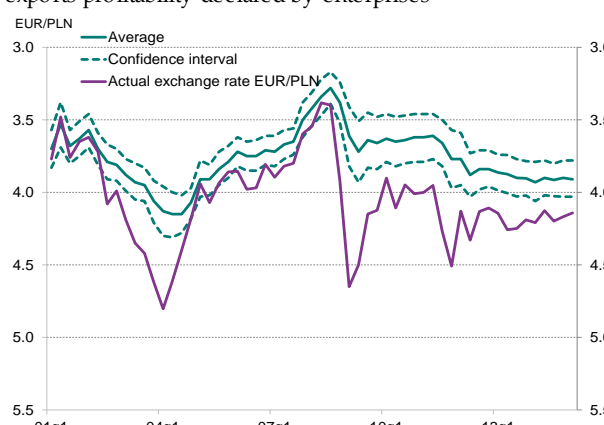
Alongside that, exports to non-EU countries continued on a downward trend. In particular, exports to Russia and Ukraine was still falling sharply, reflecting a drag from very weak economic conditions in both economies (Figure 2.12). The scale of the decline in non-EU exports was, however, smaller than in the previous quarter, which was due to a significant acceleration in export sales to non-European

**Figure 2.13** Zloty real and nominal effective exchange rate (increase denotes appreciation, January 2008=100)



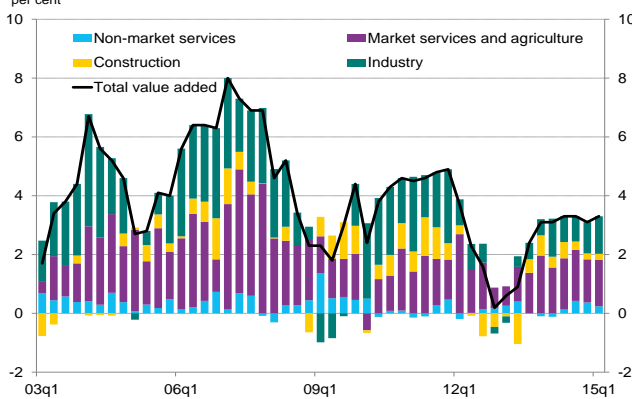
Source: NBP and the European Commission data.

**Figure 2.14** Average threshold exchange rate (EUR/PLN) of exports profitability declared by enterprises



Source: NBP data and estimates.

**Figure 2.15** Sector contribution to gross value added y/y growth



Source: GUS data, NBP calculations.

<sup>27</sup> This Chapter presents the nominal, non-seasonally adjusted growth rates, based on GUS external trade figures in euro terms.

<sup>28</sup> Balance of trade in goods (4-quarter moving average) increased in 2015 Q1 to 0.0% GDP from -0.6% GDP in 2014 Q4.

<sup>29</sup> Although since February 2015 commodity prices in global markets have remained relatively stable, and oil prices have risen, their average level in 2015 Q1 was lower than a quarter before and significantly lower than a year before. In April 2015, external trade remained in surplus, albeit slightly smaller than in early 2015, as export growth slowed down and the value of imports increased slightly on the back of a slower pace of decline in commodity imports.

countries.

Growth of Polish exports was supported by high price competitiveness of Polish products.<sup>30</sup> This was supported by the weakening of the real exchange rate of the zloty, amid the continuing decline in producer prices and stable nominal exchange rate in relation to basket of Polish trading partners currencies. Appreciation of the zloty against euro was offset by its depreciation against the dollar and the hryvnia (Figure 2.13, Figure 2.14).

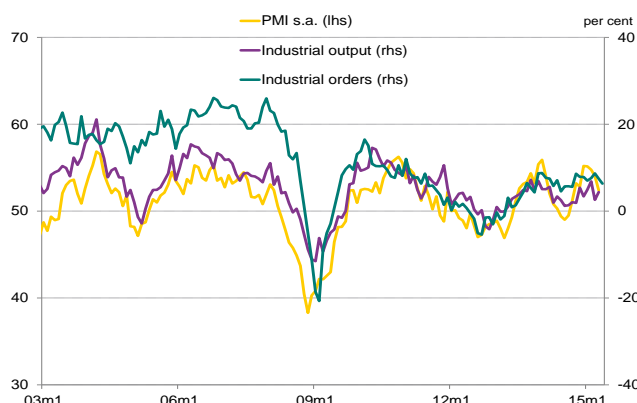
In 2015 Q1 – despite an acceleration in GDP growth in Poland – the value of Polish imports decreased slightly (by 0.2% y/y as compared to a 3.4% y/y increase in 2014 Q4). The decline in the value of imports was driven by a fall in the prices of commodities in the world markets below the previous year's figures, which led to a reduced value of imports of intermediate goods, mainly fuels.<sup>31</sup> At the same time, however, imports were supported by economic recovery in Poland.

## 2.2.5 Output

In 2015 Q1, the annual growth rate of gross value added accelerated slightly (to 3.3% against 3.1% in 2014 Q4, Figure 2.15).<sup>32</sup> This was related to further improvement in business confidence in industry and services. At the same time, the activity in construction remained sluggish.

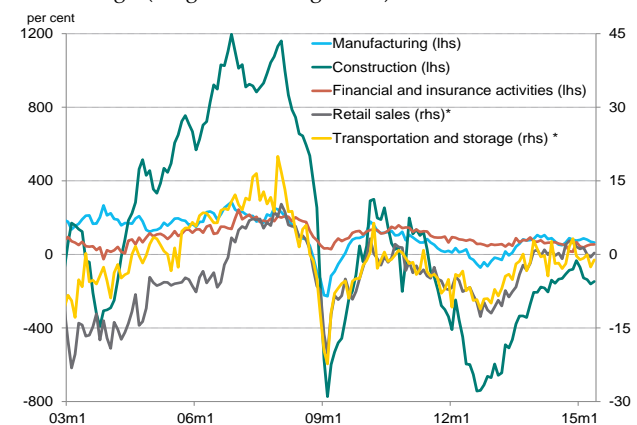
Data released in 2015 Q2 indicate that the economic growth rate could have stabilized at a similar level as in the previous quarter. Business confidence in industry and services weakened slightly in April and May, but is still favourable (Figure 2.16, Figure 2.17). At the same time, the

**Figure 2.16** PMI and annual growth of sold production of industry and of industrial orders



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

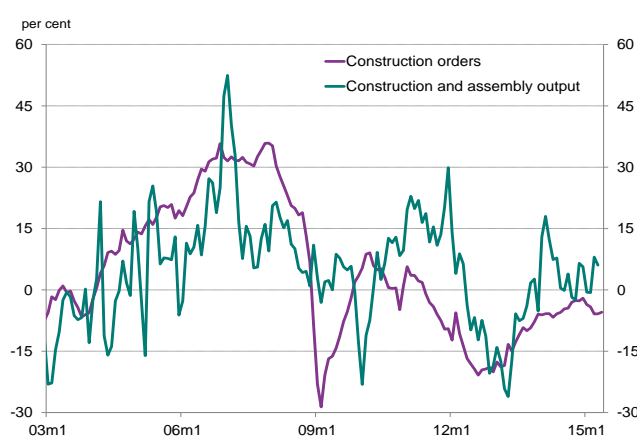
**Figure 2.17** Forecast of economic conditions in relation to the long-term average (long-term average=100)



Source: GUS business tendency survey, NBP calculations.

\*As the value of the indicators of transportation and storage and retail sales are close to zero, the figure shows deviations from the long-term average.

**Figure 2.18** Annual growth of construction and assembly output and construction orders



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

<sup>30</sup> High price profitability of exports was indicated by persistently low both share of unprofitable export sales in export revenues and the percentage of exporters claiming unprofitable export sales. *NBP Quick Monitoring Survey. Economic climate in the enterprise sector in 2015 Q1 and forecasts for 2015 Q2*, NBP.

<sup>31</sup> The decline in commodity prices brought, at the same time, further improvement in the terms of trade.

<sup>32</sup> Data on gross value added and its components in 2015 Q1 are based on GUS estimates. Data on industrial output, orders, the PMI index, construction and assembly output and orders in construction are seasonally adjusted (NBP calculations).



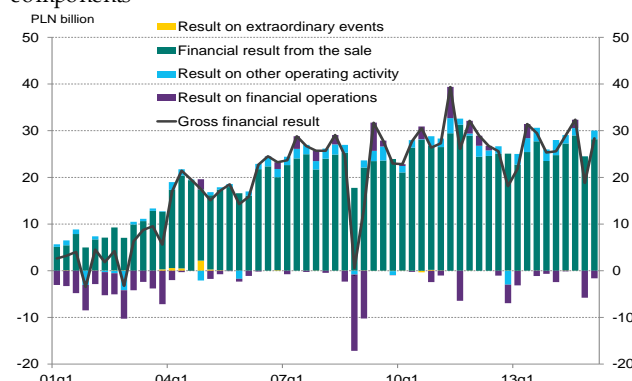
activity in construction sector rose somewhat. However, the decline in orders and business confidence indicators in construction in 2015 Q2 from a quarter before makes it difficult to assess whether the recovery in this sector is likely to continue (Figure 2.18).

### 2.3 Financial situation in the enterprise sector

In 2015 Q1, the financial and liquidity positions of the enterprise sector remained sound, supported mainly by the higher growth in sales. (Figure 2.19, Table 6). The financial result of enterprises also improved slightly, which was associated with costs growing slower than sales income, against the background of declining prices of intermediate goods used in production (see Chapter 2.1 *Inflation developments*).<sup>33,34</sup> Moreover, in 2015 Q1, profitability ratios for the enterprise sector grew strongly, and the percentage of profitable companies – despite a certain fall in comparison to the previous quarter – continued to stand close to the highest level since the global financial crisis.

The liquidity position of companies in 2015 Q1 also remained sound, as indicated by a further rise in the cash ratio, which for the first time exceeded the reference value in as many as 47.6% of enterprises.<sup>35</sup> The sound liquidity position of companies was additionally confirmed by the highest share of companies reporting a lack of liquidity problems since the beginning of the global financial crisis, as well as a reduction in the percentage of enterprises reporting payment delays as a barrier to their development.<sup>36</sup>

**Figure 2.19** Gross financial result of enterprises and its components



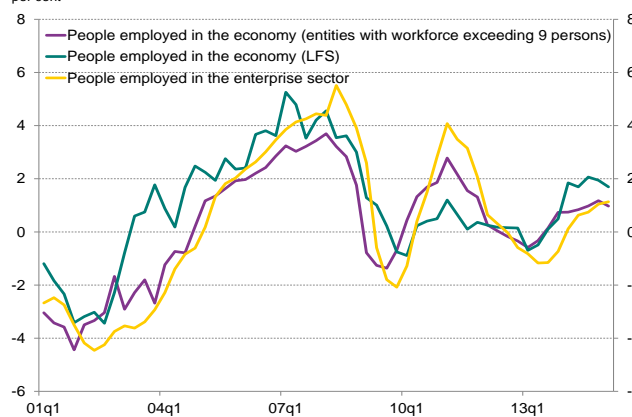
Source: GUS data based on F-01/I-01 forms. NBP calculations.

**Table 2.6** Selected financial efficiency ratios in the enterprise sector

	2010	2011	2012	2013	2014				2015
					q1	q2	q3	q4	q1
Period average data (per cent)									
Sales profitability ratio	5.2	5.3	4.3	4.3	4.5	4.7	4.8	3.9	4.8
Net turnover profitability ratio	4.4	4.5	3.4	3.8	3.8	4.1	4.5	2.4	3.9
Percentage of profitable enterprises	78.4	78.0	76.8	79.6	67.6	73.9	77.0	81.6	68.7
End of period data									
Liquidity ratio of the first degree	0.40	0.38	0.34	0.35	0.34	0.35	0.36	0.39	0.38

Source: GUS data.

**Figure 2.20** Employment growth in the economy (y/y)



Source: GUS data, NBP calculations.

Starting from 2010 Q1, GUS adjusts the LFS data are for the findings of the 2011 National Census. To preserve data comparability, earlier data presented in this Chapter have been corrected by NBP.

<sup>33</sup> According to the NBP survey, PPI deflation has so far had a net positive impact on the financial result of enterprises, reducing their costs more than their income. *NBP Quick Monitoring. Economic climate in the enterprise sector in 2015 Q1 and forecasts for 2015 Q2*, NBP, April 2015.

<sup>34</sup> In addition, in 2015 Q1, the major dampeners the result on financial operations in 2014 Q4, expired – in particular in the fuel sector and mining.

<sup>35</sup> The reference value is defined as the recommended average for the whole business population. It amounts to 20% on average, but its value may vary depending on the size of the enterprise as well as the PKD classification (*Polish Classification of Activities*).

<sup>36</sup> *NBP Quick Monitoring. Economic climate in the enterprise sector in 2015 Q1 and forecasts for 2015 Q2*, NBP, April 2015.

## 2.4 Labour market

### 2.4.1 Employment and unemployment

A certain acceleration of economic growth at the beginning of 2015 was accompanied by a further improvement in labour market conditions.

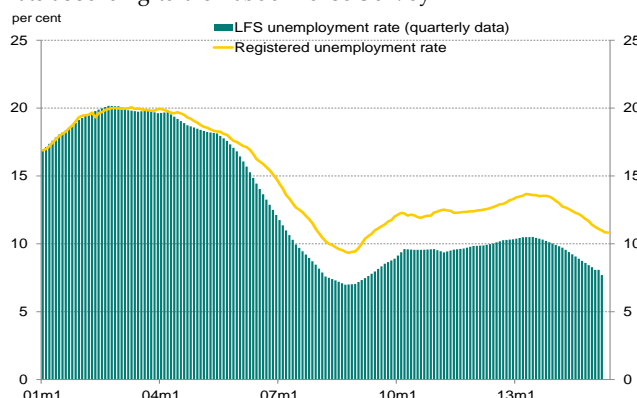
According to the Labour Force Survey data, in 2015 Q1, the number of people employed in both the economy (seasonally adjusted) and the enterprise sector rose, reaching the highest historical levels (Figure 2.20).<sup>37,38</sup> The increase in employment in the enterprise sector was to a large extent associated with the growth in employment in industry, which was due to the economic recovery in this sector. At the same time, the rise in the number of people employed in services slowed down.

The results of NBP's survey suggest that the ongoing growth in employment in the enterprise sector in 2015 Q2 may weaken somewhat, as indicated by the slight fall in the employment forecast indicator.<sup>39</sup>

The increase in the number of people employed in the economy in 2015 Q1 was conducive to a further decrease in the unemployment rate. According to the Labour Force Survey, in 2015 Q1 the unemployment rate stood at 7.7% (seasonally adjusted), approaching its record lows from the end of 2008 (Figure 2.21).

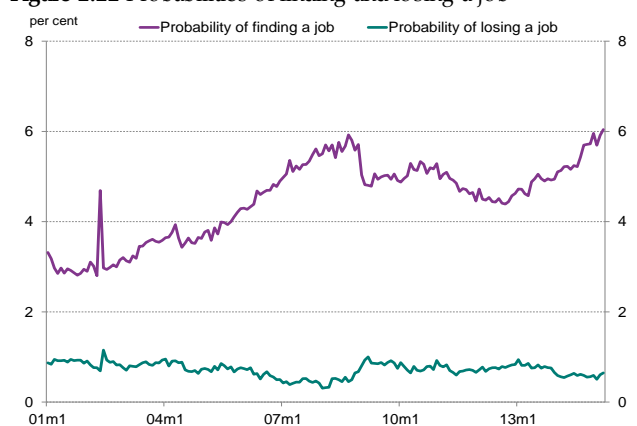
Data from labour offices also confirm a further fall in unemployment at the beginning of 2015. In May 2015, the registered unemployment rate (seasonally adjusted) stood at 10.8%, compared to

**Figure 2.21** Registered unemployment rate and unemployment rate according to the Labour Force Survey



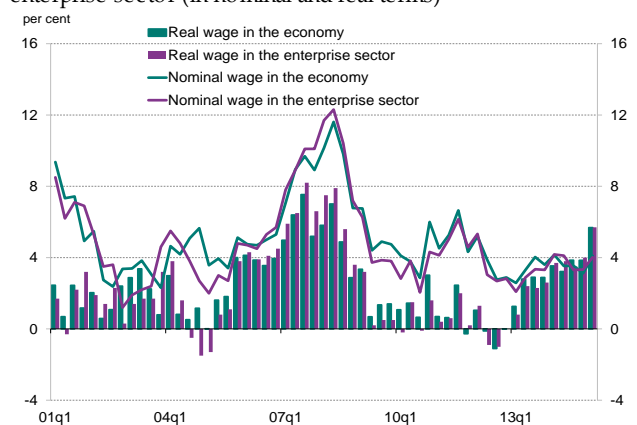
Source: GUS data (seasonally adjusted).

**Figure 2.22** Probabilities of finding and losing a job



Source: NBP calculations.

**Figure 2.23** Annual wage growth in the economy and in the enterprise sector (in nominal and real terms)



Source: GUS data.

<sup>37</sup> The expiration of the effect of extending maternity leave from 6 to 12 months may have lowered the annual growth in the number of people working in the economy in 2015 Q1 according to the Labour Force Survey.

<sup>38</sup> In 2015 Q1, according to the Labour Force Survey, growth in the number of people working in the economy stood at 1.7% y/y (compared to 1.9% in 2014 Q4), while employment growth in the enterprise sector was 1.1% y/y (compared to 1.0% y/y). In April and May employment growth in the enterprise sector stabilised at the level of 1.1% y/y.

<sup>39</sup> The employment forecast indicator illustrates the balance of companies planning to increase employment and those planning to reduce it. NBP Quick Monitoring. *Economic climate in the enterprise sector in 2015 Q1 and forecasts for 2015 Q2*, NBP, April 2015.

11.4% in December 2014.<sup>40</sup> The declining unemployment rate is accompanied by an increased likelihood of finding a job, coupled with a relatively low likelihood of a job loss (Figure 2.22).

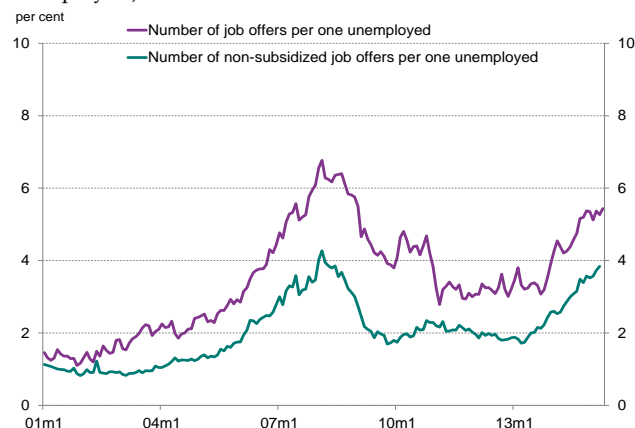
#### 2.4.1 Wages and labour productivity

The increase in employment and decline in unemployment in 2015 Q1, were accompanied by a further rise in the labour market tensions index, suggesting an improvement in the position of employees in wage negotiations with employers (Figure 2.24).<sup>41</sup> Despite this, wage pressure remains limited, and nominal wage growth increased only slightly (to 4.1% y/y compared to 3.1% y/y in 2014 Q4). At the same time, the deepening deflation of the prices of consumer goods and services in 2015 Q1 was conducive to a significant acceleration in real wage growth (Figure 2.23).

As the NBP surveys show, due to the continued limited pressure for a wage rise on the part of employees, the relatively high employment and declining unemployment have not been up to now strongly reflected in wage rises envisaged by enterprises either.<sup>42</sup> In 2015 Q1, the percentage of companies planning wage rises was unchanged compared to the previous quarter, while the size of the average planned wage rise grew only slightly.

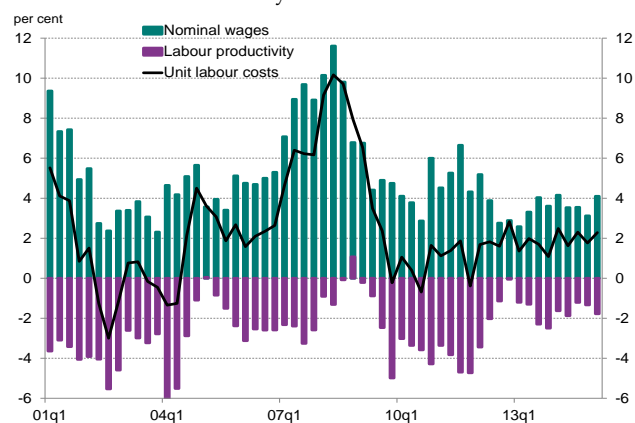
In 2015 Q1, the growth of unit labour costs in the economy remained moderate, although it increased slightly compared to 2014 Q4. That was the result of a stronger acceleration in wage growth than in labour productivity (Figure 2.25). At the same time, in industry the growth of unit labour costs declined slightly compared to 2014 Q4 and remained negative, mainly driven by the

**Figure 2.24** Labour market tension index (vacancies per unemployed)



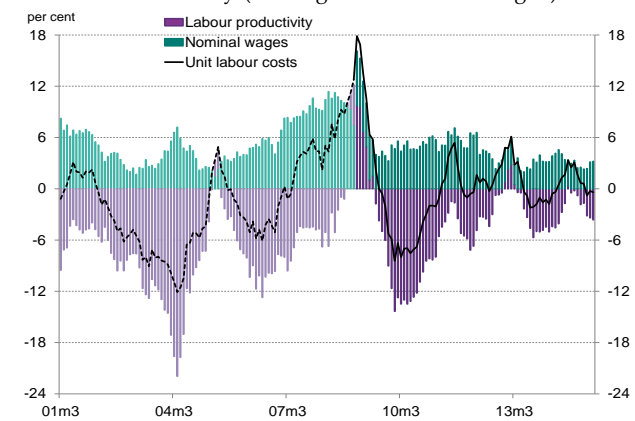
Source: GUS data, NBP calculations.

**Figure 2.25** Annual growth in labour productivity, wages and unit labour costs in the economy



Source: GUS data, NBP calculations.

**Figure 2.26** Annual growth in labour productivity, wages and unit labour costs in industry (moving three-month averages)\*



Source: GUS data, NBP calculations.

\*From December 2008 not fully compatible with earlier data due to a new classification.

<sup>40</sup> There are two reasons for the differences between the LFS unemployment rate and the registered unemployment rate: (1) the definition of an unemployed person is different, (2) the definition of population to which the number of unemployed persons is referred is different.

<sup>41</sup> The index of labour market tensions is calculated as the number of nonsubsidised job offers per one unemployed person registered in labour office.

<sup>42</sup> NBP Quick Monitoring. *Economic climate in the enterprise sector in 2015 Q1 and forecasts for 2015 Q2*, NBP, April 2015.

acceleration in labour productivity growth (Figure 2.26).

## 2.5 Financial markets and asset prices

Since the publication of the previous *Report*, the yields on Polish government bonds have risen, and the zloty has depreciated slightly against the euro. Share prices have increased, supported by accelerating economic growth in Poland and the gradual recovery in the euro area. The housing market has also continued to recover, which was supported by favourable labour market conditions and lower interest rates on mortgage loans.

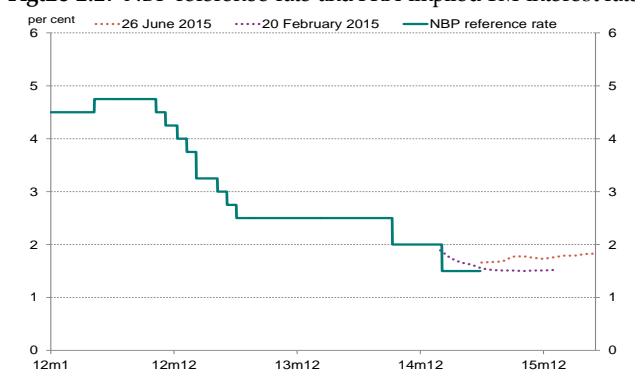
### 2.5.1 Interest rates and financial asset prices

In March 2015, the Monetary Policy Council lowered the interest rates by 0.50 percentage points, including the reference rate to 1.5%. At the same time, the Council indicated that this decision concluded the monetary policy easing cycle. As a result, forward rate agreements point to no changes in interest rates in the coming quarters (Figure 2.27).

Given faded expectations for further decreases in the NBP interest rates and a rise in government bond yields abroad, the euro area included, the Polish sovereign yield curve increased in its longer end (Figure 2.28, Figure 2.29). Yet sustainable economic growth in Poland (Box 2 *Assessment of macroeconomic imbalances: Poland vs other European Union countries*, Chapter 2.2 *Demand and output*) and improving public finances (see: Chapter 2.2.3 *Government demand*) were adding to Poland's low credit risk and containing the rise in yields.

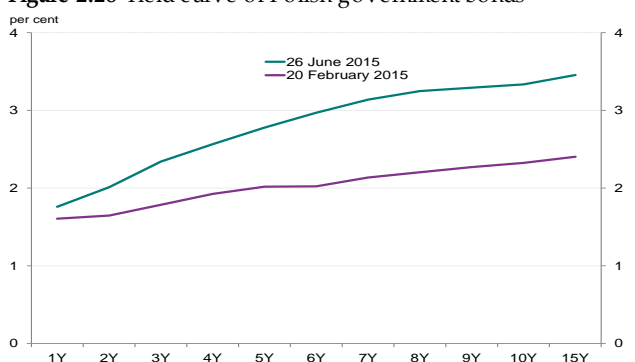
The stock prices on the Warsaw Stock Exchange have risen slightly since the previous *Report*. The increase in share prices was driven by improving conditions in the euro area and the quantitative easing by the ECB, as well as good financial standing of Polish enterprises (see: Chapter 2.3

**Figure 2.27** NBP reference rate and FRA-implied 1M interest rate



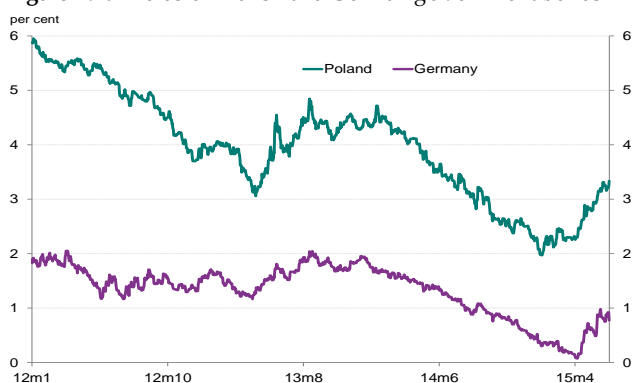
Source: Bloomberg data, NBP calculations.

**Figure 2.28** Yield curve of Polish government bonds



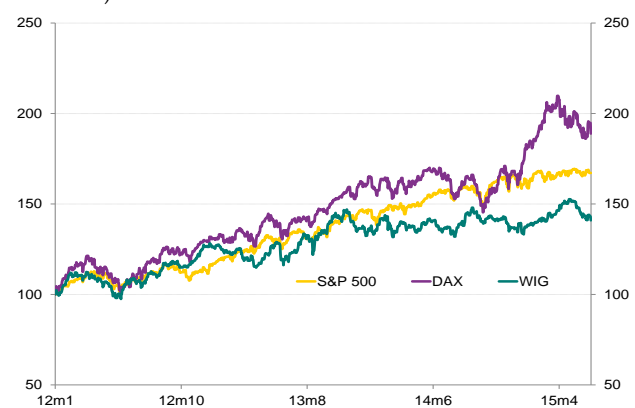
Source: Bloomberg data.

**Figure 2.29** Yields on Polish and German government bonds



Source: Bloomberg data.

**Figure 2.30** WIG index against stock indices (index, January 2012=100)



Source: Bloomberg data, NBP calculations.

Financial situation in the enterprise sector) resulting i.a. from the acceleration in economic growth in Poland. More recently, the stock prices in Poland have fallen on the back of an increase in risk of Greek insolvency and slightly weaker data on economic activity in Poland (see Chapter 2.2.5 *Output*, Figure 2.30). In spite of this downswing, the share prices remained somewhat higher than earlier in the year.

### 2.5.2 Exchange rate

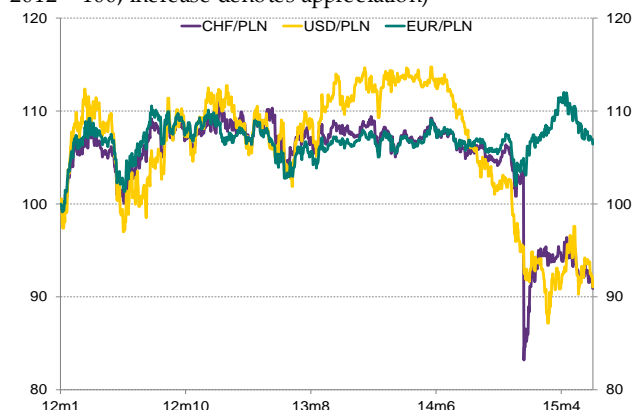
Since the previous *Report*, the zloty exchange rate has depreciated against the euro and the Swiss franc, while remaining low against the US dollar (Figure 2.31).

In March and April, the zloty was supported by faded expectations for further decreases in the NBP interest rates. However, like other currencies of the Central and Eastern European countries, the zloty started to weaken against the euro since May. This was due to the recovery in the euro area, some weaker data releases on Polish economy and the increase in risk aversion resulting from concerns about developments in Greece.

### 2.5.3 Residential real estate prices<sup>43</sup>

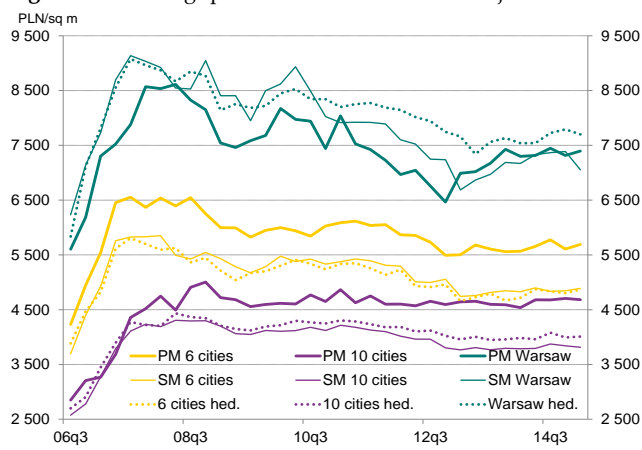
In 2015 Q1, the housing market in Poland continued to recover. Primary market prices in major cities increased slightly against the previous quarter. In the secondary market, in turn, prices remained stable (Figure 2.32)<sup>44</sup>. The sales of residential properties were supported by a gradual improvement in labour market conditions. However, a minor slowdown in lending growth resulting from a tightening in lending conditions

**Figure 2.31** Nominal exchange rate of the Polish zloty (January 2012 = 100, increase denotes appreciation)



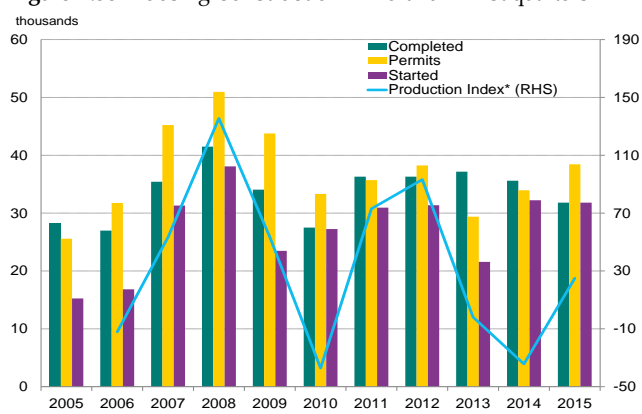
Source: Bloomberg data, NBP calculations.

**Figure 2.32** Average prices of flats in six and ten major cities



Source: NBP calculations based on the NBP survey.

**Figure 2.33** Housing construction in Poland in first quarters



Source: GUS data, NBP calculations.

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

<sup>43</sup> For more information on the situation in the housing real estate market in Poland see the NBP report: *Information on home prices and the situation in the housing and commercial real estate market in Poland in 2015 Q1* (available on NBP's website: [www.nbp.pl](http://www.nbp.pl), only in Polish).

<sup>44</sup> \*PM – primary market, SM – secondary market, hed. – hedonically adjusted. The indices are averages of sale prices in individual cities weighted by their market share. The index for 6 cities encompasses Gdansk, Gdynia, Cracow, Lodz, Poznan and Wroclaw and the index for 10 cities involves Bialystok, Bydgoszcz, Katowice, Kielce, Lublin, Opole, Rzeszow, Szczecin and Zielona Gora.

(lower LtV ratio) was conducive to lower demand for dwellings.

In 2015 Q1, fewer housing units were completed than a year ago, yet the supply of flats is still close to its record highs. At the same time, real estate development investments in the residential sector remained profitable, what encouraged developers to launch new projects. As a result, in 2015 Q1 the number of housing starts rose, supported additionally by a mild winter (Figure 2.33). Also the number of building permits increased compared to the corresponding period of the previous year.

## 2.6 Credit and money

In the first months of 2015, lending growth remained moderate (Figure 2.34), while both corporate and household deposits continued to rise solidly, although the latter slowed down slightly.

### 2.6.1 Corporate lending

In 2015 Q1, lending growth to the corporate sector was somewhat slower than in the previous quarter (5.3% y/y, in comparison to 6.9% y/y in 2014 Q4), mainly due to a slightly weaker growth in investment lending, coupled with a relative stabilisation in the growth of short-term lending (Figure 2.35).<sup>45</sup>

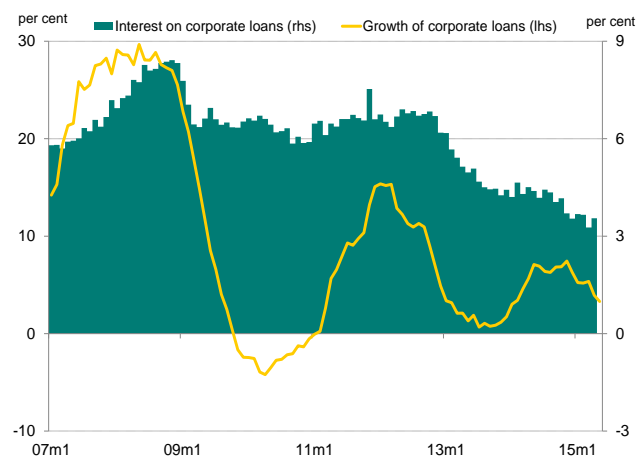
The slight slowdown in corporate lending was triggered by the improving liquidity conditions in the sector, which allowed firms to largely finance investment and current operations from their own funds (Figure 2.36, see Chapter 2.3 *Financial situation in the enterprise sector*). The slower corporate credit growth could also be related to somewhat weaker sentiment in industry and

**Figure 2.34** Annual growth in liabilities of non-financial sector, non-monetary financial institutions, local government units and social insurance funds



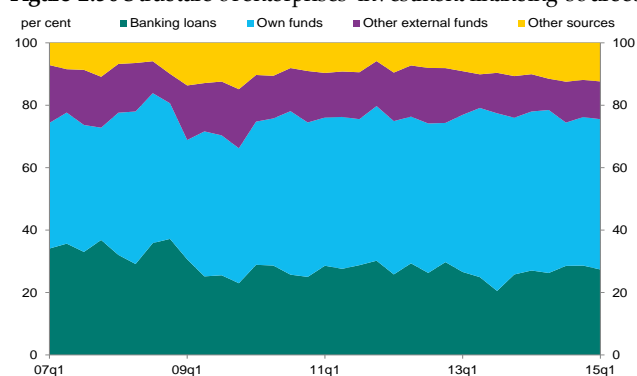
Source: NBP data.

**Figure 2.35** Annual growth and average interest on new zloty denominated loans to corporations



Source: NBP data.

**Figure 2.36** Structure of enterprises' investment financing sources



Source: Own compilation based on NBP Quick Monitoring.

<sup>45</sup> After the period of relative stabilisation in 2014 Q1, growth in short-term loans slowed down significantly in April and May 2015. This might have been affected by further improvement in the liquidity conditions of enterprises, resulting in their improved self-financing capacity.



services (see Chapter 2.2.5 *Output*). In turn, declining interest rate on this type of credit, following the cut of NBP interest rates,<sup>46</sup> and a certain easing of banks' lending conditions,<sup>47,48</sup> amidst acceleration in corporate investment (see Chapter 2.2.2 *Investment demand*), were factors stabilising credit growth.

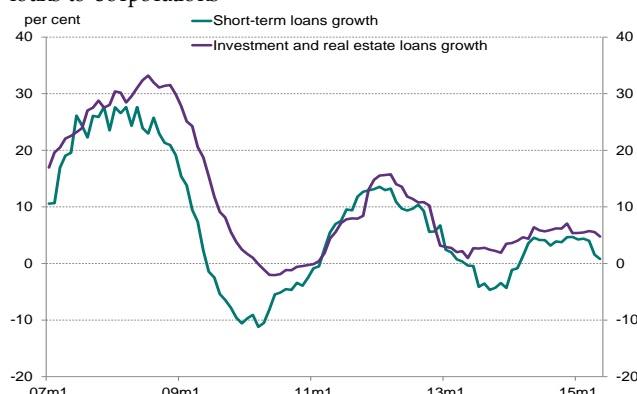
### 2.6.2 Loans to households

Growth in lending to the household sector lost some momentum in 2015 Q1 (to 4.8% y/y against 5.2% in 2014 Q4). Within that, housing loan growth declined somewhat, while growth of consumer loans remained stable.<sup>49</sup>

Slightly weaker growth of housing loans (Figure 2.38) was accounted for by a significant tightening of lending standards and some lending terms for this category of loans. Lending policy had been tightened as a result of banks' implementation of Recommendation S, requiring a higher down payment by borrower (i.e. lower LtV ratio)<sup>50,51</sup>. However, the slowdown in housing loan growth was mitigated by lower interest on loans in the aftermath of the NBP interest rates cuts.<sup>52</sup>

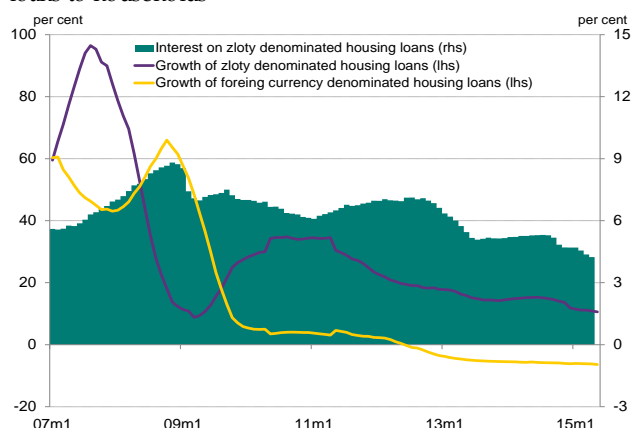
Stabilisation in consumer lending growth, in turn, could have been related to a considerable rise in the non-interest rate cost of credit, which compensated for the decline in the interest rates following the cuts in the NBP interest rates.<sup>53</sup> Growth in consumer loans was also dragged down by an increase in consumption financed from current funds, which was due to a rise in households' real disposable income driven by the improvement in the labour market and slow consumer price growth (see Chapter 2.2.1

**Figure 2.37** Annual growth of short-term loans and investment loans to corporations



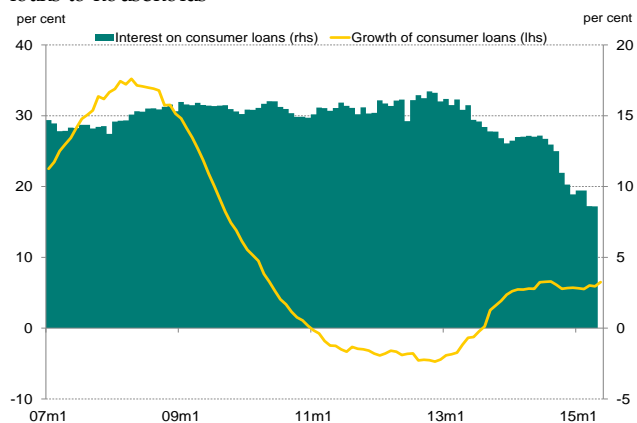
Source: NBP data.

**Figure 2.38** Annual growth and average interest on new housing loans to households



Source: NBP data.

**Figure 2.39** Annual growth and average interest on new consumer loans to households



Source: NBP data.

<sup>46</sup> The average interest on new PLN corporate loans declined by 0.43 percentage points to 3.3% from November 2014 to March 2015.

<sup>47</sup> *Situation in the credit market, Senior Officer Loan Survey, 2015 Q2, NBP, April 2015.*

<sup>48</sup> The average margin added to the WIBOR 3M rate fell to 1.6pp in March 2015, from the 1.7pp in November 2014.

<sup>49</sup> In April and May 2015, the household credit growth remained close to 2015 Q1, at 4.7% y/y and 4.6% y/y, respectively.

<sup>50</sup> *Situation in the credit market, Senior Officer Loan Survey, 2015 Q2, NBP, April 2015.*

<sup>51</sup> According to Recommendation S, the minimum own contribution required by banks for housing loans was raised to 10%.

<sup>52</sup> The average interest rate on new housing loans in PLN was 4.4% in March 2015 against 4.0% in December 2014.

<sup>53</sup> *Situation in the credit market, Senior Officer Loan Survey, 2015 Q2, NBP, April 2015.*

Consumption demand).

### 2.6.3 Deposits and monetary aggregates

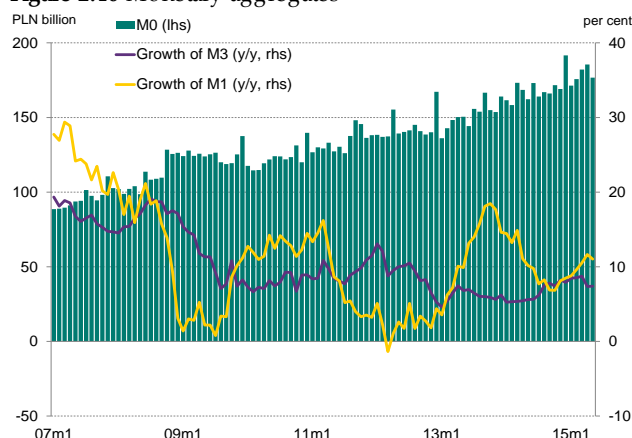
In 2014 Q1, the growth of M1 aggregate continued to accelerate (to 9.7% y/y comparing to 7.8% y/y in 2014 Q4), while that of broad money remained stable (Figure 2.40).<sup>54</sup> The acceleration in the M1 growth was accounted for by a continuous rise in sight corporate deposits. The M3 growth, in turn, was slowed down by a weaker growth in term deposits. The stable rise in corporate deposits since mid-2014, has been supported by the improving liquidity conditions in the sector. The household deposit growth remained high (8.4% y/y in 2015 Q1 in comparison to 7.9% in 2014 Q4).<sup>55</sup> It was – on one hand – propped up by a recovery in the labour market, but – on the other hand – slowed down by both lower deposit interest rates (following the NBP rates cuts), and a rise in the share of stocks and investment fund units in households' financial assets.

## 2.7 Balance of payments

In 2015 Q1, the current account balance improved markedly and showed a surplus for the first time since 2004 (Figure 2.43).

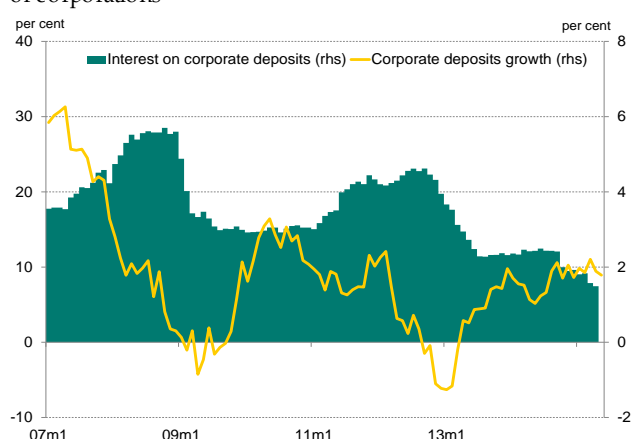
The significant improvement in the current account balance improved markedly as a result mainly from a strong increase in the trade surplus. That was driven by persistently robust rise in export sales (see Chapter 2.2.4 *Exports and imports*), accompanied by lower growth in imports due to a fall in oil prices in the global markets. The current account balance also improved as a result of higher inflow of EU funds, mainly under the Common Agricultural Policy, which narrowed the deficit on the primary income account.

**Figure 2.40 Monetary aggregates**



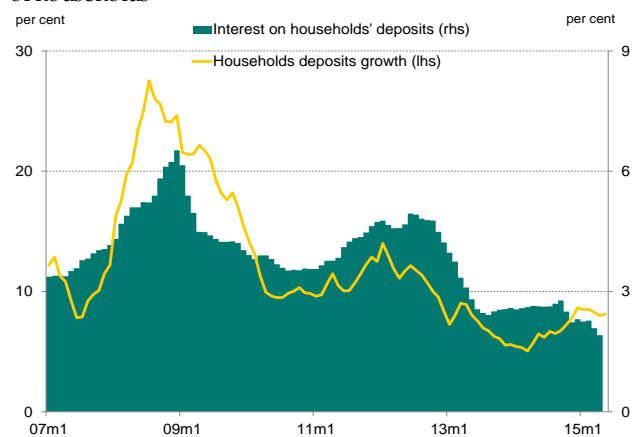
Source: NBP data.

**Figure 2.41 Annual growth and average interest on bank deposits of corporations**



Source: NBP data.

**Figure 2.42 Annual growth and average interest on bank deposits of households**



Source: NBP data.

<sup>54</sup> In April and May 2015 the growth of broad money continued to accelerate – to 11.6% y/y and 11.0% y/y respectively, which was mainly due to the stronger growth of current deposits in both corporate and household sectors.

<sup>55</sup> In April and May 2015 household deposits growth decreased in comparison to 2015 Q1 – to 8.0% y/y and 8.1% y/y, respectively.

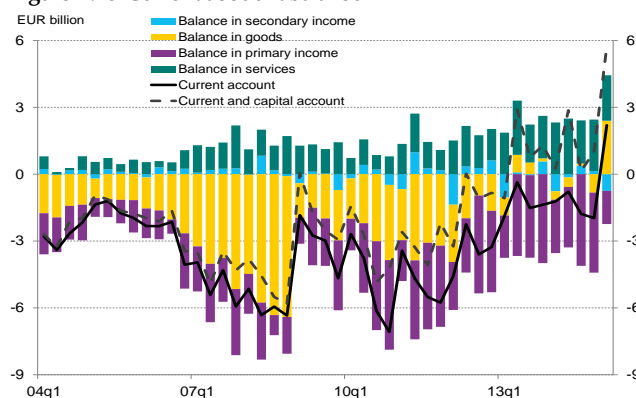


Stronger inflow of EU funds added to the surplus on the capital account as well. The total inflow of EU funds to Poland in 2015 Q1 almost doubled as compared to the corresponding period of the previous year.<sup>56</sup> As a result, the combined current and capital account balance showed a considerable surplus.

In 2015 Q1, also the financial account balance was positive, which meant the net capital outflow from Poland. It was due, on the one hand, to a significant increase in Polish assets abroad, including foreign exchange reserves, as compared to 2014 Q1 and, on the other hand, smaller inflows of foreign direct investment relative to the corresponding period of the previous year.

As a consequence of the current account surplus recorded in 2015 Q1, Poland's external imbalance indicators improved. Most of them are currently more favourable than in many EU countries (see Box 2. *Assessment of macroeconomic imbalances: Poland vs other European Union countries*). In particular, the current account balance to GDP ratio has risen to a record high since 2004 (in terms of four-quarter moving average, Table 2.7).

**Figure 2.43** Current account balance



Source: NBP data and estimates.

**Table 2.7** Selected external stability indicators (four-quarter moving average, in per cent of GDP, unless stated otherwise)<sup>57</sup>

	2010	2011	2012	2013	2014				2015
					q1	q2	q3	q4	q1
Current account balance	-5.6	-4.7	-3.5	-1.3	-1.1	-1.2	-1.2	-1.3	-0.6
Current and capital account balance	-3.8	-2.9	-1.3	1.0	1.3	1.3	1.2	1.2	2.3
Trade balance/GDP	-2.9	-3.0	-1.8	0.2	0.3	0.0	-0.2	-0.4	0.2
Official reserve assets (in monthly imports of goods and services)	5.5	5.4	5.7	5.3	5.1	5.0	5.3	5.3	5.8
Foreign debt	66	60	72	70	69	71	72	71	73
Net international investment position	-66	-53	-67	-69	-70	-69	-69	-66	-67
Official reserve assets/foreign debt (up to 1Y) plus estimated CAB (per cent)*	77	80	100	89	97	96	101	105	99
Official reserve assets/foreign debt (up to 1Y) (per cent)*	98	93	107	95	100	99	104	110	107

Source: NBP and Ministry of Finance data.

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

### Box 2: Assessment of macroeconomic imbalances: Poland vs other European Union countries

High differences in competitiveness between individual euro area economies and resulting significant macroeconomic imbalances were one of the main causes of the recent crisis in the euro area. In order to secure an early identification of imbalances and prevent their resurgence, in 2011 the Macroeconomic Imbalance Procedure was introduced to the European Union law, within the so-called "six pack". In line with this procedure, the European Commission publishes an annual report (*Alert Mechanism Report*),<sup>58</sup> which indicates the risks of imbalances in the member states economies.

<sup>56</sup> EU funds are recorded on different accounts of the balance of payments. The capital account comprises the structural and cohesion EU funds, whereas the social fund inflows are recorded on the secondary income account. Common Agricultural Policy inflows, in turn, are presented on primary income account. In 2015 Q1, the Cohesion Fund and the Common Agricultural Policy Fund inflows showed the strongest rise.

<sup>57</sup> As the data in Table 2.7 are four-quarter moving averages, they might differ from presented in Table XXV I of *Balance of payments of the Republic of Poland in Q1 2015* (available only in Polish).

<sup>58</sup> The Report is published pursuant to the Regulation No 1176/2011 of the European Parliament and of the Council of 16 November 2011 on the prevention and correction of macroeconomic imbalances.

The assessment criteria used in the *Alert Mechanism Report* involve eleven macroeconomic and macrofinancial indicators (headline indicators) for which the Commission has set the alert thresholds.<sup>59</sup> An additional assessment takes into account several auxiliary indicators providing more information on economic variables, which have exceeded the threshold level. The headline indicators are presented in the form of a scoreboard and divided into two groups – external imbalance and competitiveness indicators, and internal imbalance indicators (Table B.2.1).<sup>60</sup>

**Table B.2.1** Classification of assessment indicators

Category of indicators	No.	Name	Measurement method	Threshold
External imbalance and competitiveness indicators	1	Current account balance (CA)	% GDP	-4%, 6%
	2	Net International Investment Position (NIIP)	% GDP	-35%
	3	Change in the real effective exchange rate (REER)	3-year average	±5% (±11%)
	4	Change in global market export share	5-year change	-6%
	5	Change in nominal unit labour cost (ULC)	3-year change	9% (12%)
Internal imbalance indicators	6	Change in deflated house price index	Annual change	6%
	7	Annual change in private sector credit flow	% GDP	14%
	8	Private sector debt	% GDP	133%
	9	General Government sector debt	% GDP	60%
	10	Change in total financial sector liabilities	Annual change	16.5%
	11	Unemployment rate	3-year average	10%

Source: Own compilation based on the European Commission's methodology.

Note: The number in brackets denotes the threshold level for non-EA countries

Basing on the analysis of the scoreboard published in November 2014, the European Commission identified 16 member states whose performance called for an in-depth analysis of the likelihood of imbalances arising in their economies.<sup>61</sup> The Commission's recommendations for these countries were as follows: (i) to check whether the previously identified imbalances persisted (Belgium, Bulgaria, Germany, the Netherlands, Finland, Sweden, the United Kingdom), (ii) to verify whether the previously identified excessive imbalances were unwinding (Croatia, Italy, Slovenia), and (iii) to take firm measures aimed at eliminating imbalances (Ireland, Spain, France, Hungary). The group of countries identified as affected by excessive imbalances included Bulgaria, Croatia, France, Portugal and Italy. At the same time, the Commission emphasized that Poland, Austria, the Czech Republic, Denmark, Estonia, Lithuania, Luxembourg, Latvia, Malta and Slovakia were not facing a risk of excessive imbalances in their economies or balances of payments.

The latest, 2015 issue of the European Commission's *Alert Mechanism Report*, was largely based on the indicators computed for the 2013 data.<sup>62</sup> Since the 2014 data necessary for the calculation of all the analysed indicators have already been released, below we present our update of the assessment of macroeconomic imbalances in the EU countries, prepared according to the European Commission's methodology. Moreover, in order to facilitate a comparison of Poland's situation with that of other EU countries, imbalance indicators for all of them are compiled at Figure B.2.2. For each indicator a margin by which it exceeds the threshold (measured as the multiple of the standard deviation of all the EU countries results in a particular category) is marked with a specific colour.

<sup>59</sup> The MIP indicative thresholds have been set based on a statistical procedure as the upper/lower quartiles of the distributions of the respective variables in the group of EU countries.

<sup>60</sup> The Commission regularly assesses the adequacy of the scoreboard, including the selection of the indicators, the thresholds set and the adopted methodology, adjusting or modifying them as needed.

<sup>61</sup> The macroeconomic imbalance procedure is not applied to the beneficiary countries of the financial assistance programmes supporting the implementation of macroeconomic adjustment programmes. Currently, these include: Greece, Cyprus and Romania.

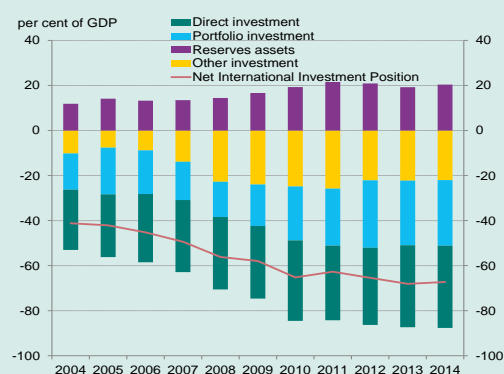
<sup>62</sup> The cut-off date for the report was set for 1 November 2014. Data have been complemented with 2014 forecasts.

**Table B.2.2** The indicator-based economic scoreboard for the European Union countries

	Threshold	AT	BE	CY	DE	EE	ES	IE	FI	EA countries										non-EA countries									
										FR	GR	IT	LU	LV	MT	NL	PT	SI	SK	BG	CZ	DK	HR	HU	LT*	PL	RO	SE	UK
Current Account Balance (% of GDP, 3-year average)	-4; 6	1.1	0.3	-4.3	7.0	-1.2	0.7	5.2	-2.4	-1.1	-0.3	0.8	4.9	-2.9	2.5	10.7	0.0	4.7	0.9	0.8	-0.5	6.3	0.6	3.3	0.2	-2.1	-1.9	8.5	-4.6
Net International Investment Position (% of GDP)	-35	2.1	54.7	-165.1	36.4	-41.1	-93.5	-97.5	8.8	-16.4	-121.9	-27.7	34.2	-61.2	37.4	65.8	-111.6	-44.7	-70.0	-72.3	-35.6	38.5	-11.6	-74.7	-44.2	-67.4	-57.1	-4.0	-19.6
REER (%, 3-year change)	±5 & ±11	1.9	-0.5	-1.4	-0.3	4.7	-1.0	-3.5	2.7	-1.2	-5.6	0.2	0.5	0.4	0.0	0.8	-1.8	1.2	1.3	-2.6	-10.0	-1.2	-0.9	-7.0	1.4	-1.3	-1.1	-3.7	10.2
Export Market Shares (percentage point, 5-year change)	-6	-16.7	-10.3	-27.2	-8.5	22.5	-11.4	-9.5	-26.2	-14.6	-17.5	-15.0	9.1	9.0	-19.3	-12.0	-6.0	-11.8	2.4	5.7	-5.3	-18.1	-18.1	-14.8	35.3	4.5	21.2	-10.1	-10.6
Nominal ULC (%, 3-year change)	9 & 12	8.2	6.0	-12.3	7.6	17.5	-3.9	5.6	8.3	3.9	-11.6	3.2	10.5	15.5	6.9	5.6	-1.6	-0.1	3.7	12.3	4.5	5.1	-4.2	7.2	8.9	3.7	2.4	7.1	4.7
Deflated House Price Index (%, y/y change)	6	1.6	-1.1	-2.0	1.8	12.9	0.4	12.5	-1.7	-2.0	-5.6	-4.3	4.7	5.7	4.8	-0.5	3.6	-6.9	1.5	1.8	2.1	3.1	-2.0	3.1	5.7	1.1	-3.6	8.7	8.3
Private Sector Credit Flow (% of GDP)	14	0.2	0.0	-11.2	1.3	5.4	-10.7	-5.7	0.7	1.8	-1.1	-3.1	27.7	0.8	2.3	2.1	-8.9	-4.0	5.4	6.4	3.1	-0.4	-0.6	-0.8	-0.2	2.9	-1.5	5.9	5.1
Private Sector Debt (% of GDP)	133	125.5	185.7	344.8	103.5	119.4	172.2	270.3	146.2	137.3	135.6	119.5	356.2	90.9	142.6	229.7	189.0	91.9	74.8	134.8	73.7	224.1	119.5	91.7	56.4	74.8	66.6	203.4	158.1
General Government Sector Debt (% of GDP)	60	84.5	106.5	107.5	74.7	10.6	97.7	109.7	59.3	95.0	177.1	132.1	23.6	40.0	68.0	68.8	130.2	80.9	53.6	27.6	42.6	45.2	85.0	76.9	40.9	50.1	39.8	43.9	89.4
Total Financial Sector Liabilities (%, y/y change)	16.5	-3.6	3.9	-19.5	-6.3	8.9	-10.2	0.7	-11.8	-0.6	-16.3	-0.7	8.8	5.2	1.7	-3.2	-7.9	-0.6	-0.3	3.3	9.8	0.6	3.2	13.3	-1.8	7.6	3.1	13.8	4.6
Unemployment Rate (%, 3-year average)	10	5.3	8.2	14.6	5.2	8.7	25.1	13.0	8.2	10.1	26.2	11.8	5.6	12.6	6.2	6.8	15.4	9.6	13.8	12.2	6.7	7.0	16.9	9.6	12.0	9.8	6.9	8.0	7.2

Source: Own compilation based on the European Commission's methodology and Eurostat, Ecwin and World Bank data.

The updated scoreboard (Table B.2.2) indicates that, at present, Poland is among the most balanced European economies. In particular, along with the Czech Republic and Romania<sup>63</sup> – the latter having been under an assistance programme since 2009 – Poland is a country with the fewest number of indicators exceeding their threshold levels (currently only one) and the largest number of indicators standing below the thresholds by at least 0.5 standard deviation. There is no sign of imbalance in the real estate market, the private and public sector debts are among the lowest in Europe and the trade surplus in 2013-14 helped to reduce the current account deficit to the lowest level since 2004. Moreover, according to the latest data, unemployment has declined below the threshold level for the first time, amidst a record employment and a stable productivity growth reducing unit labour cost.

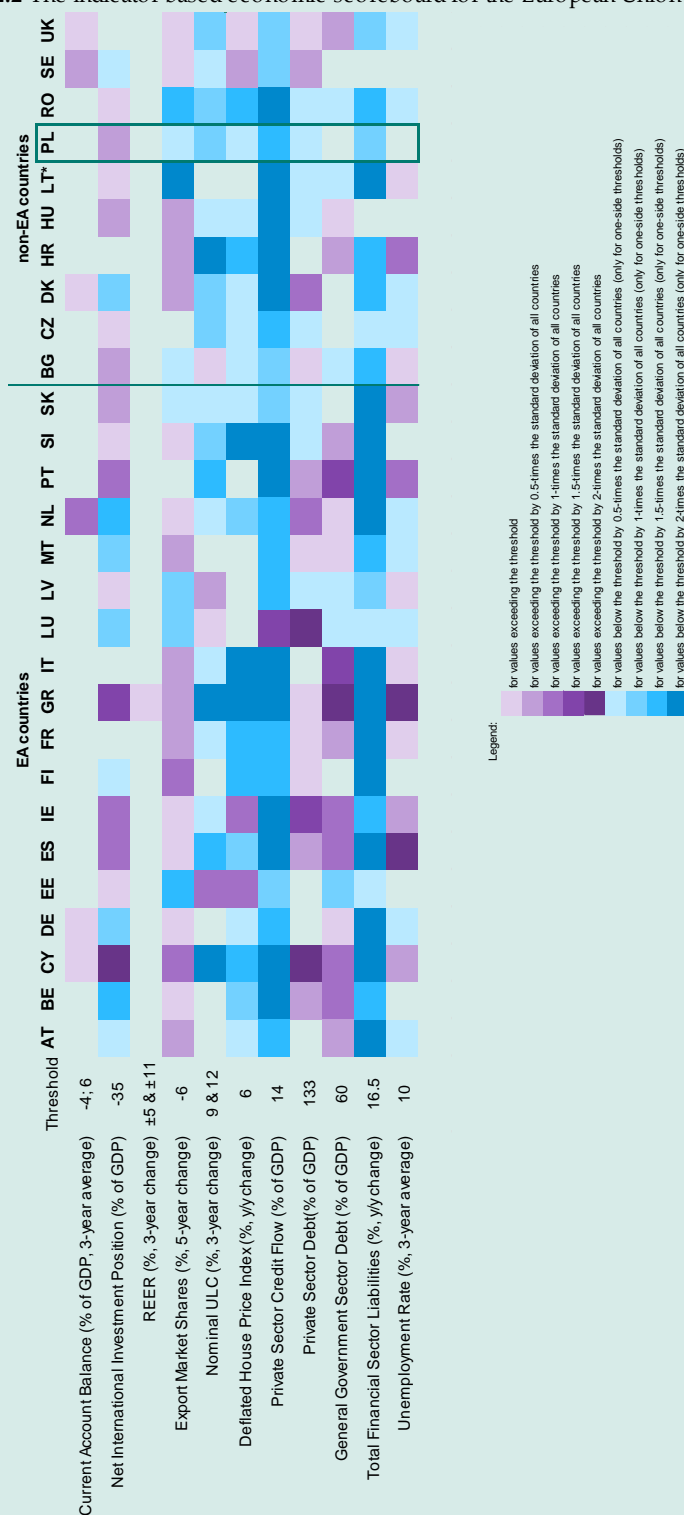
**Figure B.2.1** International investment position of the Polish economy

Source: NBP data and estimates.

In case of Poland, the only indicator running beyond the EC threshold is the net international investment position (NIIP), i.e. the difference between foreign assets and liabilities of all residents related to GDP. Since 2003, it has been remaining below the statistical limit set for this category (-35% GDP) and in 2014 it exceeded it almost twofold (-67% GDP). Yet, so far, the Commission has not recognised this as a disturbance of macroeconomic imbalance, explaining that the risk related to the negative NIIP largely depends on the structure of foreign liabilities. In this respect, Poland's position seems safe. Firstly, more than a half of Poland's NIIP (-36% GDP, Figure B.2.1) represents direct investment. Secondly, a considerable part of net foreign liabilities is made up by non-debt instruments – equities and profit reinvestments – which are a more stable form of foreign financing. As a result, Poland's net foreign debt – which, unlike the NIIP, does not include the balance of equity capital, equity securities, other forms of equity shares and financial derivatives – as at the end of 2014 amounted to EUR 147.8 bn (35% of GDP), i.e. considerably less than the absolute value of NIIP as percentage of GDP. Another buffer mitigating the risk related to the relatively large (negative) value of the NIIP is the high level of official reserve assets. The above arguments show that there are no signals of macroeconomic imbalances in Poland.

<sup>63</sup> The programme is aimed at reducing the increasing budget deficit (5.7% of GDP) and current account deficit (11.6 % of GDP) following the global financial crisis. The European Commission, the IMF, the World Bank and EBOR granted Romania financial support of EUR 20 billion in 2009, with repayment scheduled to start in 2015. It was expanded twice, in 2011 and 2013, by a total amount of EUR 8.9 billion.

Figure B.2.2 The indicator-based economic scoreboard for the European Union countries.



Source: Own compilation based on the European Commission's methodology and Eurostat, Ecwin and World Bank data.

Note: The level by which the indicator exceeds the threshold is marked with the shade of the purple. The greater the number of purple fields the higher the risk of macroeconomic imbalances in particular country, the rising number of blue fields denotes a decreasing risk. In case of thresholds for the REER and unit labour cost, the first number denotes the value for the euro area countries, and the second – for the non-euro area countries.

\*Lithuania is herein classified as a non-euro area country, since the assessment is based on data obtained while the country was not yet a member of the euro area.

## 3 Monetary policy in March – July 2015

At the meeting in March 2015 the Council decreased the NBP interest rates by 0.5 percentage points to the following levels: the reference rate 1.50%, the lombard rate 2.50%, the deposit rate 0.50%, the rediscount rate 1.75%, and kept the NBP interest rates unchanged at the following meetings.

The Chapter contains the *Minutes of the Monetary Policy Council decision-making meetings* held between March and July 2015 and the *Information from the meeting of the Monetary Policy Council* in July 2015. *Minutes of the Monetary Policy Council decision-making meeting* held in July 2015 will be published on 28 August 2015, and thus included in the following *Report*.

### **Minutes of the Monetary Policy Council decision-making meeting held on 4 March 2015**

Members of the Monetary Policy Council discussed current and future monetary policy decisions against the background of recent macroeconomic developments in Poland and abroad as well as the March projection of GDP and inflation.

While discussing developments in Poland's external environment, the Council members pointed to a recent decline in price volatility for most instruments in the international financial markets. However, some Council members indicated that uncertainty in the financial markets prevailed due to geopolitical situation in Ukraine and the risk of Greek debt restructuring. Also weak economic outlook in the euro area, Japan and in the largest emerging market economies, particularly China, remained a source of uncertainty.

Referring to economic conditions abroad, the Council members drew attention to the stable economic growth in the United States. They noted nonetheless that, despite a slight acceleration, economic growth in the euro area remained low. It was emphasized that lending growth in the euro area was still close to zero. Some Council members noted that GDP growth forecasts for the euro area had been revised upwards. It was mentioned that

an acceleration in economic growth in Germany, a fall in oil prices, a reduction in fiscal tightening, a launch of the European Commission's strategic investment plan and an increase in the pace of quantitative easing by the ECB starting from March 2015 could all contribute to higher economic growth in the euro area.

Discussing about the potential efficiency of the ECB's quantitative easing, few Council members pointed out that over the course of similar programmes in the United States and Great Britain the bond yields had been falling. The resultant decline in credit costs and depreciation of the currencies had in turn translated into an increase in economic growth. Few Council members also underlined that the pace of recovery of the US and British economies had been much faster than in economies where monetary policy had been more restrictive at that time, including the euro area. They also noted that in case of the countries of significant interest rates spread to the euro area, the risk of portfolio capital inflows and an appreciation of their currencies had increased due to the ECB's quantitative easing. Few Council members underlined that the additional liquidity from quantitative easing programmes in the United States and Great Britain, had been passed onto the real economy only to a limited extent. Therefore, in

their opinion, the programmes had failed to stimulate economic activity. According to these Council members, quantitative easing in the United States had distorted asset prices, and thus resulted in re-emergence of imbalances in this economy. They indicated that despite quantitative easing programmes, the recovery of the US economy, though faster than in the euro area, was still the slowest since the World War II. They pointed out that it was greater flexibility of the US and British economies that contributed to the relatively fast recovery in these countries following the global financial crisis.

With reference to monetary policy in other economies, some Council members pointed out that it had recently been eased in many economies, particularly in Europe. They also noted that the Fed had been indicating that it might not start to tighten its monetary policy soon, as inflation had fallen, there was no wage pressure in the economy and the US dollar had strengthened.

While discussing inflationary developments abroad, it was highlighted that the price growth had fallen in many countries over the recent months, and it was negative in the majority of European Union member states. Few Council members were of the opinion that the fall in oil prices could have come to an end. At the same time, the majority of Council members assessed that oil prices would remain markedly lower than in previous years. Moreover, due to the structural changes in oil supply, the upward pressure on its price will likely remain low. The Council members also noted that prices of many non-energy commodities, particularly agricultural commodities, had continued to fall.

While discussing the business climate in Poland, it was pointed out that GDP growth in 2014 Q4 had decelerated slightly, but remained above 3%. It was highlighted, that GDP growth in 2014 Q4 had been still supported mainly by domestic demand, as

consumption growth had been stable while investment growth in spite of a slight deceleration, had been high. However, some Council members stressed that the uncertainty about demand prospects prevailed, particularly in relation to external demand. These members also highlighted that data on the economic activity in January and the indicators of economic conditions in February had been mixed. It was pointed out that industrial production and retail sales growth had slowed down in January. At the same time, in February, indices of sentiment in industry were above expectations and suggested a pick-up in activity and an increase in employment in this sector. Some Council members also noted that the NBP business climate surveys were indicating a favourable outlook for corporate investment, demand and employment. They pointed to sound financial position of the enterprise sector, which had been allowing enterprises to finance their investments with their own funds. In the opinion of few Council members, reliance on own funds in investment financing could lead to some decline in lending to enterprises in early 2015, despite easier corporate lending conditions. In the assessment of some Council members, the fall in oil prices in the previous months could have improved the financial position of enterprises. In addition, they pointed out that the fall in oil prices had supported real disposable personal income and private consumption, in addition to further improvement in the labour market conditions, including continued growth in employment. Few Council members indicated that the improvement in the outlook for household finances also had been translating into ongoing recovery in the housing market in Poland and, consequently, an increase in activity in the housing construction sector. Few Council members assessed, however, that domestic demand growth caused by an improvement in terms of trade related to the fall in oil prices might lead to greater external imbalances if oil prices increase.



Discussing the economic growth outlook in the context of the March projection, it was noted that in line with the projection GDP growth was to remain stable in the following quarters, increasing slightly, while in the whole projection horizon it should run between 3 and 4%. Stable GDP growth should result – in light of the projection – from stable increase in consumption and investment growth staying high, despite some weakening in 2016. In the opinion of few Council members, investment growth could, however, be lower than the central projection path due to weak industrial production growth in recent months and uncertainty about the economic outlook abroad. The lower than expected investment growth could, in turn, translate into weaker than currently expected GDP growth in the coming quarters or even further economic slowdown. However, other Council members stressed that the March GDP projection was slightly higher than the November projection. They assessed that investment growth could be faster than the central projection path due to more efficient absorption of EU funds than assumed in the projection.

Discussing inflationary developments in Poland, it was highlighted that in January annual growth in consumer prices had fallen again. Some Council members expressed an opinion that deflation in Poland was mainly driven by external factors, including, above all, the fall in commodity prices. Therefore, deflation will not have negative economic consequences, but rather will support GDP growth, as it will improve the purchasing power of households and financial position of enterprises. At the same time, some Council members were of the opinion that low price growth in Poland resulted not only from external factors, but also from subdued domestic demand pressure, as indicated by a negative level of most core inflation measures, an extended period of a fall in producer prices and a negative GDP deflator in 2014 Q4.

Discussing the outlook for inflation, it was stressed that according to the March projection, under an assumption of constant interest rates, CPI inflation – despite steady increase in the following quarters – would not return to the target over the projection horizon. Similarly, core inflation, net of food and energy prices, was forecasted to run below the inflation target at the end of the projection horizon. In addition, some Council members pointed out that the output gap would most likely remain negative over the projection horizon. The Council members also noted that the March projection indicated no wage pressure, as labour productivity was expected to increase faster than wages. However, few Council members indicated that falling prices in the global commodity markets could temporarily mask the wage pressure, as they increased real wage growth and disposable household income. In their opinion, a steady increase in the relation of job vacancies to the number of the unemployed shows that nominal wages may accelerate when the impact of falling oil prices fades out.

Referring to the level of interest rates in Poland, some Council members emphasized that deepening deflation and further downward revisions of price growth had resulted in an increase in real interest rates. Few of them pointed out that the high level of real interest rates could contain investment projects in the real economy due to a lower rate of return compared to capital investments. Other Council members emphasized that in connection with the real convergence of the Polish economy with the euro area, the level of interest rate consistent with the macroeconomic equilibrium in Poland had most likely declined over the recent years.

However, few Council members indicated that the level of real interest rates in the economy was consistent with the current pace of economic growth and macroeconomic equilibrium, helping to prevent external imbalances and excessive credit growth, or might be even too low for current

conditions. In the assessment of few Council members, the level of real and nominal interest rates could be too low also according to the March projection of GDP and inflation, which indicates that the current account deficit should grow under an assumption of constant interest rates. Moreover, these members stressed that nominal rates in Poland were at historical lows, also compared to the advanced economies before the global financial crisis. They also emphasised that the real interest rates would decline as the price growth resumes to increase in accordance with the projection.

Discussing the decision on NBP interest rates, the majority of the Council members judged that they should be lowered at the current meeting. They pointed out that since the previous meeting, volatility in the financial markets, including the currency markets, had diminished. They underlined that the results of the March projections of inflation and GDP confirmed the assessment that the level of interest rates was too high to support a return of inflation to the target in the following years. They pointed out that in the light of the March projection, assuming that interest rates remained unchanged, inflation would not return to the target, while the output gap would remain negative over the projection horizon. They also pointed to the growth in interest rate spread in relation to Poland's immediate environment, which could be conducive to an increase in foreign capital inflows and an appreciation of the zloty. This would amplify deflation and delay the return of inflation to the target. Few Council members underlined that the interest rate cut would also reduce costs of public debt service, thus supporting the government's economic policy.

While discussing the scale of interest rate reduction and their desired level in the current cycle, the majority of Council members judged that interest rates should be adjusted on a single occasion so that the scale of the reduction would be significant and enough to contain the uncertainty about future

monetary policy. These members were also of the opinion that a significant one-off reduction in interest rates should come along with an announcement that this decision concluded the monetary policy easing cycle. The majority of Council members judged that such an announcement would not prevent an adjustment in interest rates in an event of unexpected strong shocks in the Polish economy or its environment.

In turn, some Council members were of the opinion that interest rates should remain unchanged. These members argued that deflation in Poland resulted mainly from supply factors and, consequently, did not impair the economy, while monetary policy currently had a limited impact on inflationary processes. They pointed out that according to the March projection, a reduction in interest rates in the first half of 2015, in line with the market expectations, would not result in such an increase in inflation that would be sufficient to ensure its return to the target. At the same time, according to the March projection, a reduction in interest rates could widen external imbalances. In addition, in the opinion of Council members who were in favour of keeping the monetary policy parameters unchanged, a reduction in interest rates could lead to an increase in financing of unprofitable investments. In such an event, a relatively high percentage of non-performing loans in Poland could lead to a deterioration in the financial situation of the banking sector.

At the meeting a motion to cut NBP interest rates by 0.50 percentage points was submitted. The motion passed. A motion was also submitted to reduce NBP interest rates by 0.25 percentage points. This motion was not voted on due to the adoption of the motion to reduce NBP interest rates by 0.50 percentage points. The Council decided to reduce the key NBP interest rates by 0.50 percentage points to the following levels: the NBP reference rate to 1.50%, the lombard rate to 2.50%, the deposit rate to 0.50%, the rediscount rate to 1.75%.



**Minutes of the Monetary Policy Council decision-making meeting held on 15 April 2015**

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

While discussing the situation in Poland's external environment, Council members indicated that 2015 was expected to bring a slight acceleration in global economic growth. It was pointed out that the incoming data suggested an improvement in economic conditions in the euro area, and data from the credit market might signal the beginning of rebound in lending. It was argued that according to the current forecasts, GDP growth in the euro area in 2015 was likely to exceed the previous year's level. Certain members of the Council emphasized that in the coming quarters economic activity growth in the euro area might be supported by the launch of the EBC's quantitative easing programme, the resulting depreciation of the euro, as well as the start of the investment programme of the European Commission. In the United States, despite the projected decline in GDP growth in the first quarter, recovery is expected to continue over the remaining part of the year.

However, some Council members pointed out that the scale of recovery in the euro area would be limited by the persistently weak investment demand and relatively high unemployment. As a result, GDP growth in the euro area – despite a certain pick-up – would remain low as compared to other developed countries. Certain Council members also expressed the opinion that excessive growth in demand in German economy, amidst highly expansionary monetary policy of the ECB, constituted a risk factor for economic growth in the euro area in the long term. Moreover, those members pointed out that insufficient structural reforms in France and Italy might have a dampening effect on long-term growth in the euro

area. Some members of the Council emphasized that also in the United States the rebound in economic activity was weak as compared to the previous business cycles. Lower GDP growth in the US economy resulted from weak investment growth and slower productivity growth. According to certain members of the Council, this was driven by corporate restructuring hampered, among other things, by interest rates kept by the Fed at historical lows. Other Council members expressed the opinion that the impact of interest rates on corporate restructuring was limited, and its intensity was determined mainly by institutional factors.

Referring to the situation in the emerging economies, it was pointed out that economic conditions in China continued to deteriorate gradually, and forecasts indicated a further slowdown in GDP growth in 2015. It was also emphasized that the situation of Poland's eastern trading partners remained unfavourable, with recession forecasted for Russia and Ukraine in 2015. Certain Council members pointed to a possible outflow of capital as a risk factor for the emerging economies, especially those experiencing less favourable macroeconomic conditions.

At the meeting attention was drawn to the stabilization of prices in the international commodity markets. Certain members remarked at that point that oil prices, following a strong decline, had increased slightly since the beginning of the year. In the recent period, also declines in the prices of agricultural commodities and industrial metals had come to a halt. This contributed to the weakening of disinflationary forces in many countries, and hence easing of deflation in the euro area and the stabilization of prices in the United States. The growth of prices in the global markets continued to be very slow, and remained negative in most European Union countries.

With reference to monetary policy in Poland's external environment it was pointed out that it had recently been eased by many central banks. The ECB had launched a Treasury bond purchase programme, and conducted another TLTRO operation on a larger-than-expected scale. It was also emphasized that the Fed had ruled out interest rate hikes in the next two months, while still signalling tightening its monetary policy this year.

When analysing the situation in real economy in Poland, it was pointed out that the incoming data confirmed continued stable growth in economic activity. Some Council members expressed the view that GDP growth in 2015 Q1 had probably slightly picked up as compared to the previous quarter. It was estimated that economic activity was fuelled by sustained growth in domestic demand. In this context, attention was paid to the still sound financial situation of companies – despite some deterioration in 2014 Q4 – and a stable rise in corporate lending, which further boosted corporate investment activity. Consumer demand continued to be supported by growing real income of households amid rising employment, and a further increase in consumer loans. Certain Council members pointed out, however, that although the situation in the labour market remained good, both employment and nominal wage growth in the enterprise sector had slowed down. Other members emphasized that unemployment – despite a gradual decline – stayed relatively high and nominal wages continued to be low as compared to most European countries. Council members also pointed out that weak growth of foreign demand, notwithstanding its slight acceleration, remained a factor curbing GDP growth in Poland in the first quarter.

While discussing the outlook for economic growth, most members of the Council assessed that GDP growth in the coming quarters would gradually accelerate with consumption and investment remaining its key drivers. Moreover, along with

economic recovery in the euro area GDP growth in Poland would be increasingly supported by rising exports. Certain members of the Council assessed that GDP growth was likely to be higher than anticipated in the March projection; this might be driven by faster improvement in the labour market, which, together with stronger rebound in economic activity abroad, would be conducive to stronger growth in consumption and private investment. Some Council members were of the opinion that also the increase in public investment might be higher than projected due to faster absorption of EU funds. Certain Council members believed, however, that GDP growth in 2015 might be slightly lower than projected, which – in their opinion – could be driven by a slowdown in corporate investment. According to certain members of the Council, also the positive supply shocks waning faster could lead to GDP growth slower than projected; this would, at the same time, contribute to the build-up of external imbalances. It was pointed out that GDP growth in the coming quarters might be additionally constrained by an excessive appreciation of the zloty. Some Council members observed that the impact of the ECB's quantitative easing on the real economy in the euro area and on asset prices within and outside the euro area continues to generate uncertainty about future economic conditions in Poland. Some Council members pointed out that the assessment of Poland's economic outlook is obscured by the uncertainty related to future geopolitical situation in Ukraine, the timing of the monetary policy tightening by the Fed, and the risk of turmoil related to the situation in Greece. Certain Council members also considered the current situation to involve a high risk of shocks in the international financial markets as a result of the sustained expansionary monetary policy by major central banks. Other Council members emphasized the absence of imbalances in the domestic economy, pointing to a stable situation in the real estate market, a relatively low private and public debts, a

small deficit on the current account and a safe level of Poland's foreign indebtedness.

Discussing inflation developments in Poland, it was indicated that annual price growth in February had decreased again and was running below expectations. At the same time, it was pointed out that while short-term inflation forecasts had been revised downwards, the expected period of deflation had remained unchanged. Some Council members highlighted that deflation in Poland was mainly driven by external factors, including, in particular, declining prices of energy and food commodities. As deflation was primarily caused by supply-side factors, in the opinion of those members of the Council, it was boosting households' purchasing power and reducing corporate costs, thus supporting domestic economic growth. In turn, some Council members were of the opinion that apart from external factors, weak price growth in Poland was underpinned by the absence of demand pressure, as indicated by the negative readings of most core inflation measures and the steady decline in producer prices. They also emphasized persistently limited wage pressure despite a gradual improvement in the labour market.

Addressing the prospects for inflation, members indicated that both the March projection and short-term forecasts envisaged price growth to remain negative in the following months, albeit the pace of this growth would gradually pick up, to turn positive by the end of the year. Some Council members represented the opinion that price growth would be higher than indicated in the March projection, and certain members expected inflation to return to the target as early as next year. It was pointed out that the waning effect of the decline in global commodity prices would contribute to the weakening of deflationary trends. Certain Council members indicated at this point a possibility of a rise in oil prices this year which might additionally drive up consumer price growth. Certain Council

members voiced the opinion that as supply shocks wore away, the wage pressure might increase, which – according to those Council members – was currently disguised by the rise in the purchasing power of households' disposable income due to a decline in energy and food prices. The increase in wage pressure and accelerated growth of nominal wages would be supported – in the opinion of those Council members – by the situation in the labour market, which was favouring job seekers, as indicated by the high proportion of vacancies in relation to the number of the unemployed. Yet, other Council members believed that growth of wages in the coming quarters would be close to that of labour productivity, with wage pressure remaining limited. Some Council members pointed out that the appreciation of the zloty, especially amidst an extended period of low inflation abroad, might also exert downward pressure on price growth.

Council members drew attention to some appreciation of the exchange rate of the zloty in the past quarter, which was supported by ECB's quantitative easing. Some Council members observed that the appreciation of the zloty might constrain the competitiveness of Polish exports.

Council members assessed that price growth in the nearest quarters would remain negative, mainly due to prior sharp price declines in commodity markets. At the same time, as the effects of those shocks waned, price growth would gradually increase. This would be additionally supported by both the sustained economic recovery at home and an improvement in economic conditions abroad, which – together with the prior adjustment of monetary policy – would limit the risk of inflation continuing below the target in the medium term.

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

**Minutes of the Monetary Policy Council decision-making meeting held on 6 May 2015**

Members of the Monetary Policy Council discussed the monetary policy in the context of the current and expected macroeconomic developments in Poland and abroad.

While discussing the situation in Poland's external environment, members of the Council pointed to the improvement in economic situation in the euro area and expected further increase in activity growth in this economy. Attention was drawn to the decline in the unemployment rate, pick-up in retail sales and improvement in consumer sentiment in the recent period. It was argued that economic activity in the euro area had been supported by the previously observed steep decline in commodity prices. Certain Council members emphasized in particular favourable economic situation in Germany – Poland's main trading partner – including the increase in consumption and improvement in industry.

Some Council members assessed that the economic situation in the euro area had been supported by the quantitative easing programme conducted by the European Central Bank, which had contributed to the weakening of the euro and higher price competitiveness of this currency area. Those members also pointed to other positive effects of the ECB's quantitative easing, including the easing of credit standards and interest rate decrease, which might suggest the onset of a revival in lending. Certain Council members emphasized that the ECB's quantitative easing programme might also stimulate growth in demand through the wealth effect related to the increase in the prices of assets held by households. It was also noted that the ECB's quantitative easing had heightened inflation expectations in the euro area.

Some Council members, however, pointed to possible negative consequences of quantitative

easing programmes, including the possibility of the formation of bubbles in the asset markets. Some Council members assessed at the same time that the asset purchase programme in the euro area had no significant effect on activity in the real economy. In this context, certain members cited the example of the United States, where short-term positive effects of quantitative easing resulted – in their opinion – from directing a large part of the central bank's programme at the purchase of real estate assets. As the ECB's asset purchase programme concerns largely Treasury bonds, it would have – in their opinion – only a minor impact on the real economy.

Some Council members assessed that further developments in the Greek economy were a source of risk for economic growth in the euro area. Certain members of the Council emphasized, however, that the effects of a possible insolvency of Greece for the financial markets might be limited, due to the ECB's current quantitative easing programme, as well as the relatively small share of the private sector among Greek creditors.

While analysing the economic situation in the United States, Council members pointed to a slowdown in GDP growth in 2015 Q1. Factors that could adversely affect activity in the US economy were highlighted, including the cold winter, the appreciation of the dollar, and the previously observed strong decline in oil prices, which had dragged down profitability and had reduced investment of oil producers in this country. It was emphasized that deteriorating data in the recent period had postponed the expectations for interest rate hikes in the United States. Some members of the Council assessed that it had been difficult to determine the persistence of the slowdown, although recovery had been still expected to continue. Certain Council members assessed that since the economic crisis, the trend of GDP growth in the US had been generally constant. They also pointed out that GDP growth projections in the United States had been overoptimistic for the past

few years, which forced their subsequent downward revisions. Certain Council members argued that the long-term GDP growth in the US economy could be adversely affected by the quantitative easing programmes conducted in the past by the Federal Reserve.

Members of the Council pointed out that improvement in the outlook for growth in developed economies had been accompanied by slowing GDP growth in many emerging economies. Attention was also drawn to the recession in Russia and Ukraine. Certain members of the Council pointed out that a possible further escalation of the conflict between these countries had posed a risk to economic growth in the external environment of the Polish economy. Some Council members also underlined the decline in economic growth in China. They assessed that imbalances in this economy, which could be observed in the real estate market, and in the recent period also in the stock market, posed a risk of a sharp drop in GDP growth. Certain Council members argued, however, that the rising share of consumption (at the expense of investment) in GDP growth might reduce the risk of a sharp drop in demand.

Council members pointed out that price growth in the global economy, including in the euro area and in the United States, had been still very low, however deflation in the euro area had decreased. It was emphasized that a certain rise in oil prices in the world markets in recent weeks had been accompanied by a slight decline in food prices. Certain members of the Council argued that the observed decline in commodity prices had been a symptom of a downward phase in the long-term cycle in the commodity market. Therefore, they argued that global inflation would remain low in the coming years.

While analysing the situation in the Polish economy, members of the Council pointed to the continuing economic recovery and the prospects for

a gradual pick-up in economic growth, driven by both internal factors, and the expected further improvement in the economic situation in the euro area. Council members assessed that the continuing economic recovery was reflected in good data from industry, particularly in export-related branches, as well as the pick-up in production in the construction and the persistently favourable financial situation of enterprises. It was assessed that the retail sales data and consumer sentiment indicators had suggested continuing steady growth in consumption. It was argued that economic conditions had been supported by the improvement of the labour market situation, including wage and employment growth. Certain Council members pointed out that suggested wage growth in the public sector could support wage growth in the economy. Yet certain members of the Council pointed to the structural problems faced by the Polish economy: high unemployment and low wages, and thus the small share of wages in GDP growth. These factors – they argued – limited consumption of households.

Council members pointed to high investment growth, which supported growth in domestic economic activity. In this context, a significant percentage of enterprises planning to embark on new investments in business surveys was noted. Some Council members emphasized that in the coming quarters investment growth in the economy would be fuelled by the inflow of EU funds under the new budgetary perspective. Certain Council members also pointed to a possible pick-up in housing investment, driven by the improvement in the labour market situation and the decline in interest rates on loans. These members also assessed that accelerating investment would be accompanied by high growth in inventory, usually strongly pro-cyclical.

Certain members of the Council argued, however, that although in the first half of 2015 investment growth might slow down – which in their opinion



may be a delayed effect of the economic slowdown recorded in the second half of 2014 – the coming quarters were expected to see its continued recovery. They argued that the continuing strong growth in investment might be connected to low investment growth recorded in the previous years. Other Council members judged that due to the much faster growth in investment than consumer demand, investment growth might decrease in the coming quarters.

While analysing trends in lending, some Council members assessed that lending had continued to expand moderately. In this context, certain Council members highlighted, in particular, the absence of any significant pick-up in the growth of corporate investment loans, despite the decline in interest rates charged on those loans. These members additionally pointed out that as interest rates on fixed term deposits had diminished, so had the share of those deposits in total household deposits, which had been accompanied by acceleration in inflows of capital to investment funds.

Certain Council members pointed out that following several years of fiscal policy tightening, the impact of this policy on demand growth in the economy would be probably neutral this year. With regard to public finance, certain Council members deemed that as the deficit of this sector had declined, the Excessive Deficit Procedure with regard to Poland might be lifted, which would be favourable in terms of the rating of Polish bonds, and hence the cost of debt servicing. Yet, other Council members argued that the public sector deficit was relatively high if the current rise in domestic demand was taken into account, while the sources of reducing the deficit applied in the past years had been exhausted. As a result, they believed that in the event of a next slowdown, fiscal policy might have limited scope for supporting demand in the economy.

Some Council members assessed that despite the recovery, a negative output gap prevailed in the economy. As a result, the annual price growth, including most core inflation measures, remained negative. These members also emphasised the absence of cost pressure in the economy, as indicated by a further producer price decline resulting from the previous sharp fall in commodity prices and moderate wage growth. In this context, business surveys were cited, which pointed to the absence of the risk of wage pressure arising in the nearest future. The consistently low level of inflation expectations of economic agents were also highlighted. Considering the above circumstances, these members assessed that the return of inflation to the target would be gradual.

Yet some Council members were of the opinion that the prolonged deflation was primarily the result of supply shocks related to the fall in commodity prices as well as low inflation in the euro area. Certain Council members also underlined that the decline in prices in Poland had been supported by the embargo on exports of certain Polish goods to Russia and by rising labour productivity. Certain Council members emphasized that as the impact of the supply shocks wore away, inflation in Poland would rise faster than the March NBP projection envisaged. In their opinion the steeper rise in inflation would also result from a higher than was assumed in the projection GDP growth in Poland and its external environment, which would be accompanied by faster domestic unit labour cost growth. At the same time they argued that in their opinion domestic demand growth had already exceeded potential output growth, which could lead to a deterioration in the current account balance, especially if the improvement in the terms of trade were to come to a halt.

Council members assessed that the annual price growth would remain negative in the coming quarters, mainly due to the previously observed sharp fall in commodity prices. At the same time,



the expected gradual acceleration of economic growth, amidst recovery in the euro area and good situation in the domestic labour market, reduced the risk of inflation remaining below the target in the medium term. Therefore, the Council decided to keep the NBP interest rates unchanged: the reference rate at 1.50%, the lombard rate at 2.50%, the deposit rate at 0.50% and the rediscount rate at 1.75%.

#### **Minutes of the Monetary Policy Council decision-making meeting held on 3 June 2015**

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

Analysing the economic conditions abroad, the Council members pointed to a pickup in GDP growth in the euro area. It was indicated that economic activity in this economy was supported by a rise in consumption, associated with declining unemployment and a fall in fuel prices, which increased the purchasing power of households and improved the financial standing of enterprises. It was also emphasized that investment expenditures were accelerating, supported by positive corporate sentiment, the earlier depreciation of the euro and an improvement in the loan affordability following the introduction of the quantitative easing programme by the ECB. It was pointed out that lending growth was accelerating, as economic activity in the euro area was recovering. It was indicated that economic conditions improved also in the South European member states. Certain Council members emphasized that the forecasts for GDP growth in the euro area had recently been revised upwards. These members assessed that higher activity in the euro area had a positive impact on the Central and Eastern European economies.

Some Council members pointed out, however, that GDP growth in Germany had been lower than expected in 2015 Q1, posting a deceleration, which might nonetheless prove temporary. However, it was argued that the slowdown in GDP growth in large emerging market economies had been affecting economic activity in Germany. Certain Council members were of the opinion that lower growth in German exports to emerging market economies could have a negative, but limited, impact on Polish exports.

Some Council members stressed that in the United States the estimates for GDP growth in 2015 Q1 had been revised downwards, and that the GDP growth rate had turned out to be negative. It was assessed that the slowdown in GDP growth was primarily driven by the earlier appreciation of the US dollar, a severe winter and lower investments in the shale oil branch resulting from the earlier fall in crude oil prices. At the same time, it was pointed out that the decline in fuel prices, though sharper than in the euro area, had failed to stimulate consumer spending, yet had increased the savings rate. It was underlined that the slowdown in economic activity continued in early 2015 Q2. In addition, it was highlighted that the recent weaker data releases on the economic activity in the United States resulted in a setback in market expectations for the fed funds rate increase.

Certain Council members were of the opinion that the global imbalances, in particular excessive savings in some large economies, remained a drag on global and emerging market economic activity. They emphasized that global economic activity could be disrupted by the difficulty to stimulate consumer demand in economies with high savings rates.

Evaluating the financial market developments abroad, the Council members pointed to a recent rise in sovereign bond yields in many advanced economies, including the euro area member states.

The rise occurred despite the EBC's public sector purchase programme. It was assessed that uncertainty about the measures taken to overcome Greece's sovereign debt crisis could have been a driver of both the increase in risk aversion in the financial markets and the rise in price volatility of many financial assets. Some Council members also pointed to a recent increase in the prices in the global commodity markets, primarily for crude oil.

Analysing the domestic real economic conditions and the economic outlook, the Council members stressed that the Polish economy had continued to recover in 2015 Q1. It was also emphasized that GDP growth in 2015 Q1 had been higher than expected. It was pointed out that although domestic demand growth had ebbed somewhat, this was primarily due to a fall in inventories. It was also emphasized that household consumption had been rising and investment growth – despite a high statistical base – had also picked up. In addition, the Council members pointed out that net exports, supported by a gradual recovery in the euro area, contributed positively to the GDP growth rate in 2015 Q1. Some Council members indicated that Polish foreign trade had been in surplus for two years, and more recently a surplus was recorded also in the current account. Certain Council members expressed an opinion that these figures showed that competitiveness of the Polish economy was improving and that there were no significant threats to Poland's external balance.

The Council members assessed that household consumption in Poland was supported by the ongoing improvement in the labour market conditions. They emphasized that unemployment had fallen and highlighted that the number of the employed had reached historical highs. Some Council members assessed that, although employment had continued to rise, no wage pressure had been observed in the economy thus far, as the growth rate in unit labour costs had been stable. In this context, it was cited from the NBP

business survey results that according to the survey participants there was no risk of a considerable acceleration in wage growth in the enterprise sector in the near future. Certain Council members argued that the room for wage increases in the enterprise sector was limited, given that the rise in employment was accompanied by a relatively small pace of increase in production and hence labour productivity. Certain Council members indicated, however, that in their opinion the unemployment rate was currently already below the equilibrium unemployment rate, which might be conducive to a rise in wage growth in the future. Other Council members expressed an opinion that the wage level in Poland was low. According to these members, faster productivity growth could lead to higher wages in Poland provided that it was brought about by more innovation in the Polish economy.

Referring to investment, attention was paid to an increase in the share of enterprises intending to launch new investment projects, as well as to a further recovery in construction. The Council members also argued that investment growth was supported by a very good financial position of enterprises and relatively high capacity utilization. Certain Council members assessed that corporate profits were supported by a fall in producer prices, as it reduced production costs more than revenues. Certain Council members, however, judged that financial costs and revenues had been playing a significant role in shaping corporate profits. They argued that higher consumer demand could result in a lower share of financial revenues in total revenues of enterprises, as it would increase the relative profitability of sales compared to the profitability of financial operations.

Certain Council members noted that the investment growth rate had been exceeding that of the production. They assessed that therefore investment growth could slow down in the coming quarters, regardless of the expected increase in investments financed with EU funds.

The Council members highlighted that despite the favourable GDP data for 2015 Q1, economic activity growth could ease somewhat in early 2015 Q2, as indicated by a deceleration in industrial production and retail sales, and a decline in certain economic indicators. Some Council members emphasized that although the source of this slowdown was difficult to identify and the degree of its persistence hard to assess at the time of the meeting, it would most likely prove temporary. Certain Council members were of the opinion that ongoing growth in the real disposable personal income would support economic recovery.

Some Council members judged that fiscal policy could be eased in the following year. Certain Council members indicated that wages in the general government sector might be unfrozen, and that public spending on benefits and allowances was likely to be increased. The risk of easier fiscal policy was – according to certain Council members – associated with the expected abrogation of the excessive deficit procedure against Poland, which would make more room for larger public spending. Other members argued, however, that the general government deficit might increase in an event of a slowdown in output due to fluctuations in the business cycle.

Analysing the situation in the financial sector in Poland, some Council members indicated that lending to the private sector continued to grow steadily, which supported economic growth but did not pose a threat to financial stability. They emphasized that decreases in the NBP interest rates had contributed to a significant decline in interest rates on loans to households and enterprises. In this context, some Council members marked that there were currently no signs of imbalances in the housing market and that the risk of excessive growth in mortgage loans was limited by macroprudential policy tightening through lowering the maximum loan-to-value ratio.

Certain Council members emphasized, however, that in recent years, despite decreases in the NBP interest rates, lending growth in the economy slowed down somewhat. They assessed that the interest rates on corporate loans declined in recent months less than the NBP interest rates. These members also pointed to a slower deposit growth in the banking sector and a likely acceleration in the pace of growth in the ratio of impaired loans for currency loans in an event of depreciation of the zloty. Other Council members assessed, however, that the value of the foreign currency loans in relation to GDP was low in Poland.

Discussing inflation developments in the economy, the Council members emphasized that the consumer price growth had increased in recent months. It was pointed out that deflation had eased primarily due to a rise in food and energy prices. The Council members pointed out that forecasts suggested further price growth. Yet, most Council members assessed that inflation would return to the target only gradually as producer prices had been declining for many quarters and inflation expectations of households and enterprises were very low. They also assessed that the output gap in the economy had been negative, which had been translating into very low or even – in most cases – negative core inflation measures. Certain Council members highlighted that inflation would be returning to the target very slowly also due to still low price growth in the environment of the Polish economy. Other Council members judged, however, that due to a marked recovery in demand, inflation might increase faster than expected in the latest NBP projection.

The Council members assessed that in the coming months, the annual price growth would remain negative, mainly due to the earlier sharp fall in commodity prices. At the same time, the expected gradual acceleration in economic growth, amidst recovery in the euro area and good domestic labour market conditions, reduced the risk of inflation

remaining below target in the medium term. Therefore, the Council decided to keep NBP interest rates unchanged: the reference rate at 1.50%, the lombard rate at 2.50%, the deposit rate at 0.50% and the rediscount rate at 1.75%.

### **Information from the meeting of the Monetary Policy Council held on 7-8 July 2015**

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

Growth of global economic activity remains moderate. In the euro area, economic conditions improve gradually, although activity is still low. In the United States, recent data suggest that the slowdown at the beginning of the year was temporary and the economic outlook is favourable. In turn, economic growth in China remains low as for this country, while recession continues in Poland's eastern trading partners, i.e. Russia and Ukraine.

Despite the ongoing recovery in developed economies, the sentiment in the financial markets has recently deteriorated in the wake of growing fears of a Greek insolvency. This was conducive to a fall in prices of some financial assets as well as a weakening of exchange rates of Central and Eastern European currencies, including the zloty.

Following a sharp and long-lasting fall, oil prices have risen slightly in recent months. This has weakened disinflationary forces in many countries, fuelling an increase in price growth in the euro area. However, price growth in the global economy remains very low, and in some European economies it is still negative. In these conditions, major central banks are keeping interest rates close to zero and the ECB is continuing its asset purchase programme.

In Poland, GDP growth in 2015 Q2 most likely continued at a previous quarter level. Increase in consumption and investment, fuelled by an improving labour market situation, good financial condition of enterprises and a rise in lending, has probably remained the main driver of economic growth. At the same time, recent data do not indicate acceleration of economic growth in the coming quarters.

Due to the moderate pace of growth in demand and the continuing negative output gap, there is no inflationary pressure in the economy. Moreover, low commodity prices and moderate nominal wage growth are contributing to the continued lack of cost pressure. As a result, the annual growth of consumer prices remains negative, although the increase in the annual growth of fuel and food prices in the recent period has limited the scale of deflation. The annual growth of producer prices is also negative, while inflation expectations remain very low.

The Council became acquainted with the projection of inflation and GDP prepared by the Economic Institute, which is one of the inputs to the Council's decisions on NBP interest rates. In line with the July projection based on the NECMOD model – prepared under the assumption of unchanged NBP interest rates and taking into account data available until 22 June 2015 (projection cut-off date) – there is a 50-percent probability that the annual price growth will be in the range of  $-1.1\div -0.4\%$  in 2015 (as compared to  $-1.0\div 0.0\%$  in the March 2015 projection),  $0.7\div 2.5\%$  in 2016 (as compared to  $-0.1\div 1.8\%$ ) and  $0.5\div 2.6\%$  in 2017 (as compared to  $0.1\div 2.2\%$ ). At the same time, the annual GDP growth rate – in line with this projection – will be with a 50-percent probability in the range of  $3.0\div 4.3\%$  in 2015 (as compared to  $2.7\div 4.2\%$  in the March 2015 projection),  $2.3\div 4.5\%$  in 2016 (as compared to  $2.2\div 4.4\%$ ) and  $2.5\div 4.7\%$  in 2017 (as compared to  $2.4\div 4.6\%$ ).

In the opinion of the Council, the annual price growth will remain negative in the coming months, mainly due to the earlier sharp fall in commodity prices. At the same time, the expected stable economic growth, amidst recovery in the euro area and good situation in the domestic labour market,

reduce the risk of inflation remaining below the target in the medium term. Such an assessment is supported by NBP's July projection. Therefore, the Council decided to keep NBP interest rates unchanged.





## 4 Projection of inflation and GDP

This inflation and GDP projection was prepared by the Economic Institute of Narodowy Bank Polski and presents a forecast of economic developments under the assumption of the constant NBP interest rates. In terms of the contents, work involved in the creation of this projection was supervised by Andrzej Sławiński, Director of the Economic Institute. The process was coordinated by the Bureau of Macroeconomic Forecasts of the Economic Institute. Using the macroeconomic model NECMOD<sup>64</sup>, the projection was prepared as the outcome of an iterative process, in the course of which the paths of some variables were adjusted if they diverged from NBP experts' economic intuition based on their knowledge of economic processes. The Management Board of NBP approved the projection to be submitted to the Monetary Policy Council. The projection constitutes one of the inputs to the Monetary Policy Council's decision-making process concerning the NBP interest rates.

The July projection based on the NECMOD model covers the period from 2015 Q2 to 2017 Q4. The starting point for the projection is 2015 Q1.

The projection was prepared under the assumption of the constant NBP interest rates taking into account the data available until 22 June 2015.

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<sup>64</sup> Current version of the documentation of the model is available at the NBP website [http://www.nbp.pl/homen.aspx?f=/en/publikacje/raport\\_inflacja/necmod.html](http://www.nbp.pl/homen.aspx?f=/en/publikacje/raport_inflacja/necmod.html)

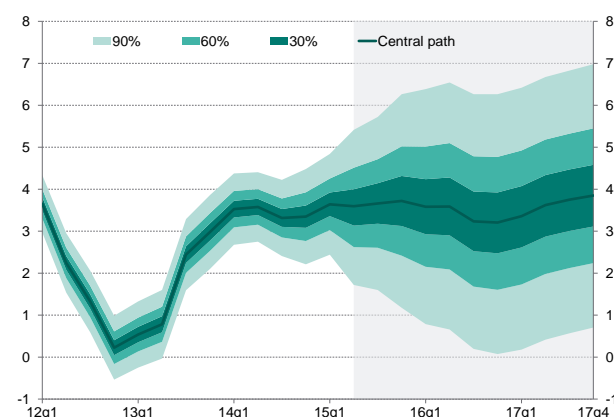
## 4.1 Summary

The current projection is heavily affected by a moderate scale of recovery in the global economy and persistently low energy commodities prices, in particular crude oil, curbing inflation on a global scale. Although the impact of low oil prices on economic growth varies across countries, in Poland, which is an oil importer, low oil prices will influence economic activity favourably over the projection horizon. Low prices of energy commodities reduce, in particular, corporate operating costs, allowing enterprises to maintain relatively high profitability of production despite growing labour cost, and help to finance investment. Low energy prices also have a positive impact on households' real income, thus boosting consumption.

The persistence of a favourable supply shock, namely the decline in energy commodity prices, supports the recovery in the Polish economy, despite continued low demand from the euro area and the adverse impact exerted on the economic activity by the Russian-Ukrainian conflict. As a result, the Polish economy is currently in a recovery phase, with growth characterized by a favourable and balanced structure. National accounts data suggest that the pick-up in GDP growth to 3.6% y/y in 2015 Q1 was driven by a stable increase in private consumption, rapid growth in investment and a positive contribution of net exports.

A merely moderate improvement in economic conditions in the euro area is expected over the projection horizon, which will support the domestic economic growth only to a limited extent. Under these conditions, GDP growth in 2015-2017 will stabilize at an average of 3.6% y/y and will be driven primarily by rising consumer

**Figure 4.1** GDP (y/y %)



Source: NBP (if not otherwise stated, this concerns all the figures and tables in this Chapter)

spending and domestic private sector investment.

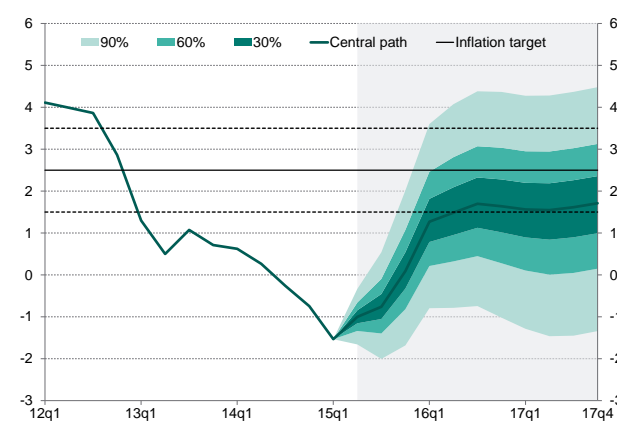
Household spending will be fuelled by the steady improvement in households' financial condition, which will be driven by continuation of the currently observed favourable trends in the labour market: further increase in employment, falling unemployment rate and accelerating growth in nominal wages. Also, low inflation will increase consumer purchasing power, and low interest rates will help to finance consumption with loans.

Over the projection horizon economic growth will also be driven by corporate investment spending. The expected continuation of the currently sound financial standing of enterprises, will support investment, allowing firms to finance investments with their own resources. Investment, as in the case of consumption, will benefit from the interest rates remaining at their current low level (which results from the projection assumption of the constant NBP reference rate). The currently high, as for this phase of the business cycle, level of capacity utilisation will encourage companies to rapidly increase gross fixed capital formation. The rising trend in gross fixed capital formation will gradually flatten over the projection horizon, yet it will continue to exceed GDP growth.

The scale of the recovery in the short-term projection horizon will help the output gap to close, though in 2015 it will still be negative, running at -0.2% of the potential output. In the years 2016-2017, the output gap will remain close to zero. The closing of the negative output gap, which is a synthetic measure of demand pressures in the economy, indicates that the impact of the previously observed downturn on inflation, will gradually fade away.

In 2015 Q1, the deflationary developments in the Polish economy were further reinforced. The

Figure 4.2 CPI inflation (y/y, %)



consumer price index decreased by 1.5% y/y in this period. Price declines resulted largely from the impact of supply factors – a sharp drop in oil prices and high supply of agricultural products. Moreover, low demand and weak cost pressures, reflected in the decline in import prices and domestic producer prices (PPI) are contributing to low inflation.

The recovery in the Polish economy and the accompanying rise in unit labour cost will bring about gradual growth in the prices of all major components in the basket of consumer goods and services (core inflation, food prices, energy prices). However, until the end of the projection horizon CPI inflation will run below the NBP inflation target. CPI inflation will be curbed by low import prices, persisting throughout the projection horizon, which will be driven by a merely moderate improvement in economic conditions in the euro area and low commodity prices in the global markets.

The main source of uncertainty for the current projection is the possibility of other macroeconomic developments in the environment of the Polish economy than those assumed in the central scenario. Currently, the main risk factor is the possibility of Greece's insolvency and its exit from the euro area. The impact of such a development should be now less severe than in 2012 and would be largely short-lived.

On the other hand, it cannot be ruled out that the ECB's bond purchase programme or the implementation of the Investment Plan of the European Commission will have a stronger impact on the euro area economy than currently expected.

The probability of the scenario under which Greece leaves the euro area is estimated as more likely than that under which growth in Poland's

international environment picks up above the assumed central projection path. Yet, the risk factors resulting from the shape of the two scenarios, both for GDP growth and for CPI inflation, are balanced, which is reflected in the symmetry of the fan chart for both variables (Figure 4.1, Figure 4.2).

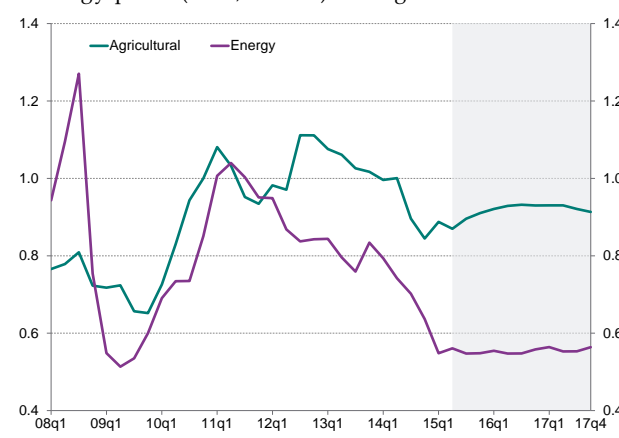
## 4.2 External environment

The main factor affecting the current projection is slow recovery in the global economy and the accompanying low prices of commodities, especially oil, curbing inflation pressure around the world.

Slow growth in oil prices results from favourable supply conditions in the oil market, as well as weak demand from both developed and developing countries. In particular, oil prices are being influenced by rising oil exports from OPEC countries, which is the result of OPEC's policy aimed at maintaining a fixed share in global oil production. Large oil reserves in the United States also help to stabilize oil prices at a low level. Low oil prices are curbing growth of other energy commodity prices, which are largely substitutes in energy production. Consequently, in the coming years, prices of energy commodities in the world markets will remain at a low level, similar to that assumed in the previous forecasting round (Figure 4.3).

Low prices of energy commodities are pushing down inflation in Poland's major trading partners (Figure 4.4). Inflation is reduced both directly, through the influence of low commodity prices on prices of energy, and indirectly, through the decline in prices of other components of the basket of consumer goods and services. Low oil prices support economic growth in countries

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

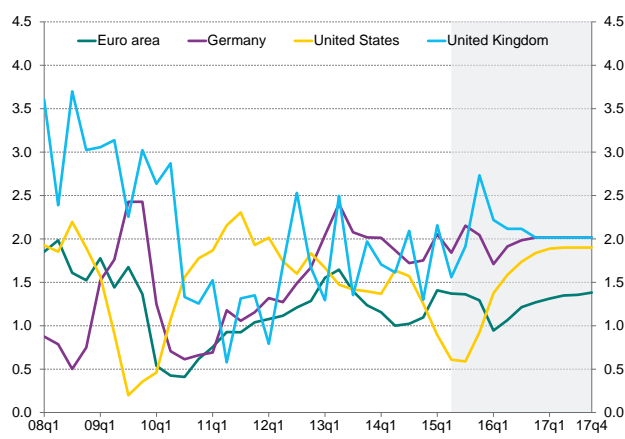


being oil importers, increasing household income in real terms and reducing operating costs of the corporate sector, and thus improving the terms of trade.

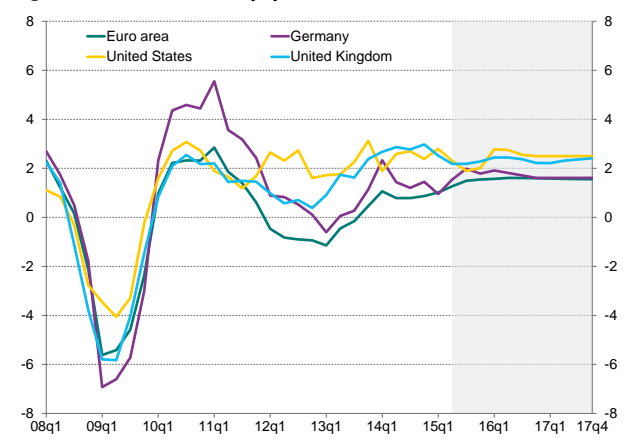
Amidst moderate growth in demand in developing countries over the projection horizon also prices of agricultural commodities are running relatively low (Figure 4.3). Yet, as compared to the expectations of the previous forecasting round, the forecast of agricultural commodity prices has been revised upwards. The upward revision is mainly due to higher projected prices of pork. This is driven by the European Commission's launch of an aid mechanism for private storage of pork, which has limited its supply.

The key assumption of the current projection, apart from the stabilization of energy and agriculture commodity prices at a low level, is a merely moderate scale of upturn in the euro area (Figure 4.5). At the same time, whereas the outlook for private consumption growth in the euro area is encouraging, the conditions for investment remain less optimistic. Consumer demand should be further supported by improving labour market conditions and the accompanying low inflation, in particular of energy prices, increasing the purchasing power of households. The currently limited investment growth in the euro area is related to low levels of capacity utilisation, continued deleveraging of businesses and persisting difficulties in the access to market financing faced by a large number of companies, despite a certain improvement observed in this regard. In the projection horizon, amidst an accommodative monetary policy and gradually rising consumer demand, investment will gradually recover. This process, however, will be curbed by the relatively low rate of growth in demand from emerging market economies.

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



**Figure 4.5** GDP abroad (y/y, %)





Although the current data point to the still limited scale of economic recovery in the euro area, the outlook for economic growth in the euro area has improved as compared to the assumptions of the previous forecasting round. This is due to the depreciation of the euro, which boosts price competitiveness of exports (Figure 4.6). The weakening of the euro is driven by the ECB's quantitative easing program. This program also helps to lower the cost of public debt service in the euro area countries and gradually reduces the constraints on bank credit supply. GDP growth should also be stimulated by the implementation of structural reforms in the Italian and French economies. Reforms in Italy involve, among others, a reduction in the costs of redundancies, an introduction of contracts with gradually increasing legal protection of employment and a reduction of social security contributions for companies employing workforce for an indefinite period of time. France has adopted the so-called Macron Law, which, among others, lowers the cost of redundancies, and eliminates certain regulatory barriers in the services market.

Against the background of expectations concerning growth in the euro area, growth prospects in the United States and the United Kingdom seem more optimistic (Figure 4.5), despite worse-than-expected data on GDP growth in 2015 Q1 (partially due to difficult weather conditions in winter). Private consumption, which will be supported by the currently observed favourable trends in the labour market, will remain the driver of growth in these economies. In April 2015, the United States saw a pick-up in employment growth, especially in the private sector, with the unemployment rate hitting a seven-year low. The relatively better economic conditions of the American and British economies will result in a higher inflation path than in the euro area and an earlier start of the cycle of

Figure 4.6 EUR/USD exchange rate

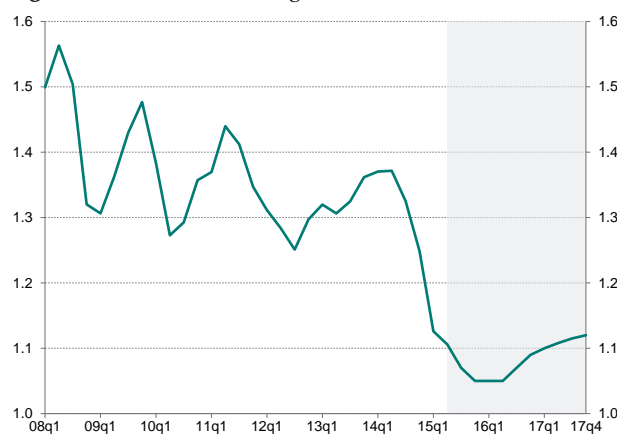
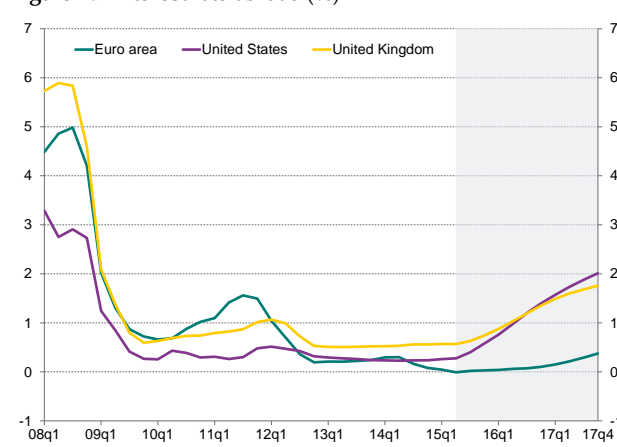


Figure 4.7 Interest rate abroad (%)



interest rate hikes in those countries (Figure 4.7).

### 4.3 Polish economy in 2015-2017

GDP growth in Poland will continue at a stable rate over the projection horizon, averaging 3.6% in the years 2015-2017 (Figure 4.8). Moderate recovery in the euro area will have only a limited boosting effect on growth, which will be mainly hinged upon rising consumer spending and domestic private sector investment. The decline in the inflow of capital transfers from the EU, being the result of the completion of the settlement of the EU Financial Perspective 2007-2013, will bring about a temporary and relatively minor slowdown in 2016 (Figure 4.13).

CPI inflation will remain negative in the short-term projection horizon (Figure 4.10). The fall in prices is largely due to the impact of supply factors – a sharp drop in oil prices and a large supply of agricultural products. Moreover, low inflation is supported by low demand pressure (reflected in the negative output gap) and the low cost pressure at home and abroad, reflected in declining import prices and the prolonged slide in domestic producer prices (PPI). Over the projection horizon, the impact of these factors on inflation will gradually fade away, yet inflation will remain below the NBP inflation target until the end of 2017.

#### Domestic demand

Household consumption demand increased by 3.1% in 2014, accounting for the largest part of economic growth. In the years 2015-2017, consumption growth, supported by the steadily improving financial condition of households, will pick up to 3.4%, running close to the long-term average (Figure 4.11). The situation of households has improved on account of both growing wage

Figure 4.8 Economic growth

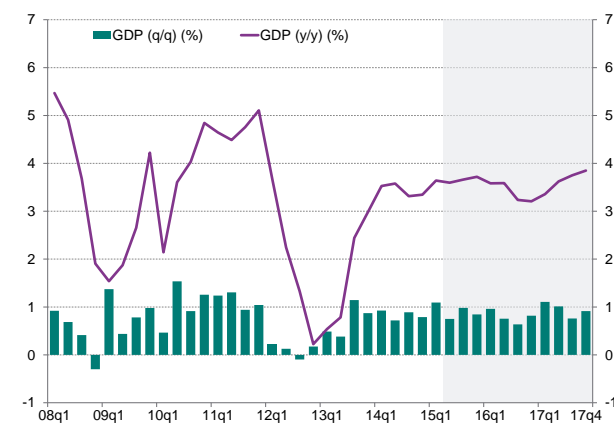


Figure 4.9 GDP growth (y/y, %) – breakdown

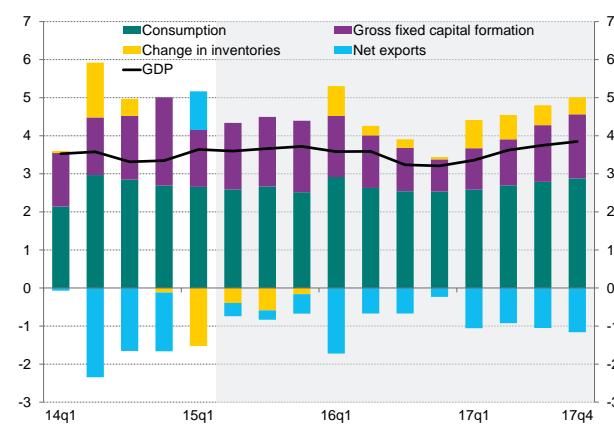
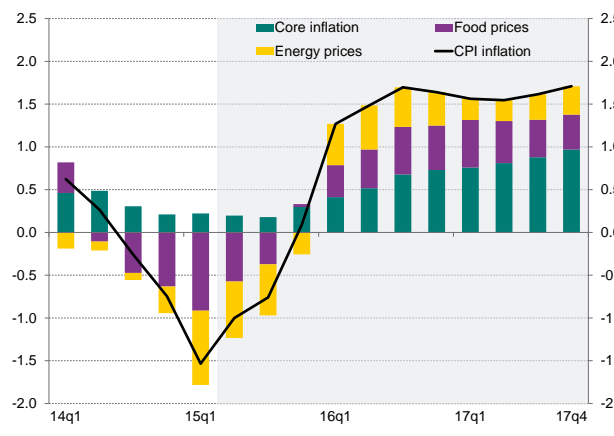


Figure 4.10 CPI inflation (y/y, %) – breakdown



fund, resulting from the favourable outlook for the domestic labour market, and a growth in income from self-employment, fuelled by improving business conditions. Moreover, weak growth in the prices of goods and services increases the purchasing power of consumers, and low nominal interest rates help to finance consumption with credit (reducing the costs of the existing and the new debt of households).

Rapid growth in gross fixed capital formation in the enterprise sector in 2014 and in 2015 Q1 was supported by low nominal interest rates decreasing the cost of credit, and high, as for this phase of the business cycle, level of capacity utilisation. Over the projection horizon interest rates, which, in line with the assumption adopted in each forecasting round, remain unchanged, will continue to have a positive impact on growth of corporate capital expenditure. Investment will also be fuelled by the expected continuation of good financial standing of enterprises, allowing them to finance investment with their own funds.<sup>65</sup> Investment growth, although it will remain above the GDP growth rate, will be gradually slowing down. This is because the currently observed relatively high investment growth is improving significantly the size of corporate fixed assets in relation to the expected moderate demand, resulting in a decline in capacity utilisation in the recent period. A possible slowdown in investment growth may also be suggested by declarations of enterprises stating that despite improving economic conditions in Poland and in the euro area, insufficient demand continues to be a significant obstacle to increasing investment outlays.<sup>66</sup> Moreover, enterprises indicate that their investments are primarily aimed at replacement or repair of their existing assets, rather than their

Figure 4.11 Private and public consumption

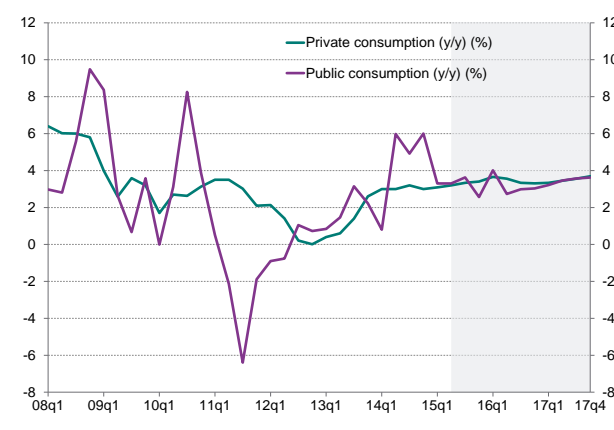
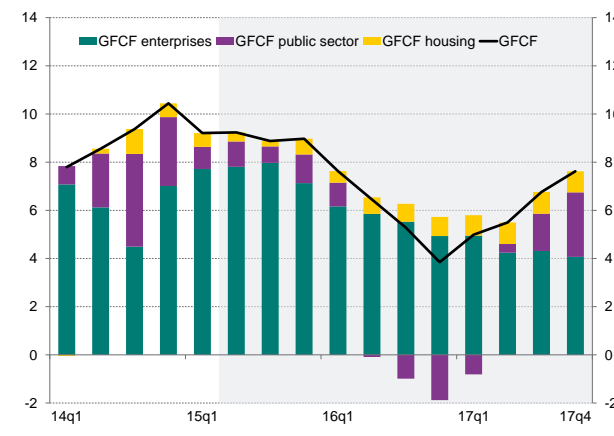


Figure 4.12 Gross fixed capital formation (y/y, %) – breakdown



<sup>65</sup> Financial situation of the enterprises in 2015 Q1, NBP.

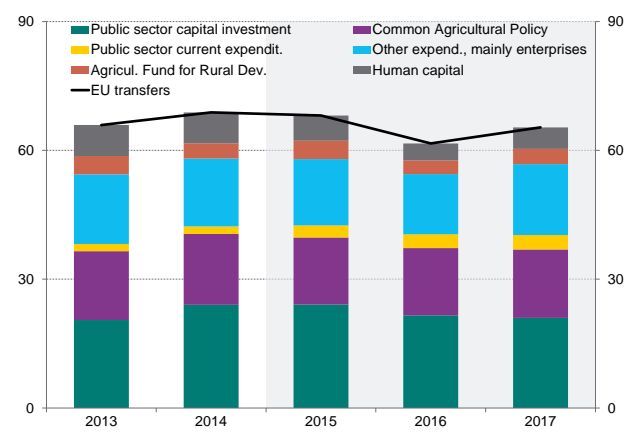
<sup>66</sup> Economic climate in the enterprise sector in 2015 Q2 and forecasts for 2015 Q3, NBP.

expansion, which remains crucial to a stronger and more sustained pick-up in investment expenditure.<sup>67</sup> An additional factor dragging down corporate investment in 2016 (similarly to public investment) will be the end of the absorption of funds under the 2007-2013 financial framework, resulting in a marked decline in the absorption of the EU transfers allocated to capital expenditure of the private sector.

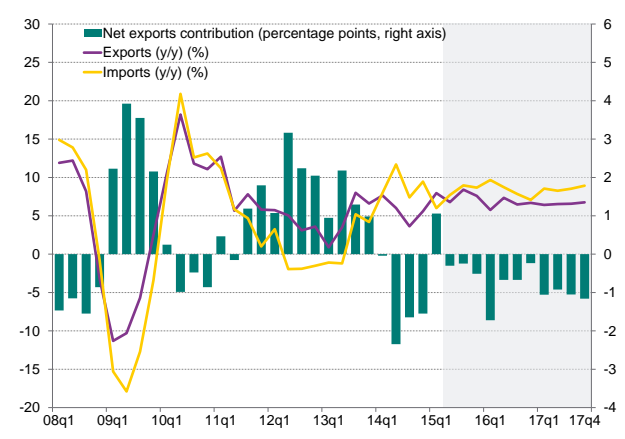
After more than one year of declines, residential investment increased significantly in the second half of 2014. The subsequent quarters are expected to bring further improvement in this sector, as indicated by the rising number of issued building permits and an increase in the number of dwellings under construction. Improving financial condition of households positively affects the outlook for housing demand. Housing investments may also be fostered by the launch of the government-subsidized housing scheme "Flat for the Young" and the October 2014 increase of price limits per one square meter of housing eligible for this scheme. The low nominal level of interest rates will also have a positive impact on residential investment by reducing the ratio of loan service costs to rent. On the other hand, the tightening of mortgage lending criteria and last year's amendment of Recommendation S will curb residential investment.

Public consumption is expected to stabilize in the projection horizon. Risks to this scenario are bidirectional. The tendency to increase spending after budgetary discipline pursued since 2011 and the closing of the excessive deficit procedure against Poland may result in fiscal policy easing. On the other hand, increases in the spending on public consumption are also likely to be limited as a result of stabilizing expenditure rule.

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



**Figure 4.14** Foreign trade



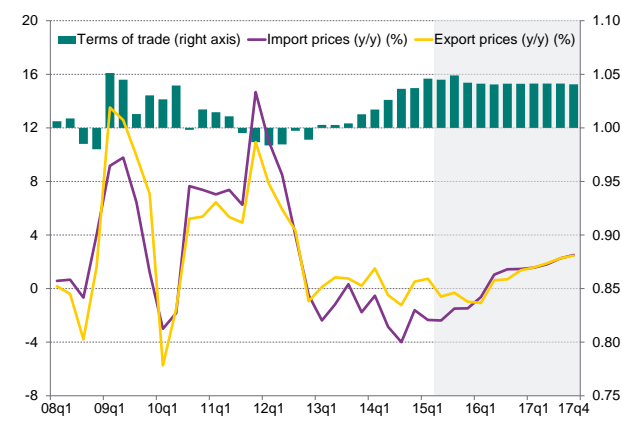
<sup>67</sup> Financial situation of the enterprises in 2015 Q1, NBP.

Capital expenditure of the public sector is in turn highly correlated with the absorption of EU capital funds.<sup>68</sup> In 2016, the absorption of EU funds under the 2007-2013 financial framework will end whereas previous experience and the schedule for adoption of programme documents suggest only a gradual utilisation of the funds allotted under the 2014-2020 framework (Figure 4.13). This concerns, in particular, regional programmes to be implemented by local government units and will cause a temporary drop in public investment, in 2016.

### Macroeconomic imbalance

In 2014, in the aftermath of the break-out of the Russian-Ukrainian crisis and economic slow down in the euro area, Polish export growth slowed down, bringing about a significant decline in the contribution of net exports to growth (Figure 4.14). Against this background, unexpectedly the contribution of net exports to growth in 2015 Q1 was positive and amounted to 1.1 percentage points. The improvement in the balance resulted from the pick-up in exports driven by the possibly short-lived recovery in trade in global value chains.<sup>69</sup> Such a high export growth is not expected to continue in the further projection horizon. This is due to the currently observed trends to reduce the scale of production offshoring to countries with lower production costs, which is partly associated with low levels of capacity utilisation in the advanced economies. This is confirmed by declarations of entrepreneurs who, despite the high price competitiveness and profitability of exports, word their forecasts for new export contracts in cautious terms. These forecasts are low, below the

Figure 4.15 Export and import prices



<sup>68</sup> Capital transfers from the EU finance about 30% of the investment spending of the public sector.

<sup>69</sup> Recovery in trade in global value chains resulted from such one-off events as introduction to the export offer of new products in the electronic sector.

long-term average.<sup>70</sup> Moreover, due to the slowdown in the emerging market economies (including China, Brazil and Russia), which are an important source of export demand in global value chains, growth in the global trade is expected to be slow. On the other hand, due to the anticipated growth in these components of domestic demand in the Polish economy which have a high import intensity, a relatively strong growth in imports may be expected in the projection horizon. Consequently, the negative contribution of net exports to growth, despite its high reading for 2015 Q1, will remain a factor limiting GDP growth.

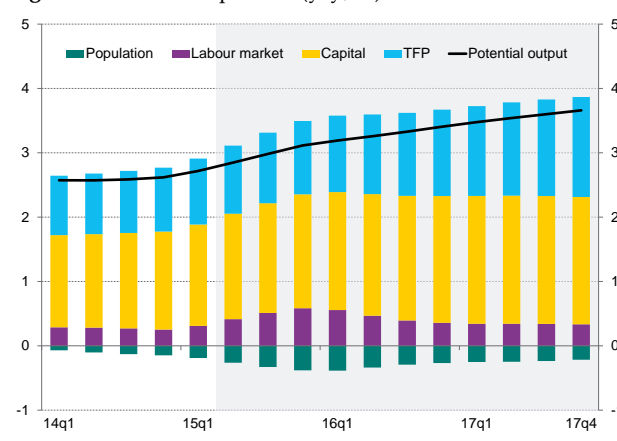
Favourable export data, supported by the decline in import prices of crude oil, resulted in a surplus in the current and capital account which, from 2014 Q2 to 2015 Q1 stood at a historically high level of 2.3% of GDP. In the projection horizon, this balance will fall to -1.4% of GDP in 2017, which will be driven by a negative contribution of net exports to growth and falling balance on the secondary income and capital accounts, associated with the end of the settlement of the 2007-2013 financial framework.<sup>71</sup>

### Potential output

Potential output growth, which slowed down markedly in the wake of the 2007-2009 financial crisis, will rebound in the projection horizon, while remaining below its long-term average until the end of 2017. Stronger potential GDP growth will be supported by three factors.

Firstly, a build-up of enterprises' production capacity, related to the lagged effect of the relatively high investment spending of the private

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



<sup>70</sup> *Economic climate in the enterprise sector in 2015 Q2 and forecasts for 2015 Q3*, NBP.

<sup>71</sup> Payments for the completed projects financed from EU funds are deferred in relation to the time of obtaining the financing, presented in Figure 4.13. Due to the final settlement of the EU 2007-2013 financial framework, the transfer of funds from the EU is expected to decline in 2016 (Figure 4.13), while the decrease in payments, which has a bearing on the balance of payments, will occur in 2017.



sector in the years 2014-16 (Figure 4.16) will be conducive to potential output growth in the projection horizon.

Secondly, the moderate upward trend – dating back to the first half of 2013 – in currently running at low levels total factor productivity (TFP) (the real convergence process), will be sustained. Yet, TFP will not be restored to the levels recorded before the global financial crisis.

Thirdly, potential output growth will benefit from the presently observed favourable trends in the labour market, reflected in the sinking equilibrium unemployment rate (NAWRU, Figure 4.19) and in the rising labour force participation rate (Figure 4.18).

Long-term levels of labour supply are supported by the weakening impact of hysteresis – as the unemployment rate, previously pushing up the NAWRU, is sinking. Further, the relatively high flexibility of the domestic labour market will be conducive to a decline in the equilibrium unemployment rate in the projection horizon. Compared with other European Union countries, forms of employment in Poland tend to include more fixed-term contracts as well as civil-law agreements – especially in the service sector.<sup>72</sup> In addition, wage indexation is applied less frequently, which helps wages adjust to market conditions.<sup>73</sup>

The gradual increase in the labour participation rate in the projection horizon will be mostly driven by a further increase in the activity of persons over 44 years of age. On the one hand, this will result from the pension system reform, stipulating a steady increase in the retirement age since 2013. On the other hand, this age group will be joined by the generation who were educated

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<sup>72</sup> Labour market survey. *Report 2013*, NBP and *Labour market survey. Report 2014*, NBP.

<sup>73</sup> Labour market survey. *Report 2012*, NBP.

and launched their professional career in the 1990s. Consequently, their human capital will better meet the requirements of the market economy than the previous generations. However, the rise in the labour participation rate will be far slower than in the recent years due to unfavourable changes in the age structure of the population, as the share of the post-productive age group will be rising.

Potential output growth in the projection horizon will be dragged down by a decline in the population due to emigration, which predominantly concerns occupationally active cohorts (Figure 4.16).

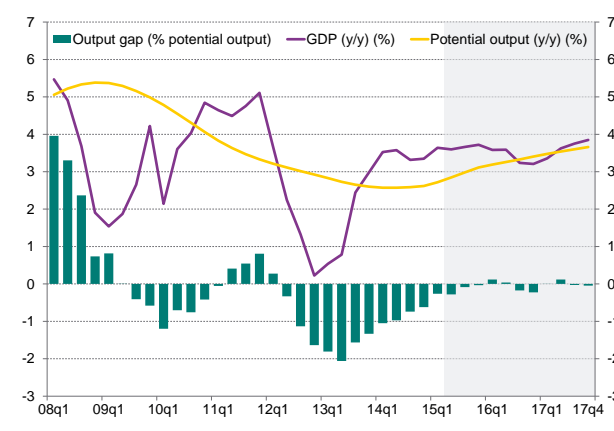
### Output gap

Early in the projection horizon, the forecasted GDP growth will exceed the relatively slow pace of the potential output growth. Consequently, the output gap will continue to narrow, even though in 2015 it will remain negative at -0.2% of the potential output (Figure 4.17). In the subsequent years, the output gap will hover around zero. This will be due to a temporary weakening in GDP growth in 2016 related to a decrease in EU transfers during this period, on the one hand, and to a steady rise in the potential output growth on the other. The narrowing of the negative output gap – which is a comprehensive measure of demand pressure in the economy – indicates that the impact of the economic conditions on inflation will gradually fade away. Yet, due to the inertia in price adjustments, CPI inflation manifests a lagged response to the size of the output gap. Hence, weak demand pressure will continue to keep consumer price growth below the inflation target in the entire projection horizon.

### Labour market

The year 2014 saw a considerable increase in the number of working persons (according to the

Figure 4.17 Output gap



LFS), a development driven by the economic upturn that Poland had embarked on. However, LFS data were additionally boosted by the statistical effect related to the extension of the maternity leave from 6 to 12 months for parents of children born after 1 January 2013.<sup>74</sup> In the projection horizon – under the assumption of a stable GDP growth and the waning statistical effect – the increase in the number of persons working will occur at a substantially slower pace, running at low, if still positive level in 2016-2017 (Figure 4.18). The flattening growth in the number of working persons is also related to growing labour productivity, resulting from the forecasted growth in TFP and productive capital accumulation.

The moderate increase in the number of the employed will translate to – due to the falling labour force, an effect associated with emigration – systematic decrease in the LFS unemployment rate over the projection horizon. In 2017, the unemployment rate will sink below 7.0%. Declining unemployment will bring a stronger growth in nominal wages, which, however, will remain relatively low during the projection horizon, below the levels observed before the onset of the global financial crisis (Figure 4.20). Wage pressure will be mitigated by the decline in the equilibrium unemployment rate (Figure 4.19), and by low CPI inflation, reducing the scale of wage demands. As a result, unit labour cost growth will gradually pick up in 2015-2017. Yet, it will exceed 2.5% y/y only at the end of the projection horizon.

### Exchange rate

In the first half of 2015, the zloty appreciated markedly, supported by the record-high balance

Figure 4.18 Employment and labour force participation

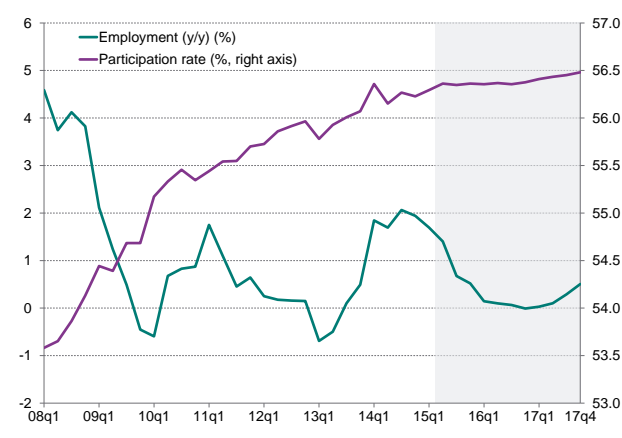


Figure 4.19 Unemployment

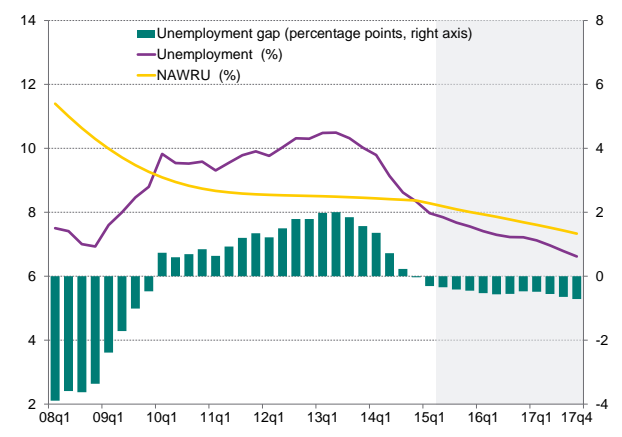
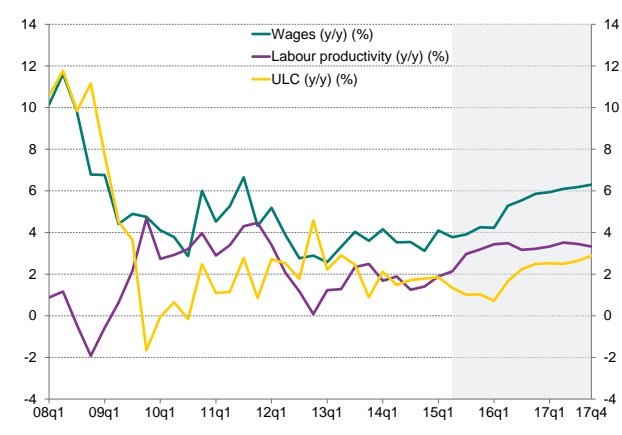


Figure 4.20 Unit labour costs



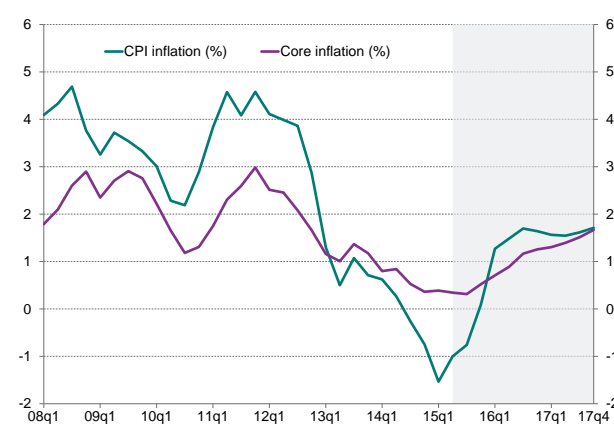
<sup>74</sup> In accordance with the LFS methodology, persons on maternity leave are considered to stay in the labour force and in employment. In turn, persons on child care leave lasting more than three months are deemed to be out of the labour force (and the number of such persons has fallen due to the extension of the maternity leave).

of the current and capital account. In addition, the domestic currency appreciated on the back of the inflow of portfolio investment to Poland, driven by the ECB's quantitative easing (QE) launched in March 2015. In the projection horizon, the increase in the deficit in the current and capital account and the waning impact of ECB's unconventional measures on the zloty will mitigate the appreciation trend of the Polish currency. On the other hand, the ongoing process of real convergence of the Polish economy, reflected in faster potential output growth as compared with the one posted by Poland's main trading partners, will have a boosting effect on the zloty. The balance of these factors is expected to render a relatively stable zloty exchange rate in the years 2016-2017.

### Components of CPI inflation

Core inflation rises gradually over the projection horizon, reaching 1.7% y/y at the end of 2017 (Figure 4.21). On the one hand, price growth in the economy will be hampered by continuing weak demand pressure, despite the recently observed recovery, as indicated by the size of the output gap over the projection horizon. On the other hand, low core inflation will be supported by the absence of cost pressure. National accounts data show falling import prices since about a year, at the same time, the PPI index has been negative for the last two years. Import prices will continue declining until early 2016. From then on, they are expected to rebound slightly, supported by the anticipated low inflation in the euro area amidst a relatively stable exchange rate. Thus, weak growth in the prices of tradable goods in Poland's key trading partners will effectively dampen price growth in these groups of products on the domestic market. Inflationary pressure will be additionally weakened by slowly rising unit labour costs (Figure 4.20). In 2017, core inflation will also experience downward pressure from the

Figure 4.21 CPI and core inflation

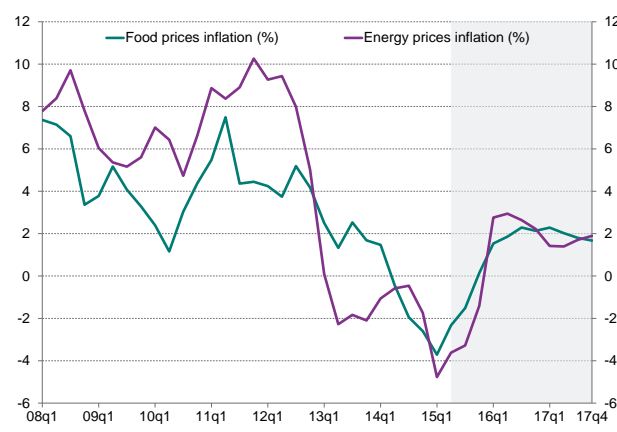


restoration of lower VAT rates.

The energy prices, and in particular forecasted prices of fuel for private motor vehicles, will be the key factor behind the below-zero CPI growth in 2015 (Figure 4.22). Weak trends in those prices result from the sudden fall in oil prices in 2014 Q4 and in January 2015. Furthermore, energy prices will be affected by the decline in domestic prices of natural gas delivered to households, expected to materialize in the second half of this year in response to the fall in global oil prices.<sup>75</sup> In the years 2016-2017, energy price inflation will pick up while still running low, significantly below the long-term average. It will be hampered by global commodity prices persisting at low levels. The relatively higher energy price inflation in 2016 will be driven by an increase in fuel prices expected to follow the bottoming out of oil prices observed in early 2015 (a positive base effect). The increase in the prices of energy in 2017 will be additionally curbed by the announced cuts in the VAT rates.

The negative rate of CPI inflation in 2015 will also be underpinned by falling food prices (Figure 4.22). The decline in food prices results from high supply of agricultural commodities on the account of the exceptionally good weather conditions in Poland and across the world in the economic season 2014/2015. The food prices inflation in the perspective of the whole year are weighed down by the Russian embargo on food imports, including those from the European Union, imposed in the second half of 2014. Towards the end of the projection horizon, assuming a return to more regular weather conditions and the waning effect of the embargo on year-on-year price growth, food price inflation will gradually rise. However, the increase will be

**Figure 4.22** Food and energy price inflation



<sup>75</sup> The prices of natural gas imported from Russia respond to changes in oil prices with a lag of several quarters (the prices of gas in Gazprom contracts are indexed to the prices of oil).

curbed by weak demand pressure in the domestic market and low-level stabilisation in the global prices of agricultural commodities (Figure 4.3). Similarly to other CPI components – though to a lesser extent – the scale of the increase in food prices will be additionally suppressed by the reduction in the VAT rates in the last year of the projection horizon.

#### 4.4 Current versus previous projection

Compared to the March projection, in the current forecasting round GDP growth path has been revised upward slightly in the entire projection horizon. CPI inflation forecast took a slight downward correction for 2015, with an upward revision for the years 2016-2017 (Table 4.1).

Higher GDP growth has been driven – apart from the assumption of faster growth abroad – by the cut in the NBP reference rate in March 2015 and the stronger than expected GDP estimate for 2015 Q1. The upward revision of consumer prices growth in the medium- and long-term projection horizon is related to faster than anticipated demand growth.

##### GDP

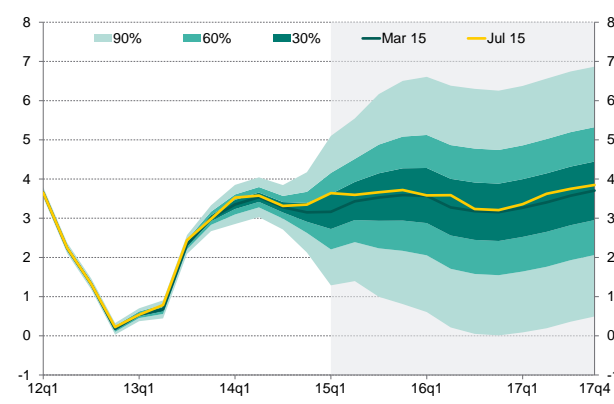
Information released after the March projection was completed has contributed to an upward revision of GDP growth for the entire projection horizon.

The stronger GDP growth early in the projection horizon results primarily from the GDP growth estimate for 2015 Q1 published by the GUS, which proved to be 0.4 percentage points higher than expected in the March projection. The GUS estimate showed a substantially different structure of growth in 2015 Q1 as compared to the

**Table 4.1** July projection versus March projection

	2015	2016	2017
<b>GDP (y/y, %)</b>			
<b>July 2015</b>	3.6	3.4	3.6
<b>March 2015</b>	3.4	3.3	3.5
<b>CPI inflation (y/y, %)</b>			
<b>July 2015</b>	-0.8	1.5	1.6
<b>March 2015</b>	-0.5	0.9	1.2

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





expectations of the previous forecasting round: a high positive contribution of net exports, outweighed by a strongly negative contribution of changes in inventories and a sharper growth in gross fixed capital formation. Thus, GDP data constituted a premise for an upward revision of gross fixed capital formation and net exports paths, amidst a simultaneous downward adjustment of the contribution of changes in inventories also in the following quarters of 2015.

Throughout the projection horizon, economic growth in Poland is supported by faster – as compared to the assumptions of the March projection round – recovery abroad, in particular in the German economy. Higher output growth abroad boosts exports, and indirectly – through the expectations channel – translates into higher investment, consumption and inventories growth.

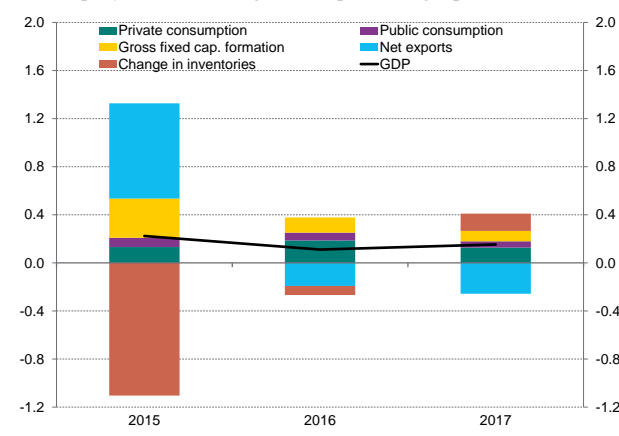
Consumption and investment demand will additionally benefit from the decrease in the NBP reference rate by 0.50 percentage points, resulting in lower cost of financing household and corporate expenditure with bank credit. Faster domestic demand growth, in the medium- and long-term projection horizon, will spur the growth of imports. As a result, GDP growth will be limited – to a larger extent than envisaged in the March forecasting round – by a negative contribution of net exports.

## Inflation

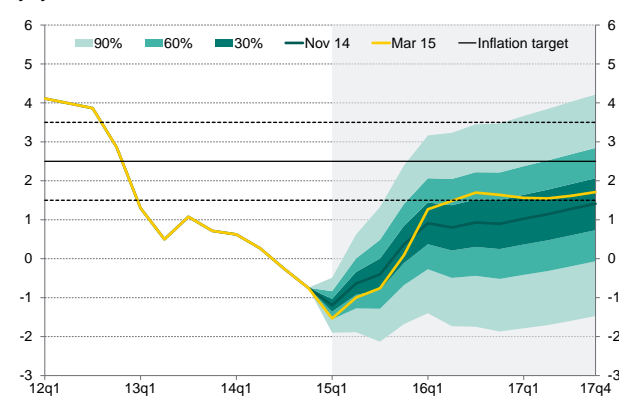
Information released after the cut-off date of the March projection shows that following the slightly weaker consumer price growth in 2015, CPI inflation path will run higher than anticipated in the March round.

The downward revision of consumer price growth forecasts for 2015 was driven by the

**Figure 4.24** Decomposition of deviations between July and March projection: GDP growth (percentage points)<sup>76</sup>



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



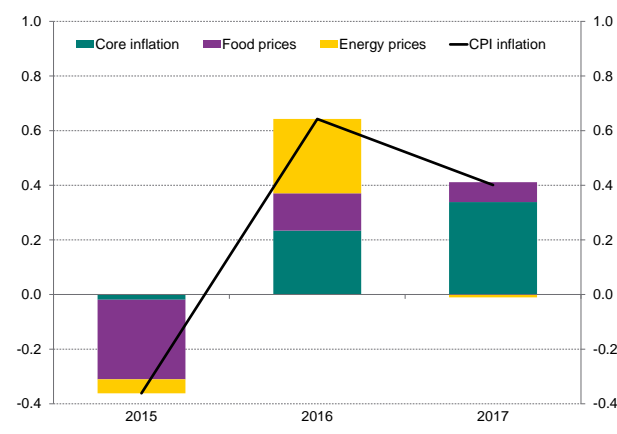
<sup>76</sup> The data presented in the chart may vary slightly from those in Table 4.1, due to rounding of numbers to one decimal place.

deeper than expected decline in food prices. The decline results from the persisting high supply of agricultural commodities in the domestic market due to, among others, the Russian embargo, and the short and mild winter. Another factor contributing to the sharper 2015 decline in food prices is a stronger than assumed in the previous forecasting round the zloty exchange rate against the euro.

The upward revision of the CPI inflation path in the medium- and long-term projection horizon is a result of higher core inflation and food prices and – additionally in 2016 – also energy prices. Higher inflation is supported by stronger, throughout the projection horizon, consumption demand and foreign demand, reflected in a faster narrowing of the output gap, which is a comprehensive measure of demand pressure in the economy. Price growth will also be boosted by stronger cost pressure in the economy. This results from the more substantial than expected in the March round improvement in labour market conditions, leading to faster wage and employment growth.

An additional factor pushing up inflation in 2016 is faster than expected energy price growth. This results from the appreciation of the dollar against the euro – and, consequently, against the zloty – amidst the global dollar-denominated prices of energy commodities remaining largely at the level assumed in the previous forecasting round. As a result, the prices of energy commodities expressed in PLN rose on their March projection levels, which has a lagged effect – due to the regulations prevailing in the Polish market – on energy prices charged to households.

**Figure 4.26** Decomposition of deviations between July and March projection: CPI inflation (percentage points)<sup>77</sup>



<sup>77</sup> The data presented in the chart may vary slightly from those in Table 4.1, due to rounding of numbers to one decimal place.

## 4.5 Forecast uncertainty sources

The balance of risks for the July projection – related to the macroeconomic situation both in Poland and its external environment – points to a near-symmetrical distribution of risk factors to CPI inflation and GDP (Table 4.2). Under the assumption of an unchanged NBP reference rate, the probability of CPI inflation running in the range of acceptable deviations from the NBP inflation target (1.5%-3.5%), which is now close to zero, rises early in the short term and then stabilizes close to 40% (Table 4.2). The key sources of projection uncertainty are presented below.

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

A major risk factor is posed by a possible deterioration in the outlook for growth in the external environment of the Polish economy, should Greece declare insolvency and possibly leave the monetary union (the so-called Grexit). Current assessments show that if this scenario were to materialise, the global economy would suffer less than in 2012 due to a lower share of the private sector in Greece's overall debt and greater efficiency of ECB's measures resulting from an extended range of the applied monetary policy tools. Despite this, the turmoil resulting from the Greek government's default and Grexit might have a substantial impact on how the nominal and real processes unfold in the euro area and in Poland, leading to sharp adjustments in the financial markets. The rise in risk premiums would entail, especially in the short run, an increase in yields on the bonds of the periphery countries of the monetary union. It would also result in a weaker euro against the dollar and other major currencies (which would help mitigate or defer the effects of monetary tightening in these economies). A rise in

Table 4.2 Probability of inflation running:

	below 1.50%	below 2.50%	below 3.50%	below the central projection	in the range (1.5-3.5%)
<b>15q2</b>	1.00	1.00	1.00	0.50	0.00
<b>15q3</b>	1.00	1.00	1.00	0.49	0.00
<b>15q4</b>	0.88	0.98	1.00	0.48	0.12
<b>16q1</b>	0.54	0.80	0.94	0.47	0.40
<b>16q2</b>	0.47	0.72	0.89	0.47	0.42
<b>16q3</b>	0.43	0.67	0.86	0.48	0.43
<b>16q4</b>	0.46	0.69	0.87	0.49	0.41
<b>17q1</b>	0.50	0.72	0.88	0.51	0.39
<b>17q2</b>	0.51	0.73	0.89	0.52	0.37
<b>17q3</b>	0.50	0.72	0.88	0.53	0.38
<b>17q4</b>	0.48	0.70	0.86	0.52	0.39

uncertainty would also produce a deterioration in consumer and business confidence, which would additionally hamper economic growth in the euro area. The extent of the weakening in business conditions would, however, be mitigated by the likely extension of the quantitative easing programme by the ECB and other activities undertaken to stabilise the financial markets. In particular, further depreciation of the euro would partly mitigate the adverse effects of higher debt servicing costs in the euro area periphery countries.

Higher risk premiums and slower growth in the euro area would adversely impact the Polish economy. The increase in the yields on bonds would boost the debt servicing cost, yet the effect on economic growth would be alleviated by a depreciation of the Polish currency and improved competitiveness of Polish exports. Expectations of slower growth in the euro area, would lead to deterioration of consumer and corporate confidence in Poland. Slower investment and consumption growth than envisaged in the baseline scenario would translate into weaker GDP growth and weaker inflationary pressure. However, this influence would be curbed – particularly early in the projection horizon – by the depreciation of the zloty vis-à-vis the euro, which would boost net exports, and increase the expected import prices.

Second source of risk to the July projection – if definitely less significant than the situation in Greece – is the uncertain growth outlook in China. This concerns the Chinese financial system in the first place. In particular, should the effects of overinvestment in the housing sector and in industry prove graver than currently assessed, debt-servicing difficulties of companies might trigger a surge in uncertainty as to the stability of the Chinese banking and shadow banking sector. Another risk factor to financial stability in China

is the considerable debt of local government units related to heavy spending on infrastructural projects. The problems in the banking system and the excessive local governments debt may further dampen investment spending growth. Weaker activity in the Chinese economy would weigh on growth in other emerging market economies and in the advanced economies, particularly those whose exports are predominantly China-oriented.

**Rising domestic demand on the back of stronger economic activity in the euro area**

Considerable uncertainty for the July projection, this time with a potential positive impact on GDP growth in Poland, stems from the possibility that economic growth would be faster in the euro area than envisaged in the baseline scenario. Early in the projection horizon, higher than assumed in the baseline scenario growth in Poland and in the euro area might be related to a stronger, as compared with the current expectations, impact on the euro area economy of the ECB's purchase of government bonds in the secondary market. Should the euro depreciate against the dollar more than expected, the euro area countries would increase their exports, which might result in a faster restoration of fixed assets in the economy, in particular amidst the presently easier access to credit. Low borrowing cost, coupled with the improving labour market conditions, would give a boost to households' purchasing power. The revival in domestic demand would also be supported by a sharper decline in the yields on Polish government bonds – lower debt servicing cost would help to ease fiscal policy in the euro area countries.

Should economic conditions in the European Union prove stronger than assumed in the projection, net exports might, in similarity to their performance in 2015 Q1, continue to drive GDP growth in Poland early in the projection horizon.

Improving situation of Polish exporters could help sustain, over a longer time, the robust investment activity of Polish businesses, observed at the beginning of 2015. A faster improvement in the domestic labour market, coupled with low NBP interest rates, might encourage households to use their higher real wages to boost consumption at the expense of a slower savings rate growth than assumed in the baseline scenario. Higher than assumed in the projection domestic demand growth, supported by the positive contribution of net exports, would translate into a materially higher (than envisaged by the baseline scenario) GDP and consumer price growth.

Late in the projection horizon, economic growth could be sped up by the effect of the implementation of the European Commission's Investment Plan for the years 2015-2017. According to the European Commission the plan may, with the time, boost euro area GDP by EUR 330-410bn, resulting in the creation of 1-1.3 million new jobs.<sup>78</sup> Should the presented risk factors materialise, GDP and CPI inflation would run above the path assumed in the baseline scenario of the projection.

### **Oil prices in the global markets**

Another source of uncertainty for the baseline scenario are prices of oil and other energy commodities in the global markets, observed over the projection horizon. The risk of significant fluctuations in oil prices is primarily driven by factors changing the global oil supply. They include, among other things, the lifting of sanctions imposed on Iran's oil sector, which would result, in the first place, in Iran's exporting its oil reserves and Iranian oil production

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<sup>78</sup> *Investment plan questions and answers*, European Commission, European Investment Bank (see [http://europa.eu/rapid/press-release\\_IP-14-2128\\_en.htm](http://europa.eu/rapid/press-release_IP-14-2128_en.htm))



expanding gradually. Uncertainty about oil supplies sinking below the level assumed in the baseline scenario results from the scale of supply disruptions, mainly from the Middle East and North African countries. The importance of this factor may be all the greater as the recent period has seen higher price responsiveness to oil production disruptions (as a result of the expected constraints in the shale oil extraction in the United States). Demand factors related to growth prospects in the global economy also add to the risks concerning the path of oil prices assumed in the baseline scenario, albeit to a lesser extent. This uncertainty applies in particular to growth in emerging market economies, including China, and the materialization of risk factors for the development of the situation in the euro area economy presented in the preceding paragraphs.

### **Stabilising expenditure rule**

The effect of the stabilizing expenditure rule accounted for in the government's assumptions to the draft regulation amending the law on public finance is another risk factor for the projection. Its adoption, if necessary, in 2016 and 2017 would require the tightening of fiscal policy in relation to the central projection scenario. It could include, among others, an increase in the rates of personal income tax and the government's withdrawal from the planned reduction of VAT rates in 2017. These changes would contribute to higher consumer prices than in the baseline scenario and lower GDP growth. Yet, in the absence of detailed information on the nature of the fiscal adjustment resulting from the use of the expenditure rule, its potential effects were not taken into account in the baseline scenario of the July projection.

Table 4.3 Central path of inflation and GDP projection

	2013	2014	2015	2016	2017
<b>Consumer Price Index CPI (% y/y)</b>	0.9	0.0	-0.8	1.5	1.6
<b>Food prices (% y/y)</b>	2.0	-0.9	-1.9	2.0	1.9
<b>Energy prices (% y/y)</b>	-1.5	-1.0	-3.2	2.6	1.6
<b>Core inflation net of food and energy prices (% y/y)</b>	1.2	0.6	0.4	1.0	1.5
<b>GDP (% y/y)</b>	1.7	3.4	3.6	3.4	3.6
<b>Domestic demand (% y/y)</b>	0.4	4.9	3.7	4.2	4.7
<b>Private consumption (% y/y)</b>	1.2	3.1	3.2	3.5	3.5
<b>Public consumption (% y/y)</b>	1.9	4.5	3.3	3.2	3.5
<b>Gross fixed capital formation (% y/y)</b>	1.1	9.2	9.1	5.8	6.2
<b>Contribution of net exports (percentage points y/y)</b>	-0.9	0.4	-0.1	-0.8	-1.0
<b>Exports (% y/y)</b>	4.8	5.7	7.6	6.6	6.6
<b>Imports (% y/y)</b>	1.8	9.1	7.8	8.3	8.6
<b>Gross wages (% y/y)</b>	3.4	3.6	4.0	5.2	6.1
<b>Total employment (% y/y)</b>	-0.1	1.9	1.0	0.1	0.2
<b>Unemployment rate (%)</b>	10.3	9.0	7.8	7.3	6.9
<b>NAWRU (%)</b>	8.5	8.4	8.1	7.8	7.5
<b>Labour force participation rate (% y/y)</b>	55.9	56.3	56.3	56.4	56.4
<b>Labour productivity (% y/y)</b>	1.8	1.5	2.5	3.3	3.4
<b>Unit labour cost (% y/y)</b>	2.1	1.8	1.3	1.8	2.6
<b>Potential output (% y/y)</b>	2.7	2.6	2.9	3.3	3.6
<b>Output gap (% of potential GDP)</b>	-1.7	-0.8	-0.2	-0.1	0.0
<b>Index of agricultural commodity prices (EUR, 2011=1.0)</b>	1.04	0.93	0.89	0.93	0.92
<b>Index of energy commodity prices (EUR, 2011=1.0)</b>	0.81	0.72	0.55	0.55	0.56
<b>Price level abroad (EUR, 2011=1.0)</b>	1.5	1.1	1.4	1.2	1.4
<b>GDP (% y/y)</b>	0.1	1.3	1.5	1.8	1.7
<b>Current and capital account balance (% of GDP)</b>	1.0	1.0	1.8	0.0	-1.4
<b>WIBOR 3M (%)</b>	3.03	2.52	1.75	1.71	1.71

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

## 5 The voting of the Monetary Policy Council members in February – May 2015

■ Date: 4 February 2015

**Subject matter of motion or resolution:**

Motion to lower the NBP interest rates by 0.25 percentage points.

**MPC decision:**

Motion did not pass.

**Voting of the MPC members:**

**For:** A. Bratkowski  
E.J. Osiatyński

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

■ Date: 4 March 2015

**Subject matter of motion or resolution:**

Motion to lower the NBP interest rates by 0.5 percentage points.

**MPC decision:**

Motion passed.

**Voting of the MPC members:**

**For:** M. Belka  
A. Bratkowski  
E. Chojna-Duch  
J. Hausner  
E.J. Osiatyński  
A. Zielińska-Głębocka

**Against:** A. Glapiński  
A. Kaźmierczak  
A. Rzońca  
J. Winiecki

■ Date: 4 March 2015

**Subject matter of motion or resolution:**

Motion to lower the NBP interest rates by 0.25 percentage points.

**MPC decision:**

Motion was not voted.

■ Date: 4 March 2015

**Subject matter of motion or resolution:**

Resolution No. 1/2015 on reference rate, refinancing credit rate, deposit rate and rediscount rate at the NBP.

**Voting of the MPC members:**

**For:** M. Belka

A. Bratkowski

E. Chojna-Duch

J. Hausner

EJ. Osiatyński

A. Zielińska-Głębocka

**Against:** A. Glapiński

A. Kaźmierczak

A. Rzońca

J. Winiecki

■ Date: 15 April 2015

**Subject matter of motion or resolution:**

Resolution No. 2/2015 on approving the Annual Financial Report of Narodowy Bank Polski prepared as of 31 December 2014.

**Voting of the MPC members:**

**For:** M. Belka

A. Bratkowski

E. Chojna-Duch

A. Glapiński

J. Hausner

A. Kaźmierczak

EJ. Osiatyński

A. Rzońca

J. Winiecki

A. Zielińska-Głębocka

**Against:**

■ Date: 5 May 2015

**Subject matter of motion or resolution:**

Resolution No. 3/2015 on approving the report on monetary policy implementation in 2014.

**Voting of the MPC members:**

**For:** M. Belka

A. Bratkowski

E. Chojna-Duch

A. Glapiński

J. Hausner

A. Kaźmierczak

EJ. Osiatyński

A. Rzońca

J. Winiecki

A. Zielińska-Głębocka

**Against:**

■ Date: 5 May 2015

**Subject matter of motion or resolution:**

Resolution No. 4/2015 on the evaluation of the activities of the NBP Management Board as regards the implementation of the monetary policy guidelines for the year 2014.

**Voting of the MPC members:**

**For:** M. Belka

A. Bratkowski

E. Chojna-Duch

A. Glapiński

J. Hausner

A. Kaźmierczak

EJ. Osiatyński

A. Rzońca

J. Winiecki

A. Zielińska-Głębocka

**Against:**

■ Date: 19 May 2015

**Subject matter of motion or resolution:**

Resolution No. 5/2015 on approving the report on the operations of Narodowy Bank Polski in 2014.

**Voting of the MPC members:**

**For:** M. Belka

A. Bratkowski

E. Chojna-Duch

J. Hausner

A. Kaźmierczak

E.J. Osiatyński

J. Winiecki

A. Zielińska-Głębocka

A. Glapiński and A. Rzońca were absent.

**Against:**



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