NBP Narodowy Bank Polski

Monetary Policy Council

March 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 20 February 2015.

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

Contents

Summary

Global economic activity remained moderate in 2014 Q3 and Q4, while business conditions continued to vary significantly across countries. Strong recovery was sustained in the United States, supported by expansionary monetary policy and a fading drag from fiscal tightening. In contrast, euro area economic growth remained sluggish, adversely affected by structural problems faced by some member countries, such as persistently high debt levels and related decline in lending. In major emerging economies, the pace of growth decelerated, with GDP growth in Russia decreasing close to zero. In Central and Eastern European countries, moderate activity continued, dragged down by low demand from the euro area and Russia.

Since the publication of the previous *Report*, inflation has dropped substantially in most economies, in many of them turning into deflation. Lower inflation resulted from a sharp decline in oil prices in global commodity markets, which took place against the backdrop of a moderate global economic growth. In the United States, consumer price growth slowed below 1.0% y/y despite the observed recovery. In the euro area, in turn, deflation was accompanied by weak economic activity. In some emerging economies, including Russia, the decline in inflation was mitigated by the depreciation of their currencies. In most countries of Central and Eastern Europe, price growth subsided to below zero.

Amidst low inflation, the major central banks have been keeping interest rates at historically low levels. However, different business conditions across countries were conducive to further divergence in their monetary policies. The Fed has been signalling that it might increase its interest rate in 2015, while the ECB has expanded its quantitative easing considerably. Monetary policy was eased in European countries with strong economic links to the euro area, in some of them also through lowering the interest rates below zero. In particular, the SNB lowered its interest rates to negative levels, though a simultaneous abandoning of the exchange rate floor against the euro resulted in a temporary monetary tightening. Monetary policy was loosened in part of the countries, that saw a slide in inflation driven by the drop in commodity prices. In turn, in some economies that experienced an increase in risk aversion resulting in depreciation of their currencies, central banks increased interest rates and intervened on the FX market.

The divergent monetary policies of major central banks, along with the weakening global economic outlook and a rise in geopolitical risks were the main factors behind developments in financial asset prices and exchange rates since the publication of the previous *Report.* The US dollar has strengthened considerably in recent months, especially against the euro, as the Fed pointed to a possible interest rate increase in 2015, the ECB weakend significantly its monetary policy and risk aversion in the international financial markets enhanced. There was also a rise in appreciation pressure on other safe haven currencies, particularly on the Swiss franc, which strengthened significantly after the SNB abandoned the exchange rate floor against the euro. Appreciation of the safe haven currencies and depreciation of the emerging market currencies were accompanied by decrease in government bond yields in many economies. It was particularly noticeable in the euro area member states, as the ECB expanded its asset purchases. Stock market indices have increased across the world, notably in the euro area, underpinned by substantial easing of the ECB's policy.

Prices of consumer goods and services in Poland have been falling since July 2014, with the CPI standing at -1% at the end of 2014[1]. Deepening deflation primarily resulted from continued falls in fuel and food prices, which were related to significant declines in global commodity prices. Factors pulling down consumer price growth also included lack of demand pressure reflected in decline in all core inflation measures, and lack of cost pressure confirmed by PPI deflation and fall in import prices. Most indicators of inflation expectations have decreased, although the expectations of majority surveyed agents remain positive.

In 2014 Q3 and Q4, Poland saw economic growth sustained at a rate close to 3.0%, yet somewhat slower than in 2014 Q2. Domestic demand continued to be the primary driver of growth. In particular, investment expenditures continued to expand at a robust pace, supported by sound financial conditions of enterprises and high capacity utilization, along with acceleration in both local government spending and residential investment growth. Economic activity in Poland was also driven by consumption growing at stable pace and fuelled by improving labor market conditions and rising consumer sentiment. Alongside that, the contribution of net exports to GDP growth remained negative due to weak external demand.

Growth in the number of working persons in the economy accelerated in 2014 Q3 and Q4, mostly driven by a recovery in services. The rise in employment is accompanied by a decline in unemployment. Nonetheless, stable growth in wages and moderate growth in unit labour costs point to a continued lack of wage pressure in the economy.

Since the interest rate cut of 0.50 percentage points in October 2014, the Monetary Policy Council has kept the NBP interest rates unchanged, including the reference rate of 2.0%.[2] Financial market participants expect a further decrease of the NBP interest rates, by a total of 0.50 percentage points until mid-2015. Expectations of an interest rate cut by the NBP and the monetary policy easing by the ECB translated into a fall in Polish government bond yields to their historical lows. At the same time, the rise in risk aversion contributed to a decline in stock prices in Poland. The exchange rate of the zloty has depreciated against the US dollar and against the Swiss franc, while simultaneously gaining against the euro. The developments on the Polish FX market have been determined mainly by external factors, including the monetary policy of major central banks and a rise in risk aversion. The recovery in the housing market continued as reflected in high home sales and stable prices. The recovery was supported by an improvement in the labour market, high loan affordability and the relatively low interest rates.

Total lending growth – despite some acceleration – has remained moderate. The acceleration in total lending was driven by an increase in corporate loan growth, supported by the easing of credit standards and a fall in interest on loans. At the same time, growth in household loans declined slightly due, in part, to tighter lending standards applied by banks for this credit category.

In 2014 Q3, the deficit on the current account widened slightly, while remaining low. The rise in the deficit on the year before partly reflected the increase in the income of foreign direct investors. The deficit was

[1] In January 2015, according to the preliminary GUS (Central Statistical Office) data, inflation declined to -1.3%% y/y. However, the data on inflation in January 2015 may be revised as a result of changes in the structure of the CPI basket introduced by GUS at the beginning of each year.

[2] In March, the Monetary Policy Council decided to decrease interest rates by 0.50 percentage points, to 1.50% in the case of the reference rate. At the same time, the Council announced that the decision to lower the interest rates concluded the monetary easing cycle.

further risen by flagging external demand observed amidst a concurrent expansion in domestic demand, which reduced the surplus in Poland's external trade. Due to the widening of the current account deficit in 2014 Q3, Poland's indicators of external imbalances deteriorated slightly on their 2014 Q2 performance. That notwithstanding, the current and capital account balances continued to add up to a surplus.

The *Inflation Report* is structured as follows: in Chapter 1 economic developments in the external environment of the Polish economy are presented in the context of their impact on inflationary developments in Poland. Those developments as well as domestic factors affecting them are discussed in Chapter 2. *Minutes of the Monetary Policy Council Decision-Making Meetings* held in November 2014 – February 2015, together with the *Information from the meeting of the Monetary Policy Council* in March 2015, are presented in Chapter 3. Minutes from the MPC meeting held in March will be published on 19 March 2015 and so will be included in the next *Report*. MPC voting records in the period October 2014-January 2015 can be found in Chapter 5. This *Report* also includes four boxes: "Developments in the long-run inflation expectations in the euro area", "The ECB's Expanded Asset Purchase Programme", "Floating the Swiss franc and its potential impact on household consumption in Poland" and "The Impact of the fall in oil prices on inflation and GDP in Poland".

Chapter 4 of the Report presents the projection of inflation and GDP based on the NECMOD model, which is one of the inputs into the Council's decision-making process on the NBP interest rates. In line with the March projection – prepared under the assumption of unchanged NBP interest rates and taking into account data available until 17 February 2015 – there is a 50-per cent probability that the annual price growth will be in the range of -1.0-0.0% in 2015 (as compared to 0.4-1.7% in the November 2014 projection), -0.1-1.8% in 2016 (as against 0.6-2.3%) and 0.1-2.2% in 2017. At the same time, the annual GDP growth – in line with this projection – will be, with a 50-per cent probability, 2.7-4.2% in 2015 (as compared to 2.0-3.7% in the November 2014 projection), 2.2-4.4% in 2016 (as against 1.9-4.2%) and 2.4-4.6% in 2017.

1 External environment of the Polish economy

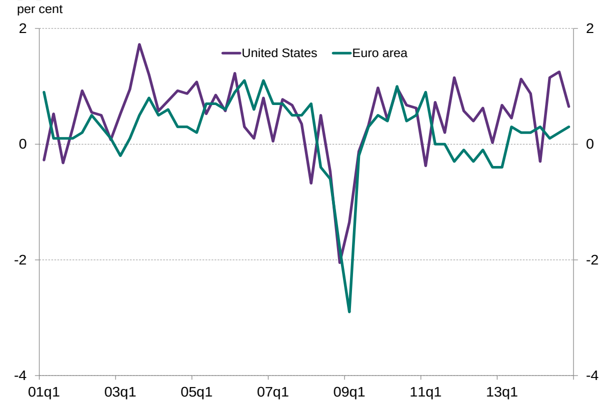
1.1 Global economic activity

Global economic activity remained moderate in 2014 Q3 and Q4. However, business conditions continued to vary significantly across countries. In the United States, recovery was sustained, whereas GDP growth in the euro area remained sluggish (Figure 1.1). In major emerging economies, the pace of growth decelerated, with GDP growth in Russia sliding close to zero.

Robust recovery continued in the United States in 2014 Q3 and Q4 (Figure 1.1).[3,4] It was supported by expansionary monetary policy and a fading drag from fiscal tightening. Alongside that, employment rose strongly, against the backdrop of further fall in unemployment (Figure 1.3), while consumer sentiment improved. As a result, consumption growth expanded. At the same time, investment was on the rise, relatively robust industrial output growth continued and corporate sentiment remained favourable.[5]

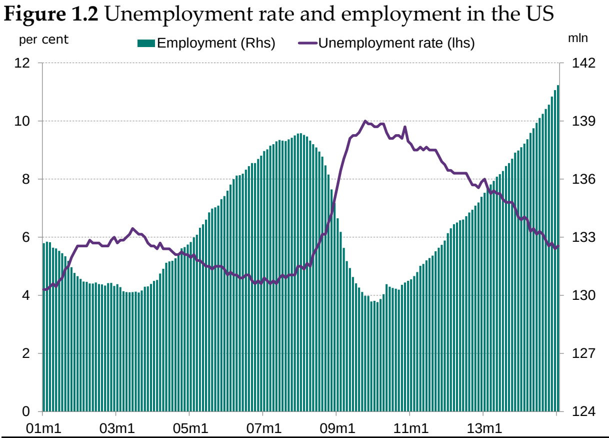
The euro area economic growth remained low in 2014 Q3 and Q4 (accordingly 0.2% and 0.3% q/q; Figure 1.4). In Germany, the biggest economy of this currency area, GDP growth accelerated to 0.7% q/q in 4Q, following a slowdown close to zero in 2Q and 3Q. Meanwhile, in some of the countries having previously experienced a fall in GDP (including Spain, Greece and Portugal)[6] recovery was gaining strength. In contrast, in some large economies, including France and Italy, economic activity growth sustained close to zero.

Figure 1.1 Economic growth in selected advanced economies (q/q)



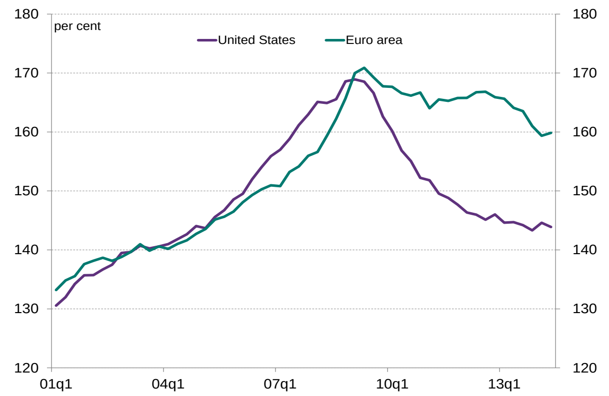
Source: Bloomberg data.

Figure 1.2 Unemployment rate and employment in the US



Source: BLS data.

Figure 1.3 Non-financial private sector debt in the US and the euro area (per cent of annual GDP)



Source: BIS, Eurostat, BEA data and NBP calculations.

[3] In 2014 Q3 and Q4, GDP growth in the United States amounted to, accordingly, 1.2% q/q and 0.7 q/q as compared with 1.0% q/q in 2014 Q2.
[4] The GDP growth data presented in this chapter are seasonally adjusted.
[5] Following relatively high growth in 2014 Q3, investment growth slowed down to 0.6% q/q in 2014 Q4.
[6] Although GDP in Greece fell by 0.2% q/q (against an increase of 0.7% q/q in the 3Q), economic growth in the y/y terms remained relatively high comparing to previous years (it amounted to 1.7% y/y).

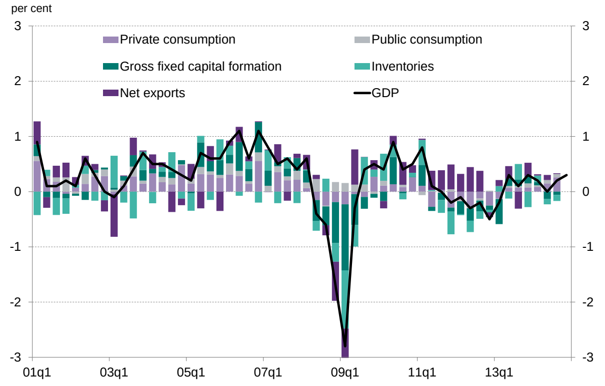
Output growth in the euro area continued to be adversely affected by structural problems faced by some countries, such as persistently high debt levels translating into a decline in lending (Figure 1.4).[7] Furthermore, amidst weak external demand growth and no expectations of a sizeable domestic demand rebound, investment demand remained weak.[8] Under the circumstances, industrial output growth – despite some rise in 2014 Q4 – continued to be low and corporate sentiment stayed weak (Figure 1.5).

At the same time, economic activity in the euro area was supported by improving labour market conditions, notably a rise in employment (Figure 1.6), as well as the decline in fuel prices which increased purchasing power of households' incomes. Consequently, consumption growth gained momentum in 2014 Q3, with further growth in 2014 Q4 indicated by retail sales data.

In Central and Eastern European countries, GDP growth in 2014 Q3 and in 2014 Q4 remained moderate (Figure 1.7). On the one hand, output growth was supported by improving labour market conditions and rising consumer sentiment, which reinforced domestic demand, above all consumption growth. On the other hand, economic activity in the countries of the region was being dragged by the persistently low demand from the euro area and Russia. As a result, many of those economies saw weaker export growth and continuously sluggish industrial output growth.

In the largest emerging economies, activity growth declined in the second half of 2014. In China, GDP growth fell to 7.3% y/y in 2014 Q3 and Q4 (from 7.5% in 2014 Q2). The adverse impact on this economy came primarily from the flagging investment, particularly in the real estate market (Figure 1.8), while strong consumer demand and

Figure 1.4 GDP growth in the euro area (q/q)



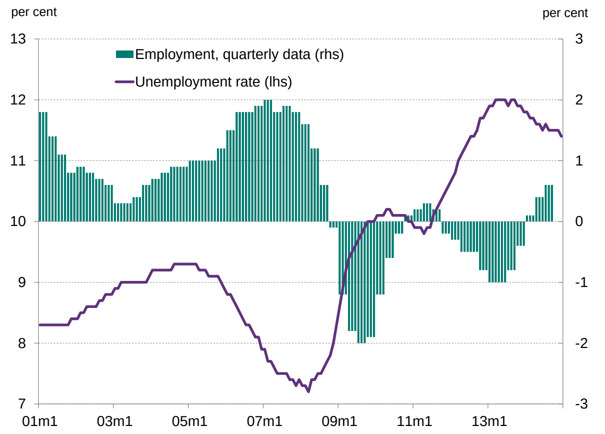
Source: Eurostat data.

Figure 1.5 Industrial output growth* and PMI index in manufacturing in the euro area

Source: Eurostat data, Markit.

* Change in the three-month moving average of the industrial output as against the average of three months before.

Figure 1.6 Employment (y/y) and unemployment rate in the euro area



Source: Eurostat data.

[7] This decline has been gradually levelling off.

[8] In 2014 Q3, investment decreased.

positive net exports were the factors supporting economic activity in China.

In Russia, GDP growth slowed down considerably in 2014 Q3 and Q4. Due to economic aftermath of the war with Ukraine, plummeting oil prices and the currency crisis, corporate sentiment sank considerably, leading to a fall in investment. At the same time, retail sales picked up somewhat. This, however, was related to rising inflation expectations sparked by the sharp depreciation of the rouble and the ensuing accelerated purchases of durable goods.

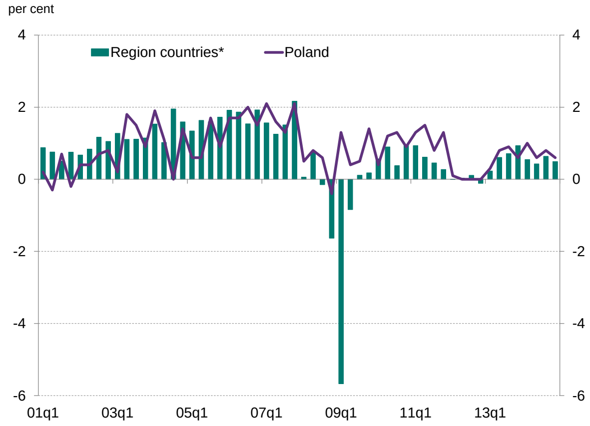
1.2 Inflation developments abroad

Since the publication of the previous *Report*, inflation has dropped substantially in most economies (Figure 1.9*),* in many of them turning into deflation. Lower inflation resulted from a sharp decline in oil prices in global commodity markets (see Chapter 1.4 *Global commodity markets*), which took place against the backdrop of a moderate global economic growth.

In the United States, consumer price growth slowed to 0.8% y/y in December 2014 (from 1.7% y/y in October; Figure 1.10) amidst a slight drop in core inflation, occurring despite the observed recovery. In the euro area, in turn, the slump in oil prices – together with weak economic growth and persistently lowering core inflation – led to deflation (in January 2015 price growth amounted to -0.6% y/y).

Also in most countries of Central and Eastern Europe with low – relative to their previous performance – economic activity, price growth subsided to below zero, (Figure 1.11). Apart from plunging energy prices, the decline in inflation in the region's countries resulted from a fall in food prices due to good harvest.

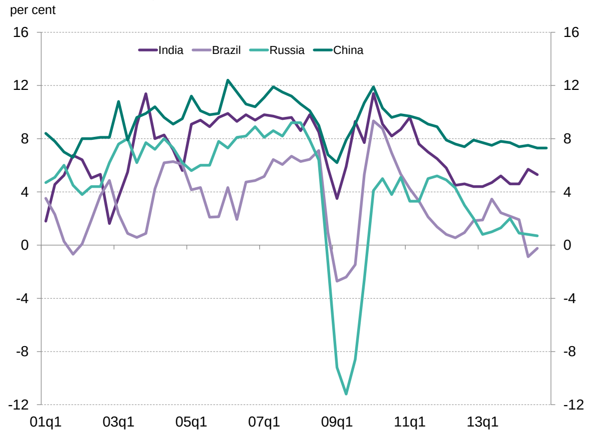
Figure 1.7 GDP growth in Poland and region countries* (q/q)



Source: Eurostat data.

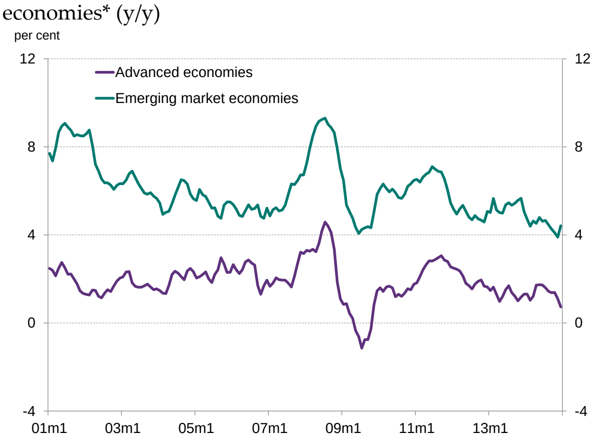
* Region countries include: Czech Republic, Slovakia, Hungary, Lithuania, Romania, Latvia, Estonia, Bulgaria. The aggregate calculated as a weighted average (weights according to shares of the countries in Polish exports)

Figure 1.8 GDP growth in China, India, Brazil and Russia (y/y)



Source: Bloomberg data.

Figure 1.9 Inflation in major advanced and emerging market economies* (y/y)

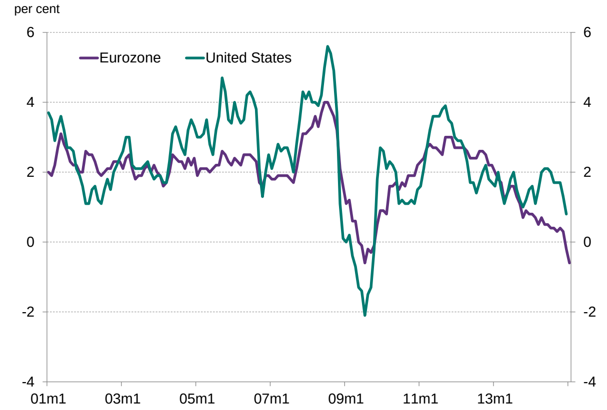


Source: Bloomberg data, NBP calculations.

* 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.

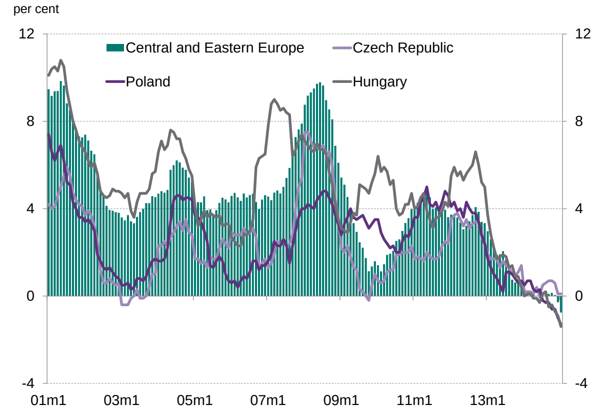
In China, sinking prices of fuels and food, coupled with relatively weak economic activity growth, brought inflation down to its lowest levels in five years. In some other emerging economies, the decline in inflation was mitigated by the depreciation of their currencies. In Russia, a sharp depreciation of the rouble and the restrictions imposed on imports of food from EU countries resulted in price growth picking up substantially (to 15.0% y/y in January 2015 as against 8.3% y/y in October 2014).

Figure 1.10 CPI inflation in the United States and HICP inflation in the euro area (y/y)



Source: Bloomberg data.

Figure 1.11 CPI inflation in the Central and Eastern Europe region* and its major economies (y/y)



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

Box 1: Developments in the long-run inflation expectations in the euro area

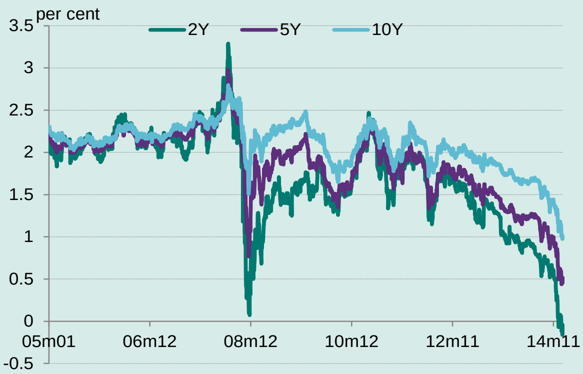
Slow economic growth and sub-zero inflation levels in the euro area, combined with the insufficient, so far, effects of monetary policy easing, induced the ECB in January 2015 to embark on purchases of Treasury securities of the euro area countries (see Chapter 1.3 *Monetary policy abroad and international financial markets* and Box 2 *The ECB's Expanded Asset Purchase Programme*). In the opinion of the ECB, this decision is bound to raise inflation levels and permanently anchor medium- and long-term inflation expectations at the central bank's target of below but close to 2%. Developments in euro area inflation expectations have gained particular significance to the ECB, since nominal short-term interest rates in the region have long been running at close to zero, leaving long-term interest rates to be determined precisely by long-term inflation expectations.

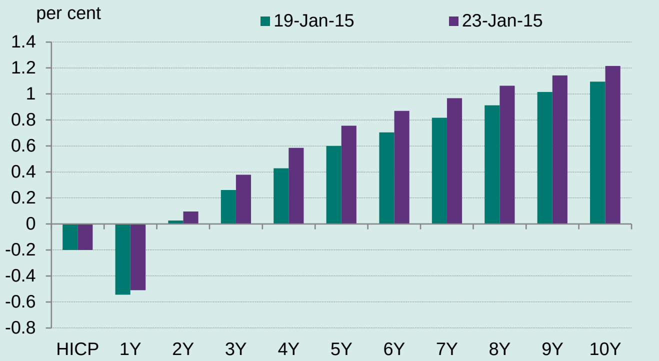
Medium- and long-term inflation expectations are measured with the use of surveys or inferred from the prices of financial instruments. In the case of the euro area, the market measures of inflation expectations most useful in analysing medium- and long-term expectations are derivative instruments – inflation swaps and options (typically based on HICP excluding tobacco products)[9].

[9] Another widely applied market gauge of inflation expectations is the break-even rate, reflecting the inflation level that should be reached in order for yields on same-maturity fixed-coupon (nominal) bonds and inflation-indexed bonds to equalise in nominal terms. The break-even rate is not, however, a "clean" measure of inflation expectations in the horizon set by the bond's maturity, because it also includes risk premiums (issuer's credit risk and liquidity risk). Besides, break-even rates can be determined only on

In the zero-coupon inflation swap with maturity T, the parties "bet" on the magnitude of the future change in the price index over the horizon T. One party will receive the following payoff : *face value*×[(1+*fixed rate*)^{T}-1], while the other party will get: *face value*×[(HICP$_{T-2}$/HICP$_{t-2}$)-1], where HICP$_{x}$ represents the value of single-base price index in the period x, and t denotes the trade date. The value of the first payoff is known at the time of the transaction, the other one depends on the – *ex ante* unknown – level of the price index in T-2. For the transaction to be equally attractive for both parties, the present value of both payoffs should be equal. Thus, the swap rate quoted in the market represents average inflation until maturity of the transaction as expected by market participants. Since 1Y to 30Y contracts are quoted in the euro area, it is possible to infer on this basis what average level of euro area inflation is expected by investors in the respective horizons (Figure B. 1.1.)

Figure B.1.1 Rates of 2Y, 5Y and 10Y inflation swaps (left panel) and the term structure of inflation swaps as of 15 January 2014 (right panel)

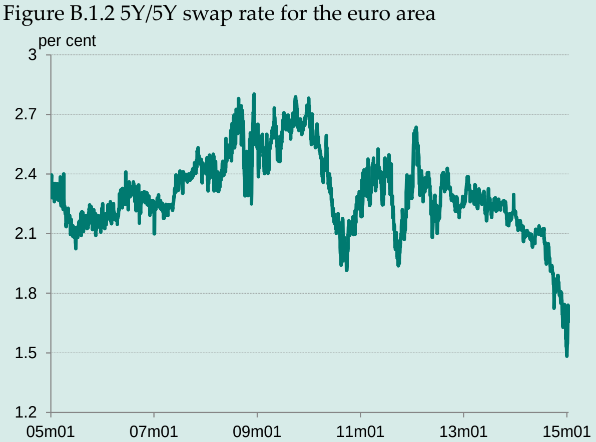




Source: Bloomberg. The HICP category in the right panel of the chart represents the last known reading of the HICP index (excluding the prices of tobacco products) for the euro area.

Figure B.1.1 presents the evolution of swap rates over time for three selected maturities, and the present term structure of swap rates against current inflation - directly before (19 January 2015) and after (23 January 2015) the announcement of the ECB's extended asset purchases. Despite their markedly higher volatility during the crisis, until 2012 Q3 long- and medium-term inflation expectations were running at levels consistent with the ECB's definition of price stability. Yet since then, they have embarked on a steep downward trend. The ECB's announcement of quantitative easing produced a slight rebound in inflation expectations (of 13 bps on average, Figure B.1.1, right panel), yet market participants seem to continue to expect very low inflation levels, at an average of 1% over the next 10 years.

Figure B.1.2 5Y/5Y swap rate for the euro area



Source: Bloomberg data, own calculations.

By analogy with the term structure of interest rates, the zero coupon inflation curve also enables a determination of forward inflation rates, i.e. expected average inflation levels between fixed dates in the future. This is how the rate of the 5Y/5Y inflation swap, considered by the ECB the best market-based approximation of medium-term inflation expectations, is determined (Figure B.1.2). This measure also points to euro area inflation expectations trending to historical lows, with only a slight – so far – increase in response to the announcement of quantitative easing by the ECB. Following a decline to 1.5%, the 5Y/5Y rate rose by approx. 15 bps directly on the ECB's announcement of the expanded asset purchases, which

the basis of bonds by specific issuers – e.g. Italy, France etc. - and hence they cannot serve as a basis for the calculation of inflation expectations for the entire euro area.

shows that market participants continue to expect inflation levels markedly below 2% in the second half of the decade.[10]

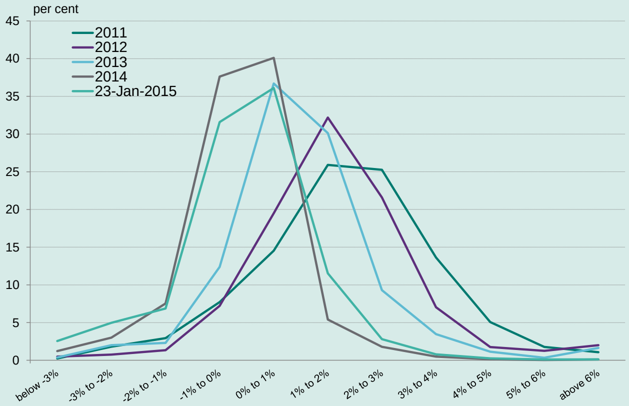
Besides the swaps, another instrument for inferring market participants’ expectations are inflation cap and floor options. The cap option pays the difference between the change in the price index (HICP) in the period until maturity and the agreed exercise rate if this difference is positive; otherwise, the payoff is zero. The exercise rate is determined as average annualised inflation in the horizon of the transaction. The floor option, in turn, pays the difference between the exercise rate and the change in the price index where this difference is positive and zero otherwise. In similarity to inflation swap quotations, prices of inflation options contain the information about the expectations of market participants concerning future inflation. Yet while the swaps solely allow us to determine where – approximately – the central tendency of inflation is in a given future horizon, options provide for the determination of an entire probability distribution for inflation (the so-called implied distribution). When the distribution of future inflation is known, it is in turn possible – based on its standard deviation – to estimate investors’ uncertainty about the central tendency. Also, by analysing the skewness of the distribution, we can estimate the balance of risks related to the expected value.[11]

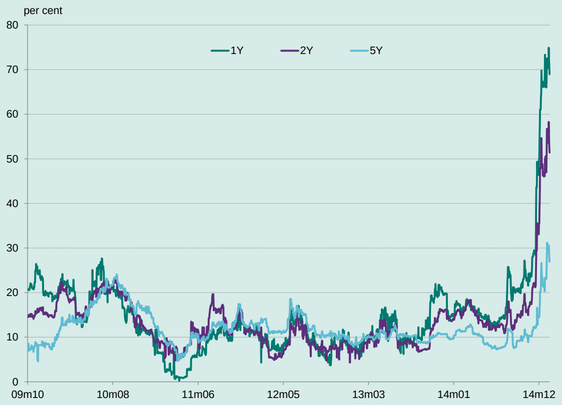
Figure B.1.3 presents distributions implied from the prices of 2Y inflation options estimated for the end of 2011, 2012, 2013, 2014 and 23 January 2015 - i.e. immediately after the announcement of the new quantitative easing programme by the ECB. These distributions confirm the downward trend – already visible in the swap quotations – in the level of expected 2-year inflation in recent years (see Figure B.1.1, left panel), but they also show a material change in the balance of risks around the expected inflation levels. In 2011, investors' inflation expectations were still relatively symmetrical, with a nearly 50% likelihood of inflation exceeding 2%. With each subsequent year, though, the distributions shifted towards the left, and the accumulation of likelihood in the right tail of the distribution decreased steadily. At the end of 2014, the implied probability of inflation running above 2% dropped slightly below 3%, to subsequently edge up to 4% after the ECB's January decision. At the same time, the implied probability of deflation rose considerably in the second half of 2014, running at approx. 50% in the horizon of the nearest 2 years (Figure B.1.3, right panel).

[10] Although it seems natural to interpret the forward rate as inflation expected at a fixed date in the future, this is not strictly correct. For the forward swap rate to express future expected inflation, a correction should be applied to it (the so-called convexity adjustment). In order to determine this correction, it is necessary to construct and calibrate a model for pricing inflation derivatives or to interpolate market quotations. Since, however, the value of the convexity adjustment tends to be too insignificant to affect the overall assessment of market trends (for the 5Y rate it amounted to 0.5 bp), it is often overlooked in analytical applications.

[11] It is necessary to exercise caution when interpreting the distributions implied from option prices, as in practice options are quoted only for selected exercise rates; thus to obtain the complete distribution, one must interpolate or extrapolate the missing data. Moreover, implied distributions are constructed under the assumption of investors' neutrality to risk, whereas in fact they may be risk-averse, which implies subjectively higher values assigned to the contracts that pay off in extreme states of the world. Since e.g. severe deflation is a development typical of a highly undesirable state of the world, its probability implied from option prices will be higher than in reality. The probability that very high inflation should materialise will be similarly overestimated. On the other hand, the implied probabilities of less painful developments will be underestimated versus their real values. Thus, investors' aversion to developments from the tails of the distribution may make the implied-distribution tails heavier than in reality, and hence the implied uncertainty may be higher than in reality. Although the implied levels of probabilities do not, in themselves, carry important information – assuming that investors' attitude towards the states of the world from the tails of the distribution does not change significantly – the evolution of implied distributions (or their selected parameters) in time may provide a valuable source of information.

Figure B.1.3 Probability distributions of 2-year inflation implied from the prices of the euro area HICP options (left panel) and the probability of deflation in the 2-year horizon (right panel)





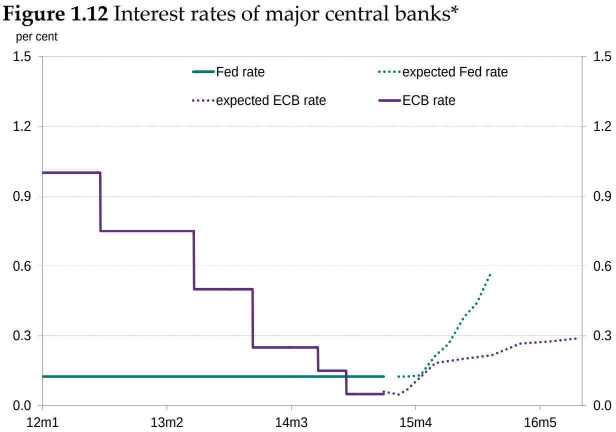
Source: Bloomberg data, own calculations.

In sum, prices of derivative instruments - inflation swaps and options - show that market participants expect an extended period of very slow price growth in the euro area, and the balance of risks points to high probability of deflation continuing in the subsequent years. Under the circumstances, the ECB announcement of the asset purchase programme - and of its continuation until inflation path returns permanently to 2% - should be conducive to rising medium- and long-term inflation expectations. At the same time, strong quantitative easing should limit the probability of deflation as perceived by market participants, which - amidst unchanged interest rates - has a loosening effect on monetary conditions in the euro area.

1.3 Monetary policy abroad and international financial markets

The major central banks have been keeping interest rates at historically low levels. In addition, the ECB has expanded its quantitative easing considerably, while the Fed has been signalling that it might increase its interest rate in 2015 (Figure 1.12, Figure 1.13). The divergent monetary policies of major central banks, along with the weakening global economic outlook and an increase in geopolitical risks were the main factors behind developments in financial asset prices and exchange rates over the recent months.

Figure 1.12 Interest rates of major central banks*



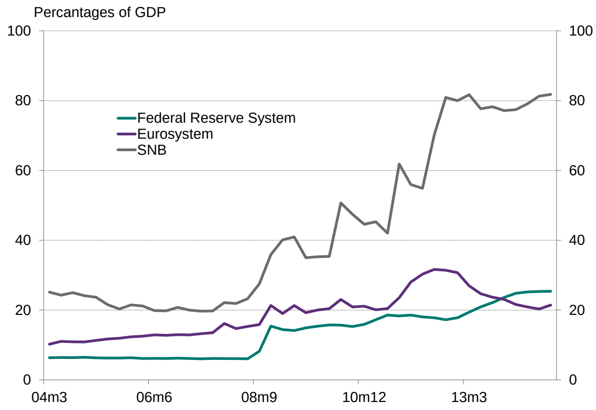
Source: Bloomberg data.

* Expected Fed's rate – fed funds futures; expected ECB's rate –EURIBOR option.

The Fed has kept its interest rates close to zero and continued to reinvest the principal payments from its security holdings and roll over the maturing Treasuries, which resulted in further expansion of its balance sheet. At the same time, the Fed does not exclude a gradual increase of its interest rate, conditioning it on the level of employment and inflation. According to market expectations as of late February, the fed funds rate may be raised in 2015 Q4.

In the recent months, the ECB has maintained its interest rates at historical lows, keeping the deposit rate negative (Figure 1.12). It has also continued the purchase of covered bonds and asset-backed securities, and conducted another targeted longer-term refinancing operation. Nonetheless, the measures taken until mid-January proved insufficient to counteract the weakness in economic growth and prevent both the price growth rate from turning negative and inflation expectations from falling sharply. Therefore, the ECB expanded its asset purchases to a significant extent, The Bank announced it would buy incorporating government bonds issued by member states, government agencies and EU institutions. The purchases will continue at least until end September 2016.[12] The combined monthly amount of the purchases will amount to EUR 60 billion (see Box 2: *The ECB's Expanded Asset Purchase Programme*).[13]

Figure 1.13 Assets of major central banks, January 2008 = 100



Source: Bloomberg data, NBP calculations.

Box 2: The ECB's Expanded Asset Purchase Programme

On 22 January 2015, the ECB announced the Expanded Asset Purchase Programme, which is an extension of the its monetary policy programmes in terms of both scale and scope. Under the extended programme, the Eurosystem's national central banks from March on will purchase private and public sector securities worth EUR 60bn a month on the secondary market. The purchases will continue until the end of September 2016 or, in any case, until the Governing Council sees a sustained adjustment in the path of inflation, consistent with the ECB's definition of price stability of below, but close to 2% over the medium term.

Economic background of the new programme

The economic conditions in the euro area were consistently weak over the past year. The economic growth was subdued, while inflation had deviated substantially from the ECB's inflation aim. Along with a sharp decline in inflation expectations these were posing a threat to price stability in the medium term (see Chapter 1.2 *Inflation developments abroad,* Box 1 *Developments in the long-run inflation expectations in the euro area*). Hence, last year the ECB took measures to substantially ease monetary conditions in the euro area. Above all, the Bank has decreased

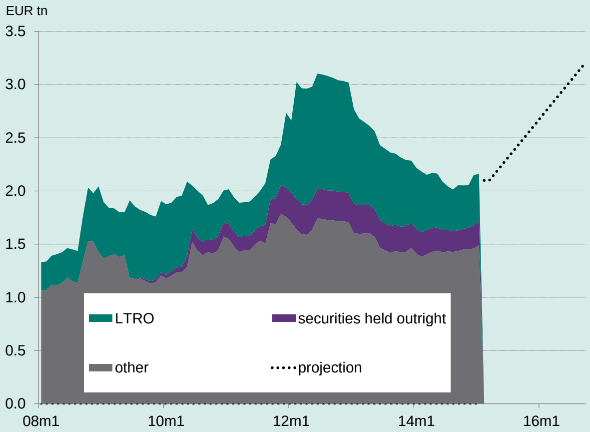
[12] Apart from announcing government bond purchases, the ECB lowered the interest rate on the TLTRO operations by 0.10 percentage points so that it is equal to the rate on the main refinancing operations. Relatively high interest rates could have contributed to lower allotment of the first two TLTROs. The reduced interest rate will apply to future TLTROs, including the first scheduled for mid-March 2015.

[13] In recent months, also Bank of Japan eased its monetary policy significantly. At the end of October 2014, it increased the target for the annual monetary base growth from JPY 60-70bn to JPY 80 bn. It also expanded the scale of government bond purchases from JPY 50bn to JPY 80bn and extended the target maturity of its portfolio from 7 years to 7-10 years.

the policy rates down to near zero, enhanced its forward guidance and indicated that it intented to increase the Eurosystem's balance sheet back to its 2012 level, i.e. by approximately EUR 900 billion. To this end, the Bank launched targeted longer-term refinancing operations (TLTROs). It also started to purchase asset-backed securities (ABSs) and resumed the programme of covered bond purchases.

While the interest rate on corporate loans receded somewhat after these programmes had been launched, they proved insufficient to achieve the intended balance sheet expansion (Figure B.2.1). The TLTRO allotment of EUR 212 billion was far below the their limit (EUR 400 billion[14]). The scale of the asset purchases was modest (EUR 42.6 billion), in part probably due to relatively small size of the market for these assets. In addition, the increase in the Eurosystem's balance sheet was being contained by the repayments of the funds borrowed from the ECB by commercial banks under the LTRO operations (altogether approximately EUR 1trillion in two operations, one in December 2011 and one in February 2012).
In addition, in December 2014 the euro area slid into deflation, while inflation expectations had fallen considerably.

Figure B.2.1. Eurosystem's balance sheet and its components



Source: Bloomberg data.
Note: the projection of Eurosystem's balance sheet assumes monthly purchases of EUR 60 billion and no change in the remaining balance sheet items.

Figure B.2.2. Share in Treasury bond offering according to capital key

Source: Bloomberg data.
*/ Subscription of the country's capital as share in ECB capital paid up by euro area countries.

Terms and objectives of the new programme

On 22 January, the ECB announced an expansion of its previous asset purchase programme by:

- **extending the range of assets to be purchased, to include the sovereign bonds of member states**, euro area agencies and European institutions with maturities of 2 to 30 years, subject to their eligibility as ECB collateral, and – in the case of countries covered by the financial assistance programmes – provided that the progress of the issuer country under the programme is deemed as satisfactory[15];
- **considerably expanding the scale of asset purchases**: the purchases of sovereign bonds, ABSs and covered bonds are to amount to EUR 60 billion per month and last from March 2015 to at least the end of September 2016; and in any case, until the inflation path has returned to the level consistent with the ECB's definition of price stability.

[14] Calculated based on the value of loans extended by banks to private agents (for more, see "Monetary policy easing by the ECB since the previous Inflation Report", *Inflation Report, November 2014* and "Monetary policy easing by the ECB", *Inflation Report, July 2014*).

[15] In the case of longer-maturity bonds, the eligible collateral includes, in principle, instruments that have at least BBB- rating (CQS3). Yet in 2012 the ECB abolished the minimum rating requirements for the sovereign bonds of countries subject to the financial assistance programmes, which means that the sovereign bonds of these countries continue to be accepted as collateral by the ECB. Under the expanded asset purchase programme, the Eurosystem will be able to buy the bonds of all euro area member states, including Greece provided that the outcome of the review under the adjustment programme in 2015 is positive.

The assets will be purchased in the secondary market, in proportion to the shares of the national central banks in the ECB capital (Figure B. 2.2). To prevent excessive concentration, it was decided that sovereign bond purchases will not exceed one third of the total issuance of a given central government and one fourth of the issuance of a specific bond. Nevertheless, the application of the capital key means that more than 60% of the bonds purchased will concentrate in three countries – Germany, France and Italy. Any potential losses on the purchased assets will be largely borne by the national central banks of the Eurosystem – i.e. without risk-sharing – which is aimed to contain the potential fiscal transfers between the area's countries.[16]

Given the assumed monthly scale and horizon of the purchases, the total size of the programme may amount to approximately EUR 1.1 trillion by end September 2016. This should allow for a considerable expansion of the Eurosystem's balance sheet, and hence a significant easing of monetary conditions in the euro area. According to the ECB, the expanded asset purchase programme will stimulate economic growth and inflation in the euro area through the following channels:[17]

- **the signalling channel**: the considerable (larger than expected) scale of the announced asset purchases is to highlight the ECB's determination and its legal and institutional capacity to prevent excessive tightening of monetary conditions – and in addition to enhance the Bank's forward guidance. This should lift inflation expectations and boost the sentiment of economic agents in the euro area;
- **the price channel:** the purchases should raise the prices or lower yields of the securities acquired,(by reducing their risk premia), which in turn should lead to a decline in interest rates on a range of debt instruments and loans;
- **the portfolio balance (quantitative) channel:** the additional liquidity injected into the financial system through the asset purchases is supposed to encourage restructuring of investors' portfolios, also by an increase in exposure to assets not covered by the ECB programme (e.g. corporate bonds), which should propagate the impact of the monetary easing in the euro area.

The above list of QE transmission channels is based on the experience of other central banks that have run similar programmes (the Federal Reserve, the Bank of England and the Bank of Japan) as well as the experience of the ECB itself, which previously purchased euro area sovereign bonds under the Securities Markets Programme (SMP) in 2010-12. In both cases, material differences between the programmes make it impossible to formulate inferences about the possible impact of the ECB's new asset purchase programme on the euro area economic activity and inflation.[18]

As the Fed pointed to a possible interest rate increase in 2015, the US dollar has strengthened considerably in the recent months, especially against the euro, which has in turn been weakened by the significant monetary policy easing by the ECB (Figure 1.14). The appreciation of the dollar was also supported by an increase in risk aversion in the international financial

[16] The sharing of hypothetical losses will apply to 20% of the assets purchases, of which 12% will be securities of EU institutions, and 8% will be the remaining securities acquired by the ECB.

[17] For more about the transmission mechanism of quantitative easing, see "Quantitative easing of major central banks", *Inflation Report, March 2012.*

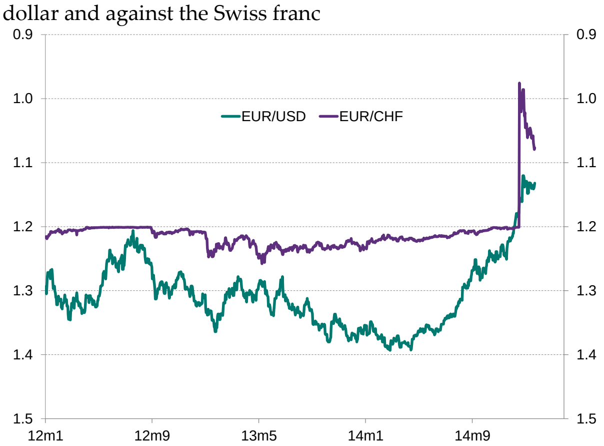
[18] On the one hand, the impact of the ECB's quantitative easing on the real economy and inflation in the euro area may be smaller than in the United States, as its effectiveness will depend heavily on the extent to which banks expand lending. On the other hand, the large scale of the new ECB programme means that their effectiveness will probably exceed that of the SMP programme.

markets. There was also an increase in appreciation pressure on other safe haven currencies, particularly on the Swiss franc.

As a result, the SNB lowered its interest rates to negative levels and abandoned the exchange rate floor against the euro, which resulted in an abrupt appreciation of the Swiss franc against the euro and a majority of currencies (see Chapter 2.5 *Financial markets and asset prices*, Box 3: *Floating the Swiss franc and its potential impact on household consumption in Poland*). Following the decision, the SNB probably continued to intervene to weaken the Swiss currency. Monetary policy was also eased in other European countries with strong economic links to the euro area (Denmark, Sweden, Norway, the Czech Republic[19] and Romania), in some of them also through lowering the interest rates below zero. Monetary policy was loosened also in other countries, which was caused by a slide in inflation driven by a drop in commodity prices, and in the case of commodity exporters, also due to a deterioration in the growth outlook (see Chapter 1.2 *Inflation developments abroad*).

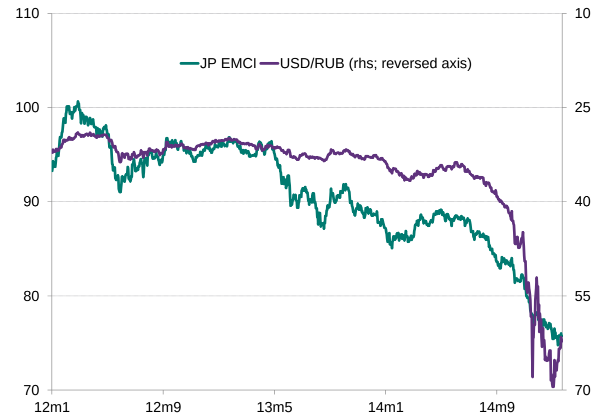
An increase in risk aversion resulted in depreciation of many emerging market currencies (Figure 1.15). The scale of depreciation was particularly strong in the case of currencies of oil exporters, where the falling oil prices had contributed to a deterioration in economic outlook. To contain the pace of depreciation, some central banks raised their interest rates and intervened on the FX market. In spite of some downward adjustment in late January due to faltering economic outlook, the extent of the combined interest rate increases and currency interventions was particularly large in Russia. Compared to the end of October 2014, the main interest rate of the Bank of Russia has risen by a

Figure 1.14 Exchange rate of the euro against the United States dollar and against the Swiss franc



Source: Bloomberg data.

Figure 1.15 Index of emerging market exchange rates against the USD (JP EMCI) and rouble exchange rate against the dollar



Source: Bloomberg data.

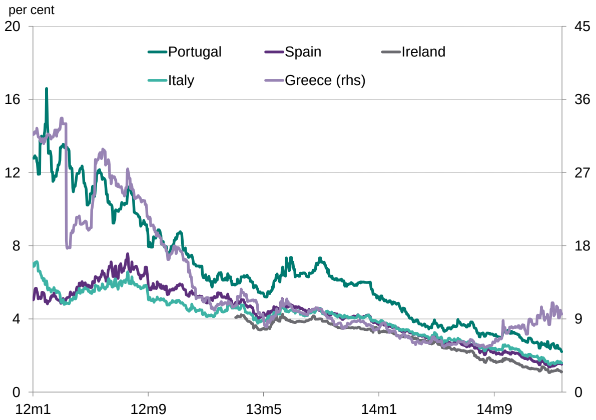
[19] The Czech National Bank eased its monetary policy by extending the period of weakening of its currency aimed at keeping the Czech koruna at 27 EUR/CZK at least (from 2016 Q1 to end-2016).

total of 7.00 percentage points to 15.00%. In addition, the Bank of Russia took other measures designed to contain the rouble's depreciation, including currency interventions.[20] Also in Ukraine, the interest rates were increased markedly (by 5.50 percentage points, to 19.50%), which was accompanied with the floating of the hryvnia, after which the currency weakened by approximately 35.0%.

The differences in the monetary policy decisions of the Fed and the ECB triggered divergent trends in the government bond yields. While the yields on the United States Treasuries bonds increased, the yields for their equivalents in the euro area member states and their significant economic partners posted a decline. In the largest euro area member states and several closely related countries – yields on bonds with maturities of even up to six years turned negative (Figure 1.16). The only euro area member state that experienced an increase in bond yields was Greece, where the risk of debt restructuring has risen recently.

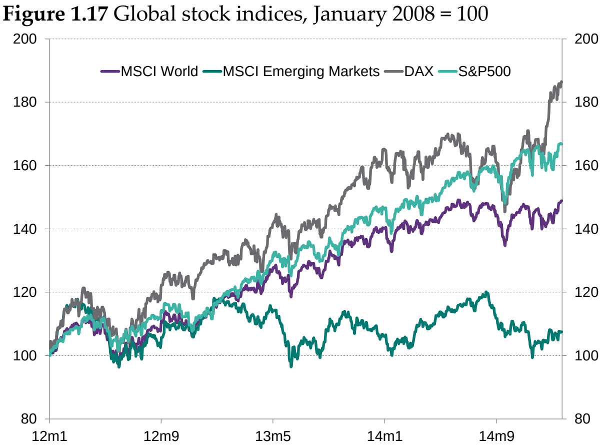
Since the previous *Report*, stock market indices have increased across the world, particularly in the euro area, underpinned by substantial easing of the ECB's policy. Since mid-January 2015, this factor has also supported stock prices in the emerging market economies. However, stock prices in these countries remained below the levels from the publication of the previous *Report*, mainly due to worse economic outlook in the major emerging market economies, most specifically China, and heightened risk aversion in the past few months (Figure 1.17).

Figure 1.16 10-year bond yields of Greece, Spain, Ireland, Portugal and Italy



Source: Bloomberg data

Figure 1.17 Global stock indices, January 2008 = 100



Source: Bloomberg data.

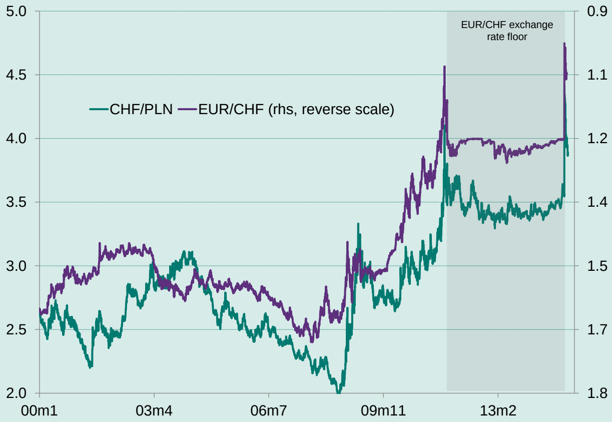
Box 3: Floating the Swiss franc and its potential impact on household consumption in Poland

On 15 January 2015, the Swiss National Bank (SNB) abandoned the exchange rate floor it had set in relation to the euro in September 2011. At the same time, the bank lowered the fluctuation band for the 3M LIBOR CHF to (-1.25%÷-0.25%) from (-0.75%÷0.25%). According to the SNB's press release, its decision was taken against the background of a decrease in the degree of overvaluation of the Swiss franc due to its weakening against the US

[20] Between the end of December 2013 and the end of January 2015 the reserves of the Bank of Russia decreased by USD 133.4bn, which accounts for 28.4% of the stock of reserves as at end-December 2013.

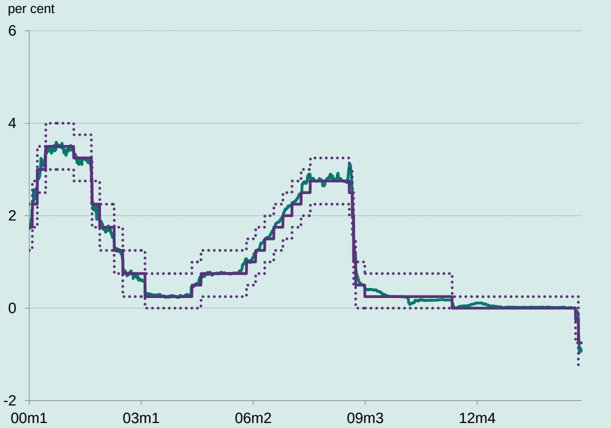
dollar prior to the decision. An additional, though not officially acknowledged, reason for removing the exchange rate floor could have been concerns over a further increase in its balance sheet and growing costs of managing rapidly rising foreign exchange reserves that would have been inevitable after the launch of QE by the European Central Bank (Figure B.3.3).

Figure B.3.1. Exchange rate of the Swiss franc in relation to the euro and the Polish zloty



Source: Bloomberg data.

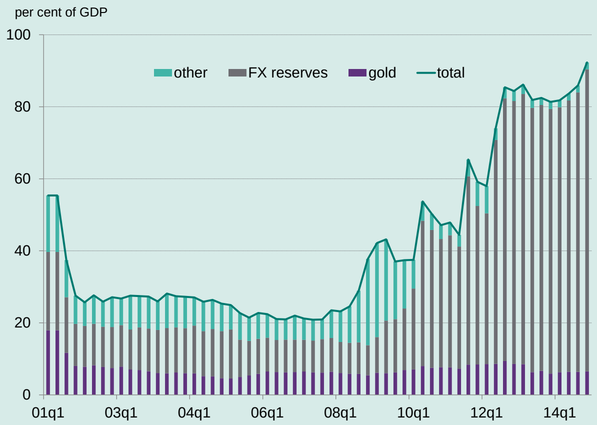
Figure B.3.2. 3M LIBOR CHF and the target for the 3M LIBOR CHF



Source: Bloomberg data.

The SNB's decision led to an appreciation of the Swiss franc against all currencies, most notably of the currencies of the countries with a relatively high share of loans denominated in the Swiss franc. In late February, the zloty was still weaker against the Swiss franc, by around 9.8%. Moreover, the spreads for derivatives used by domestic banks for FX hedging, including for loans denominated in the Swiss currency, have increased.

Figure B.3.3. Balance-sheet of the SNB



Source: SNB and Bloomberg data, own calculations.

The appreciation of the Swiss franc against the zloty led to an abrupt increase in the debt of households in the Swiss franc (by around PLN 12.7 billion), which translated into a deterioration in their financial position. As a result, the rise of the Swiss franc exchange rate may be conducive to lower consumption of households indebted in the Swiss franc due to an increase in current loan service costs (a rise in the DtI ratio[21]) and negative wealth effects stemming from a rise in value of the loan in relation to the price of the home (a rise in the LtV ratio[22]). In November 2014, the Swiss franc loans accounted for around 37% of the total value of housing loans. They are currently serviced by around 550 thousand households. The consumption expenditures of households indebted in the Swiss franc do not exceed 5% of total private consumption outlays in the Polish economy.

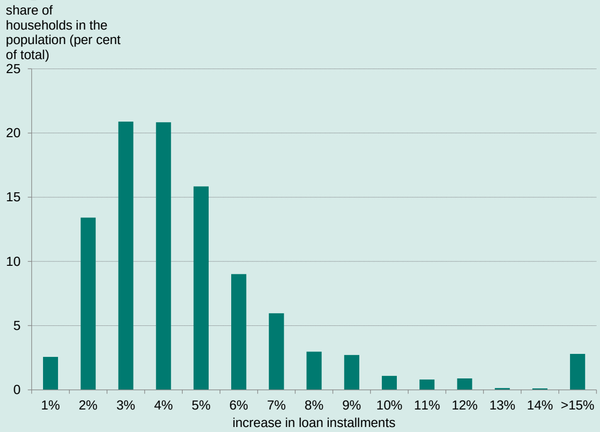
An increase in the housing loan installments resulting from the appreciation of the Swiss franc for an average household indebted in the Swiss franc should amount to less than 4% of its disposable income (Figure B.3.4). A total increase in the loan service costs for the Swiss franc loans resulting from a 20% depreciation of the zloty against the Swiss franc (i.e. the initial scale of the Swiss franc appreciation) will amount to PLN 2 billion per annum, which represents 0.2% of households' annual disposable income, in terms of the economy as a whole.

[21] DtI (*Debt-to-Income*) is the ratio of debt payments to disposable income.

[22] LtV (*Loan-to-Value*) is the ratio of the value of loan outstanding to the current value of property on which the loan was secured.

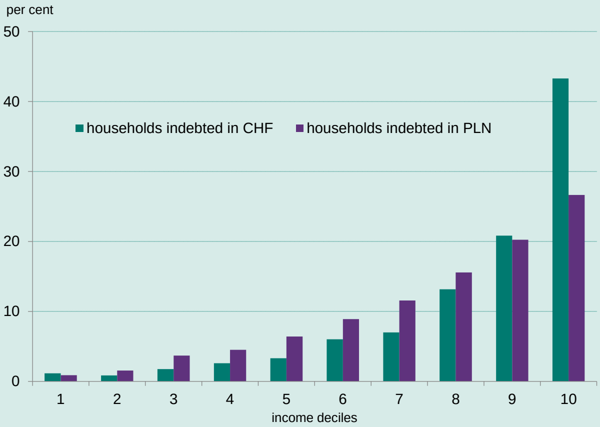
Assuming that the costs fully translate into a fall in household consumption, Poland's GDP should decline only by around 0.1%.

Figure B.3.4. Distribution of loan installment growth to disposable income of borrowers indebted in the Swiss franc



Source: GUS data, own calculations.

Figure B.3.5. Distribution of borrowers by income deciles depending on the currency of a housing loan



Source: GUS data, own calculations.

Despite relatively low household savings rate in the Polish economy (and, consequently, limited capacity to smooth consumption over time), an assumption that the increase in loan servicing costs will fully translate into a decline in consumption can be judged as very conservative. The impact of the strengthening of the Swiss franc on household consumption may be smaller than estimated above because of:

- the concentration of Swiss franc loans in high income households and high income buffers[23] of this borrower group, which reduce the need for a significant reduction in current consumption. The income of more than 40% households indebted in the Swiss franc is concentrated in the highest income decile, whereas for the households indebted in the zloty the share is slightly above 25%;
- the possibility that the impact of the appreciation of the Swiss franc on the value of loan installments will be partly offset by more negative interest rates in Switzerland, which should be considered by banks in determining the interest on loans extended at a variable interest rate.

Overall, the impact of the current strengthening of the Swiss franc on Poland's economic growth should be limited, but it may still be considerable for individual households with lower income buffers. At the same time, there are risk factors that may result in a slightly stronger impact of the floating of the Swiss franc on Poland's consumption, including the magnitude of the potential further appreciation of the Swiss franc or a shift in saving preferences of households.

1.4 Global commodity markets

In 2014 Q4 and at the beginning of 2015, prices of most energy commodities followed a downward trend. In particular, oil prices dropped by over

[23] Income buffer is a difference between household's current income and its expenditure on essential goods and services and debt service costs. Basic consumption expenditure per household member is equal to the equivalent of the breadline as calculated by the Polish Institute of Labour and Social Studies, multiplied by the OECD-modified equivalence scale which assigns a value of 1 to the household head, of 0.5 to each additional adult member and of 0.3 to each child below 14 years of age.

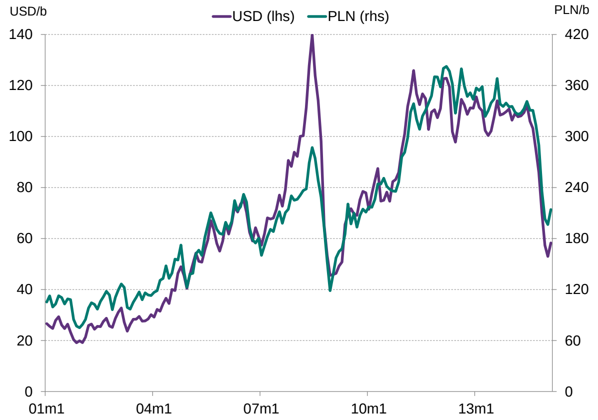
30% in that period (after a decline of almost 12% in 2014 Q3). At the same time, agricultural commodities, in contrast, rose somewhat.

The prices of Brent crude oil were falling steadily from mid-2014, hitting the lowest point since March 2009 at the beginning of 2015 (Figure 1.18). The drop in oil prices was primarily driven by supply-side factors, including, above all, expanding oil production in the United States, Russia and Iraq as well as the sustained current and forecast output of this commodity in Saudi Arabia. On the demand side, the fall in oil prices was supported by economic slowdown in developing countries, including China, and the persistently sluggish growth in the euro area (see Chapter 1.1 *Global economic activity*). The decline in oil prices was on the other hand mitigated – especially at the beginning of February 2015 – by concerns about a gradual reduction of oil production due to its low prices.

Despite the sharp fall in the prices of oil, those of gas were stable in 2014 Q4, which resulted from their lagged response to changes in oil prices. In January, the previous drop in oil prices started to feed through to gas prices. With regard to coal prices, the decline observed for a few years continued in the period under analysis, driven by the increasingly widespread application of shale gas in energy production and the shrinking demand for coal from China (Figure 1.19).

In the agricultural commodity markets, prices were rising in 2014 Q4 and at the beginning of 2015. However, this rise followed a period of sharp declines, owing to which the prices are still running at their four-year lows. The increase in the index of agricultural commodity prices in 2014 Q4 was mainly supported by rising wheat prices related to an expected fall in the production of this commodity in South America and Australia and the slowing wheat exports from Russia. The index of food prices, in turn, was driven up by

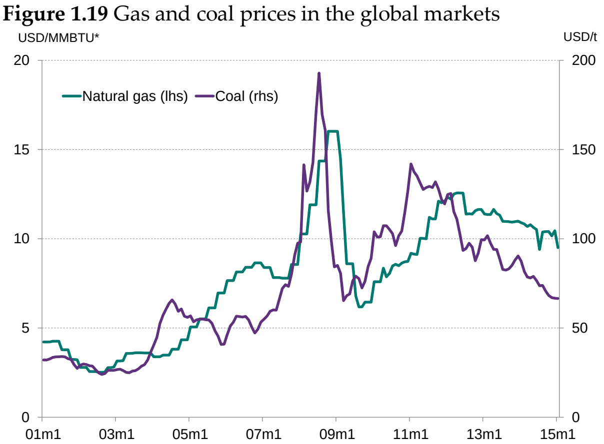
Figure 1.18 Brent oil prices in USD and PLN



Source: Bloomberg data.

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

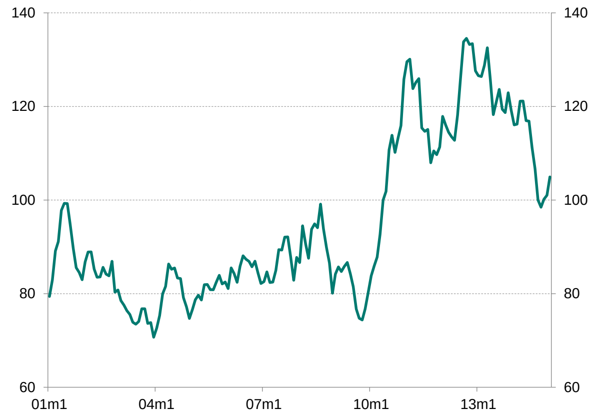
Figure 1.19 Gas and coal prices in the global markets



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 (May 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.

rising dairy and coffee prices due to deteriorating weather conditions.[24]

[24] Wheat prices fell again in January 2015 due to rising forecasts of global production and the waning concerns about Russian restrictions on the exports of this commodity.

2 Domestic economy

2.1 Inflation developments

2.1.1 Consumer prices

Prices of consumer goods and services in Poland have been falling since July 2014, with the CPI standing at -1% at the end of 2014. (Figure 2.1, Table 2.1)[25].

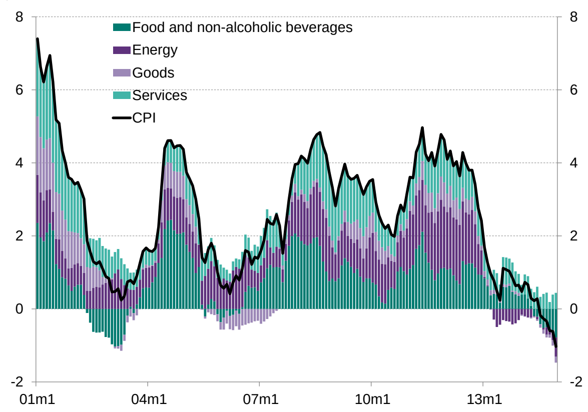
Declining CPI inflation over 2014 Q4 primarily reflected continued falls in fuel and food prices. Prices of fuel were sinking due to a slump in global oil prices (see Chapter 1.4 *Global commodity prices*; Box 4 *The Impact of the fall in oil prices on inflation and GDP in Poland*). The drop in food prices, in turn, could be attributed to further declines in global prices of agricultural commodities, a good harvest of agricultural produce at home and the Russian embargo on the imports of Polish agricultural and food products introduced in August 2014.

Factors pulling down consumer price growth also included lack of demand and cost pressures as well as falling global inflation, amidst a relatively stable nominal effective exchange rate (see Chapter 1.2 *Inflation developments abroad*).

2.1.2 Core inflation

Given the absence of demand and cost pressures in the economy, all core inflation measures also followed the downward trend (Figure 2.2).

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



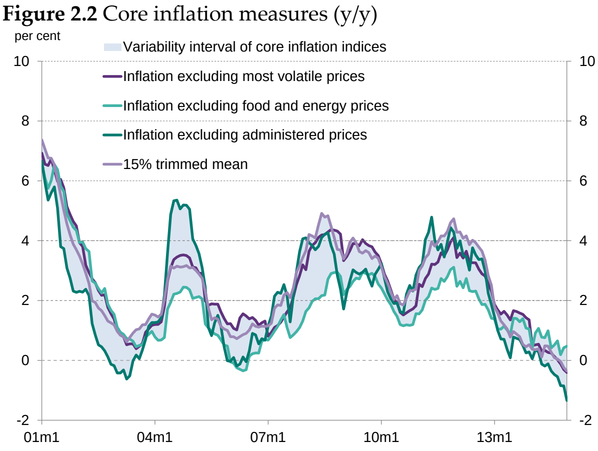
Source: GUS data, NBP calculations.

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

	2014								
	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
CPI	0.3	0.2	0.3	-0.2	-0.3	-0.3	-0.6	-0.6	-1.0
Food and non-alcohol beverages	0.3	-0.8	-0.9	-1.7	-2.1	-2.0	-2.2	-2.5	-3.2
Energy	-1.3	-0.1	-0.4	0.0	-0.2	-1.1	-1.0	-1.4	-2.9
Goods	-0.1	-0.1	-0.1	-0.3	-0.4	-0.2	-0.3	-0.5	-0.6
Services	1.7	1.7	2.2	1.2	1.5	1.6	0.7	1.4	1.6

Source: GUS data, NBP calculations.

Figure 2.2 Core inflation measures (y/y)



Source: GUS data, NBP calculations.

[25] In January 2015, according to the preliminary GUS (Central Statistical Office) data, inflation declined to -1.3%% y/y. However, the data on inflation in January 2015 may be revised as a result of changes in the structure of the CPI basket introduced by GUS at the beginning of each year. Due to the preliminary nature of the data, GUS did not publish information on changes in all components of the CPI basket. Therefore, a more in-depth analysis of the January price changes in particular groups will be presented in the subsequent *Report*.

The index of inflation excluding food and energy prices decreased from 0.7% y/y in September 2014 to 0.5% y/y in December 2014, which was related to the deepening decline in the prices of non-food products. The remaining indices of core inflation fell to negative and historically low levels.

2.1.3 Producer prices in industry

In 2014 Q4, producer price deflation observed since 2012 Q4 became even more pronounced (reaching -1.8% y/y as compared to -1,7% y/y in 2014 Q3; Figure 2.4)[26]. The persistence of PPI deflation results from lack of cost pressure in industry amidst a concurrent decline in import prices, enhanced, in the past few quarters, by a drop in commodity prices. Falling levels of producer prices were observed in both domestically sold goods and exports[27].

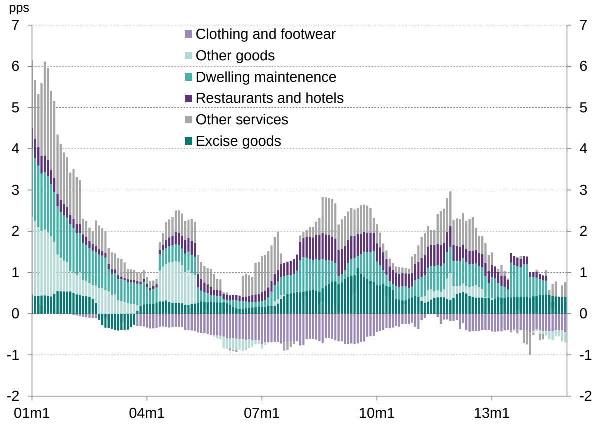
2.1.4 Import prices

Prices of imports in zloty terms continued to decline in 2014, dragging on the PPI and CPI indices. In 2014 Q3, import price growth sank from -3,6% y/y in 2014 Q2 to -5.8% y/y, reaching the lowest point since 2005 and thus consolidating the downward price trend observed since 2012 Q4 (Figure 2.5). The fall in import prices resulted both from a decline in dollar-term prices of goods (mainly the fuel prices) and the strengthening of the zloty against the dollar in comparison with the previous year.

2.1.5 Inflation expectations

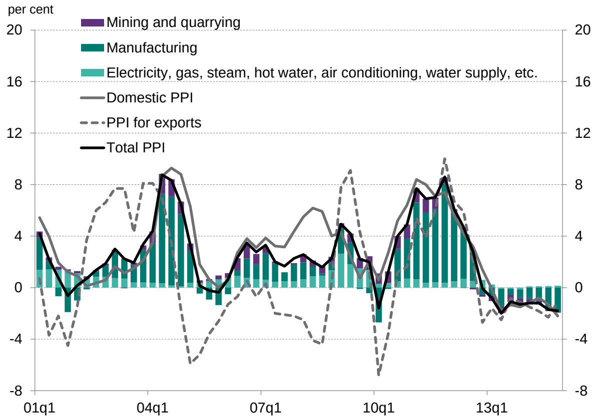
Since the publication of the previous *Report*, most indicators of inflation expectations have decreased (Table 2.2, Table 2.3). Consumer and corporate expectations have persisted at close to zero, whereas the expectations of the financial sector

Figure 2.3 Composition of core inflation (y/y)



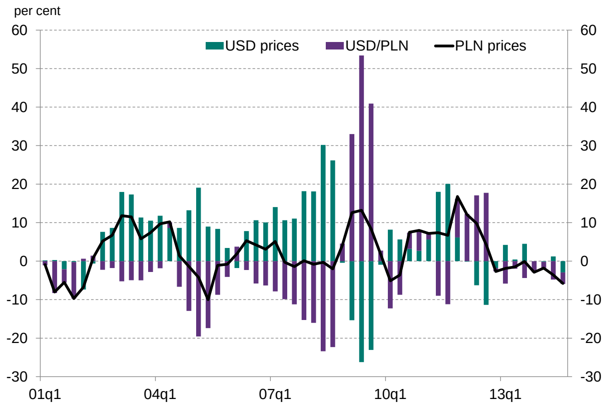
Source: GUS data, NBP calculations.

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



Source: GUS and Eurostat data.

Figure 2.5 Composition of annual growth of import prices in PLN terms



Source: GUS data, NBP calculations.

[26] In January 2015, PPI fell to -2.9% y/y as against -2.7% y/y in previous month.

[27] In 2015 Q4, domestic PPI declined by 2.2% y/y ,and PPI for exports by 1.1% y/y (as against the fall by 1.3% y/y and 2.3% y/y respectively in the previous quarter)..

analysts, and those of the participants in the *NBP Survey of Professional Forecasters*[28] – which had been running at higher levels – fell considerably. The expectations of all the surveyed agents remain positive in all horizons, yet below the NBP target.

The decline in inflation expected by the participants of the December 2014 *NBP Survey of Professional Forecasters* was accompanied by a higher – 35% – perceived probability of annual deflation in 2015, as compared with negligible levels of such probability in the September 2014 survey.

Table 2.2 Inflation expectations of consumers, enterprises, bank analysts and participants of the *NBP Survey of Professional Forecasters* (%)

	Oct 2014	Nov 2014	Dec 2014	Jan 2015	Feb 2015
CPI expected in12 months					
Consumers	0.2*	0.2*	0.2*	0.2*	0.2*
Enterprises	0.2**	-	0.1	-	-
Expected average annual CPI					
Bank analysts					
- in 2015	1.2	0.9	0.6	0.1	-0.2
- in 2016	2.2	2.0	2.0	1.7	1.7
- in 2017	-	-	-	2.2	2.3
NBP Survey of Professional Forecasters:					
- in 2015	1.2**	-	0.2	-	-
- in 2016	2.1**	-	1.8	-	-

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 2.3 Forecasts of CPI inflation derived from individual interval forecasts (in %)

Horizon	Central forecast	50% probability	90% probability	Probability of 1.5-3.5% range
2015	0.2	-0.2 – 0.8	-0.9 – 2.3	9%
2016	1.8	1.2 – 2.3	0.2 – 3.6	59%

Source: NBP Survey of Professional Forecasters, December 2014.

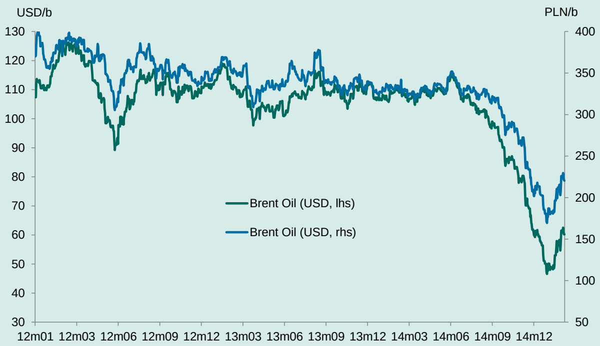
Box 4: The impact of the fall in oil prices on inflation and GDP in Poland

Since mid-2014, oil prices have fallen significantly in the global markets. While the first half of 2014 saw the average price of Brent oil at USD 109/bbl, in February 2015 it had plummeted to USD 58/bbl on average[29]. This represents a decline of 46% in dollar terms (see Figure R.4.1). The slump in global oil prices was driven by both supply- and demand-side factors. Global oil supply was boosted by surging extraction from unconventional sources in the United States, amidst stable output by Saudi Arabia and a concurrent expansion by some oil exporters (aiming to make up for the shortfalls in revenue from oil exports due to lower prices). Demand for oil, in turn, was being dragged by flagging current and expected global economic growth, primarily in Europe and major emerging economies, in particular China.

[28] The NBP Survey of Professional Forecasters is conducted on a quarterly basis. It comprises 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.

[29] Presented data for February 2015 refers to the period until the cut-off date for the *Report*, i.e. 20.02.2014.

Figure B.4.1 Prices of Brent oil



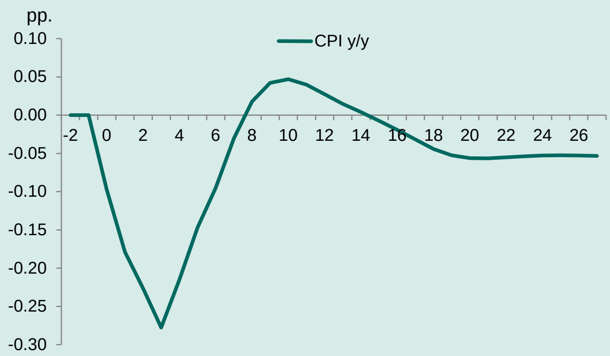
Source: Bloomberg data, own calculations

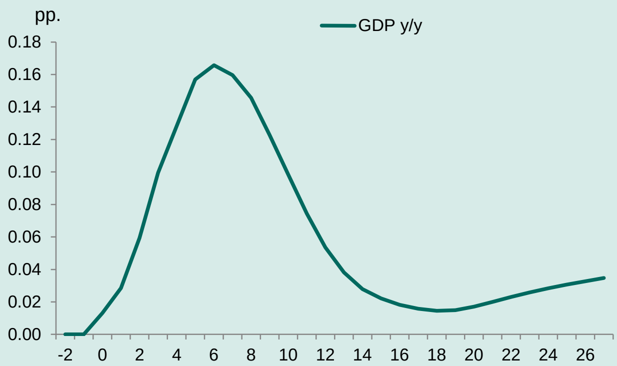
In Poland, the drop in oil prices was mitigated by an appreciation of the dollar against the zloty. Yet the fall in dollar terms was sharp enough to produce a considerable decline also in zloty prices of oil, despite the weakening of the zloty (between the first half of 2014 and February 2015, zloty-denominated prices of oil decreased by 35%; see Figure B.4.1).

Sinking zloty prices of oil fed through into a marked decline in retail prices of fuels in Poland, although due to a sizeable share of indirect lump-sum taxes in retail prices of fuels, the decline was markedly smaller than that in the commodity price of oil (between August 2014 and January 2015, retail prices of fuel fell by 16.4%)[30]. Given the 5.4% weight of fuels in the CPI basket, this led directly to a 0.9 percentage points decrease in the CPI in the period discussed. There is also an indirect downward effect of fall in oil prices on consumer prices in Poland, as the drop in oil prices helps bring down corporate costs. Lower corporate costs – amidst moderate demand growth – are conducive to price reductions, especially in industries where the cost of fuels accounts for a large share of the overall value of supply (e.g. in transportation this share amounts to 9.3%)[31].

At present, it is difficult to assess the ultimate impact of the slump in oil prices on consumer prices in Poland, since its size will depend on, above all, the duration of this commodity shock. According to NBP estimates, a 10% unexpected and sustained fall in global oil prices will generate a maximum decline of 0.3 percentage points in the CPI, with the strongest impact observed with a 3-quarter lag (Figure B.4.2)[32].

Figure B.4.2 Change in inflation (left panel) and GDP (right panel) in Poland resulting from an enduring 10% decline in oil prices





Source: own compilation based on the NECMOD model.

30 The weak feed-through of the decline in global oil prices to retail prices of fuels in Poland is also due to the fact that part of the decline is consumed by rising retail mark-ups charged by fuel retailers.

31 In construction the figure is 2.5%, in agriculture 2.2% and in manufacturing 0.7%. (data based on the balance of cross-industry flows in 2010).

32 The figures are based on the NECMOD model simulation results. The impulse was defined as a sustained, unexpected 10% decline in global oil prices, all other variables of the external environment being held constant. This means that the scenario of a deepening deflation in the euro area, which could be enhanced by falling oil prices, was not taken into account in the simulation. In this scenario, the positive impact of the oil price slump on Poland's GDP would be limited due to a fall in demand from the euro area. Furthermore, it is assumed in the simulation that a monetary policy is compliant with the Taylor rule. This implies a reduction in interest rates in response to lower inflation resulting from a decline in oil prices. However, even in case switching off the Taylor rule and keeping interest rates unchanged, the impact of fall in oil prices on GDP would not differ significantly from that presented in Figure B.4.2.

As Poland is an oil importer, a marked decline in oil prices has the effect of a so-called positive supply shock. A positive supply shock exerts downward pressure on prices, while at the same time boosting GDP. NBP estimates show that a fall in oil prices by 10% drives up the country's GDP growth due to higher demand both at home and abroad, with the biggest impact of approx. 0.2 percentage points after six quarters. (Figure B.4.2). The positive effect of the oil price drop on GDP stems primarily from a boost in households' purchasing power, which supports their increased spending on other goods, and from falling corporate costs. These, together with a stronger outlook for consumption, support corporate investment. Lower oil prices also contribute to a decline in import prices, strengthening the trade balance as the ratio of export to import prices improves (i.e. better terms of trade), thus working towards a higher contribution of net exports to GDP growth.

2.2 Demand and output

In 2014 Q3 and Q4, Poland saw economic growth sustained at a rate close to 3.0%, yet somewhat slower than in 2014 Q2 (3.0% y/y in 2014 Q4 and 3.3% in 2014 Q3 as compared with 3.5% in 2014 Q2 – Figure 2.6, Table 2.4).

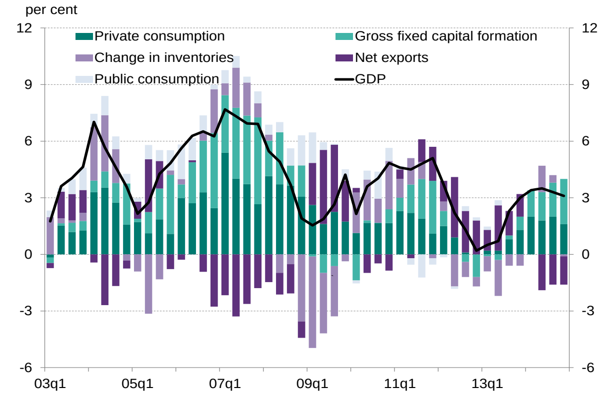
Domestic demand continued to be the primary driver of growth. The expansion in the domestic economic activity was supported by robust investment and a stable rise in consumption demand. Alongside that, the contribution of net exports to GDP growth remained negative due to weak external demand. In addition, a decrease in the contribution from inventories detracted from GDP growth.

2.2.1 Consumption demand

Consumption demand continued to grow at a stable pace in 2014 Q3 and Q4 (3.1% y/y in 2014 Q4 and 3.2% y/y 2014 Q3 as compared with 3.0% y/y 2014 Q2, Figure 2.7).

Consumption demand was supported by a rise in real wages, amidst steadily growing employment. Consumption was also boosted by improving consumer sentiment, including higher propensity to make major purchases. At the same time, lending to

Figure 2.6 GDP growth and its components



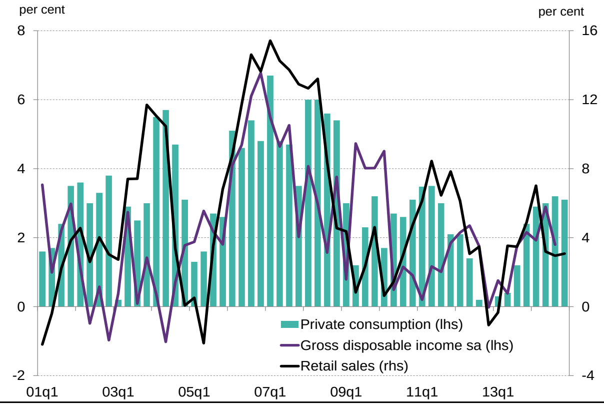
Source: GUS data.

Table 2.4 Growth of GDP and its selected components (y/y) and contribution of inventories and net export to GDP

	2011	2012	2013				2014			
			q1	q2	q3	q4	q1	q2	q3	q4
GDP (%)	4.8	1.8	0.5	0.7	2.3	3.0	3.4	3.5	3.3	3.1
Private cons. (%)	3.0	1.0	0.3	0.4	1.2	2.4	2.9	3.0	3.2	3.1
Public cons.(%)	-2.3	0.2	0.9	1.5	3.5	2.2	0.1	3.7	3.5	3.7
Gross fixed capital formation (%)	9.3	-1.5	-0.5	-1.8	1.3	2.7	11.2	8.7	9.9	9.0
Change in inventories (pps)	0.7	-0.7	-0.8	-1.9	-0.6	-0.6	0.0	1.4	0.4	-0.1
Net exports (pps)	0.9	2.2	1.1	2.4	1.3	1.2	0.0	-1.9	-1.6	-1.5

Source: GUS data.

Figure 2.7 Growth of private consumption, gross disposable income and retail sales (y/y, constant prices)



Source: GUS data, NBP calculations.

households continued to expand (see Chapter 2.6 *Credit and money*).

The moderate retail sales growth, favorable consumer sentiment and a rise in lending to households – all point to a continued moderate growth in consumption demand in 2015 Q1.

2.2.2 Investment demand

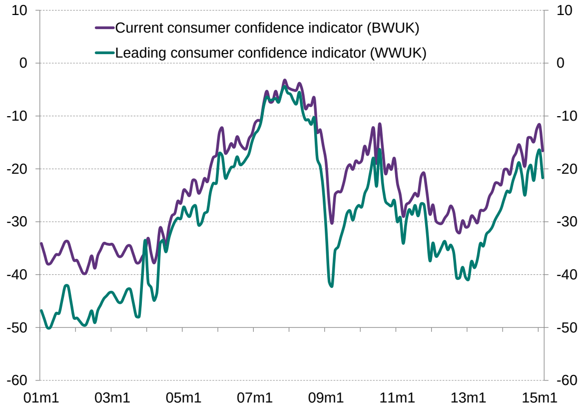
In 2014 Q3 and Q4, investment expenditures continued to grow at a robust pace (9.9% in 2014 Q3 and 9.0% in 2014 Q4, as compared with 8.7% in 2014 Q2), supported with swift increase in corporate, public and residential investment (Figure 2.8). At the same time, investment rate in the national economy remained close to savings rate for the entire Polish economy (Figure 2.9).

Public and housing investment expanded at a considerable pace in 2014 Q3, which continued into 2014 Q4. An increase in public investment growth rate in 2014 Q3 was primarily related to a sharp acceleration in the local government spending. Meanwhile, faster residential investment growth – in annual terms – was in turn caused by further improvement in labour market conditions, high affordability of housing loans and relatively low interest charged on them, with additional support from the government's first home buyers programme "Flat for the Young". The rise in housing investment could also be underpinned by relatively high rate of return on household dwelling investments for rent purposes and the rents outweighing the loan service costs.

Corporate investment growth remained high both in 2014 Q3 and 2014 Q4. Rising investment was supported with sound financial conditions of enterprises and high capacity utilisation (Figure 2.11). Investment growth was also fuelled by relatively low interest rates on corporate loans.

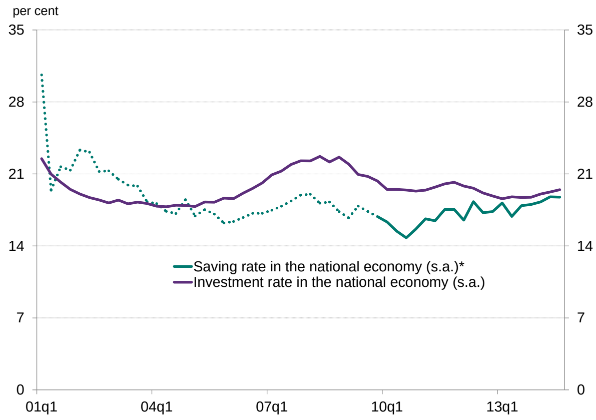
According to the NBP business climate surveys, the outlook for corporate investment remains rather

Figure 2.8 Consumer confidence indicators



Source: GUS data.

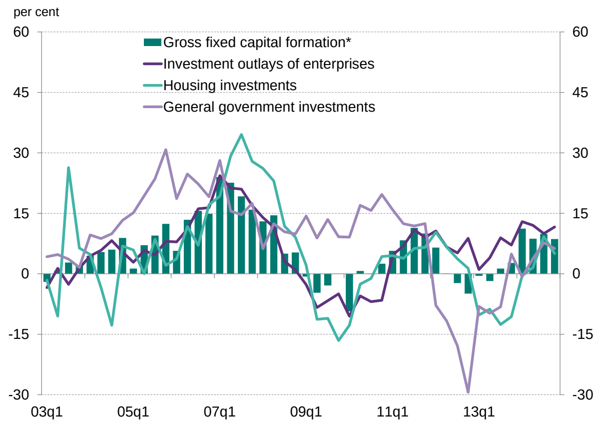
Figure 2.9 Saving and investment rate in the national economy



Source: NBP estimates, GUS data.

*2001-2009: national accounts based on ESA 95, 2010-2014: national accounts based on ESA 2010.

Figure 2.10 Investment in the economy (y/y, NBP estimates for the NECMOD model; data seasonally adjusted)



Source: NBP data.

*GUS data (not seasonally adjusted).

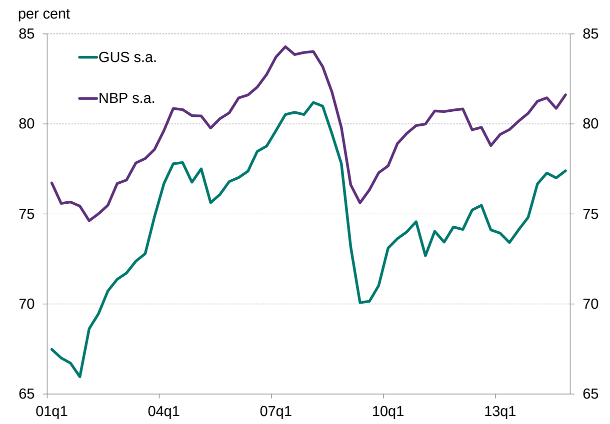
positive. Investment expenditures in relation to production assets and equipment are still below their long-term average, which should be conducive to higher growth in investment activity. (Figure 2.11). The corporate investment plans, however, are below their long-run average, contained by prevailing uncertainty about demand outlook.

2.2.3 Government demand

In 2014, the situation of the public finance sector improved, as indicated by the narrowed general government deficit.[33] The impact of fiscal policy on aggregate demand – despite reduced deficit – was close to neutral. The growth rate of the primary expenditure of the sector (i.e. expenditure net of interest payments) was close to the potential GDP growth and no significant fiscal adjustments on the revenue side occurred.[34] The improvement in the general government balance was attributable mainly to changes in the pension system, consisting in the transfer of assets and current pension contributions from open pension funds (OFE) to the Social Insurance Fund (FUS). These changes resulted in growth of revenues from social security contributions and a decline in interest payments.

According to preliminary data, the central budget deficit in 2014 amounted to about PLN 29.5 billion and was markedly lower than in the previous year (PLN 42.2 billion). Overall central budget revenue was about PLN 5 billion higher than envisaged in the *Budget Act*, which was related to higher tax revenue. In turn, budget expenditure was about PLN 12 billion lower than the limit set in the *Budget Act*. This means a fall in nominal terms as compared to 2013, predominantly due to a decline in interest payments and the subsidy to FUS. The reduction of

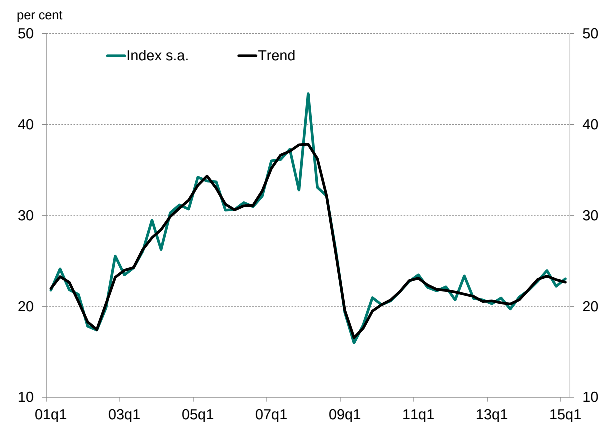
Figure 2.11 Production capacity utilisation in industry (GUS) and in the corporate sector (NBP)



Source: GUS data, NBP economic climate survey.

The degree of capacity utilisation based on GUS business tendency survey is significantly lower 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.

Figure 2.12 Index of new investments (percentage of enterprises planning to start new investments within the coming quarter)



Source: NBP economic climate survey.

[33] In 2013, the general government deficit, according to ESA 2010 methodology, amounted to 4.0% of GDP. According to the fiscal notification of October 2014, in 2014 the deficit estimated by the Ministry of Finance was 3.3% of GDP, whereas according to European Commission's estimates the deficit was close to 3,6% of GDP (February 2015 forecast).

[34] In 2014, a number of legislative changes increasing tax revenues entered into force, including freezing income tax thresholds in PIT, abolishment of VAT refunds in residential construction, and also the widening of the VAT reverse charge mechanism. However, increased revenue from these changes was partially offset by a decrease connected with the change of rules on VAT deductions regarding company cars and fuel for their propulsion.

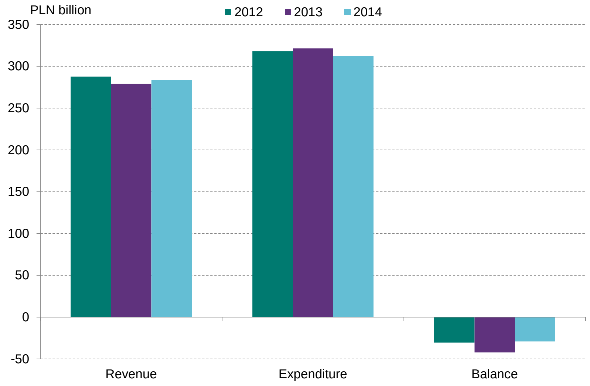
the FUS subsidy contributed to better performance of the central budget, but it worsened the financial situation of the FUS at the same time, and in consequence it had a neutral impact on the balance of the general government sector.

In 2014, local government units recorded – according to preliminary data – a deficit of PLN 2.0 billion, i.e. of PLN 1.6 billion more than in 2013. Detailed data for the three quarters of 2014 suggest that worse result for the whole year reflected a strong rise in capital expenditure (23.2% y/y).

Deficit of the social security subsector rose significantly in 2014[35], which was driven mainly by developments in the Social Insurance Fund (FUS). Compared to previous years, a smaller share of the difference between contributions paid to the FUS and expenditures on social benefits was covered by a subsidy from the central budget. The debt of the FUS on account of loans from the central budget rose again (by PLN 8.9 billion).[36] In 2014, the balance on the Labour Fund was close to zero, while the National Health Fund recorded a surplus comparable to last year's figure.

In 2015, a further improvement in the balance of the general government is expected, which will be largely the effect of the changes implemented in the pension system. According to government plans, this should enable a reduction of the general government deficit to less than 3% of GDP in 2015, i.e. within the deadline set by the EU Council under the Excessive Deficit Procedure.

Figure 2.13 State budget performance in January-December



Source: NBP and Ministry of Finance.

[35] According to the fiscal notification of October 2014, the expected balance of the social security subsector in 2014 was to reach PLN -17.4 billion, against PLN -4.6 billion in 2013.

[36] The Social Insurance Fund deficit was additionally financed with funds obtained as a result of changes implemented in the pension system, i.e. the so-called "security slider" and proceeds from interest and redemption of bonds transferred from OFE to the Demographic Reserve Fund. According to ESA 2010 methodology, these flows, however, do not constitute general government revenues, but deficit financing.

2.2.4 Exports and imports

In 2014 Q3, Poland's external trade lost momentum due to worsening economic conditions in the East and a slightly weaker growth of domestic demand, amid persistently sluggish economic activity in the euro area.[37] Further decline in exports growth (to 3.1% y/y from 5.7% y/y in 2014 Q2;Figure 2.14) was accompanied by weakening imports (a rise of 4.9% y/y compared with 7.6% y/y in 2014 Q2).[38]

Slower export growth in 2014 Q3 resulted partly from the continued slump in exports to the former USSR countries, including Russia and Ukraine. At the same time – and in contrast to the previous quarter – exports to the remaining non-EU countries also decelerated. As a consequence, overall exports to this group of countries shrank by 8.4% y/y in 2014 Q3 (as against a rise of 2.6% y/y in 2014 Q2; Figure 2.15).

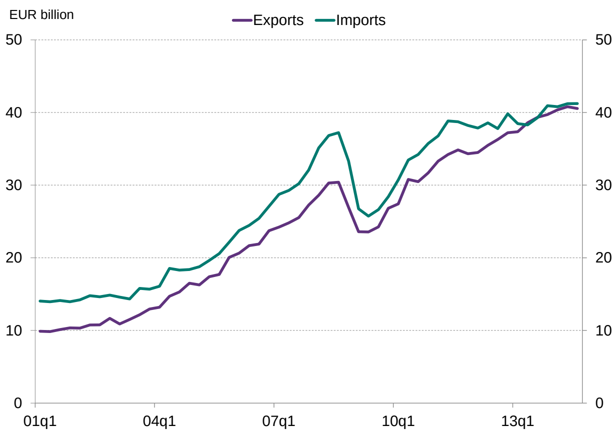
Export growth was also hampered by the sluggish economic activity in the euro area, which was reflected in somewhat weaker performance of sales to this group of countries (8.0% y/y, as compared to 8.2% y/y in 2014 Q2).

In turn, higher sales to the other EU countries (a rise of 4.6% y/y from 3.3% y/y in 2014 Q2), probably related to the relatively sound economic performance of some of them, was a factor supporting export growth.

In 2014 Q3, import growth lost momentum on the back of a decline in the global prices of agricultural and energy commodities, coupled with slower export growth and a slight deceleration in domestic demand.

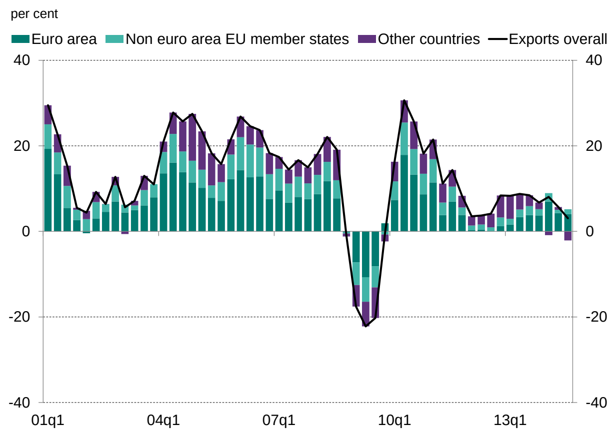
In 2014 Q3, the nominal effective exchange rate of the zloty weakened somewhat, compared to the

Figure 2.14 Value of Polish exports and imports



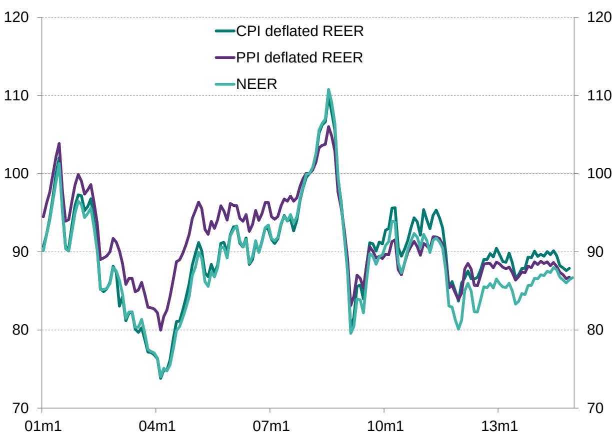
Source: GUS data.

Figure 2.15 Geographic composition of Polish export growth



Source: NBP calculations based on GUS data.

Figure 2.16 Zloty real and nominal effective exchange rate (increase denotes appreciation; January 2008=100)



Source: NBP and the European Commission data.

[37] The growth rates cited in this chapter relate to non seasonally adjusted GUS data.
[38] In October-November 2014 there was a rebound in exports (which grew by 4.4% y/y), driven by accelerating exports to the euro area and a flattening decline in exports to third countries. At the same time, import growth decelerated again (to 2.4% y/y), which was probably related to further decline in prices of some commodities in global markets

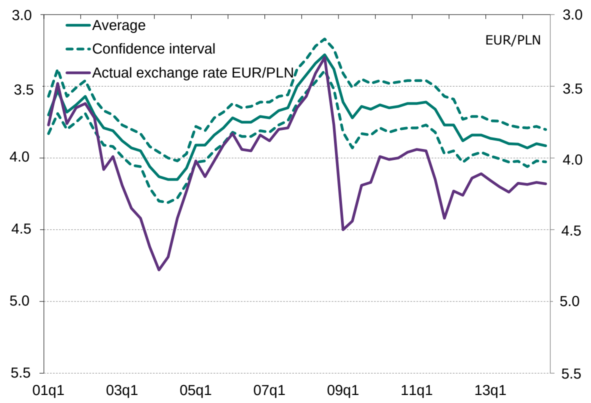
previous quarter. In 2014 Q4, in contrast, it appreciated gradually, which was driven by the weakening of the rouble and the hryvnia (Figure 2.16). Yet, during the entire second half of 2014, the PLN/EUR exchange rate remained markedly below the threshold exchange rate of export profitability, as declared by enterprises in the NBP business climate surveys (Figure 2.17)[39]. The favourable – from the point of view of Polish enterprises – level of the exchange rate and its relative stability throughout the year 2014 helped maintain both high profitability of external sales and very low percentage of firms citing the exchange rate as a barrier to growth[40]. Favourable conditions for Poland's trade exchange in 2014 H2 were also reflected in national accounts data, pointing at further significant improvement in terms of trade. The rise in relative prices in external trade resulted from stronger fall in import prices than in export prices, which was related to the drop in oil prices in global markets.

2.2.5 Output

In 2014 Q4, the annual growth of gross value added decreased slightly (to 2.8% in 2014 Q4, as compared to 3.1% in 2014 Q3; Figure 2.18)[41]. Growth continued to be primarily supported by the service sector, albeit with a somewhat diminished contribution (1.6 pp., as compared with 2.1 pp. in 2014 Q3). Construction also contributed less (0.2 pp. as against 0.3 pp. in 2014 Q3) – in contrast to industry, whose contribution to growth increased (to 1.0 pp., as compared to 0.7 pp. in 2014 Q3).

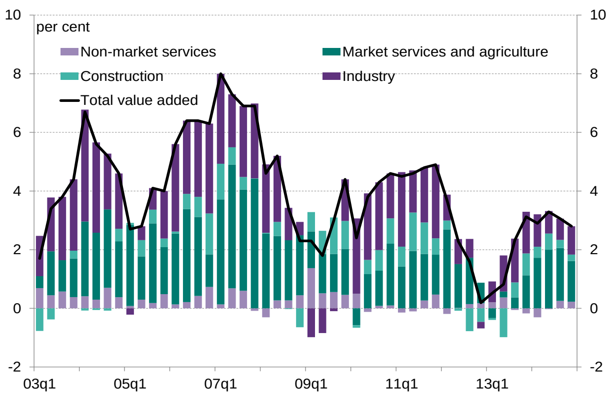
The slightly weaker growth observed in the service sector in 2014 Q4 was in part caused by poorer performance of transportation services and a decline

Figure 2.17 Average threshold exchange rate (EUR/PLN) of exports profitability declared by enterprises



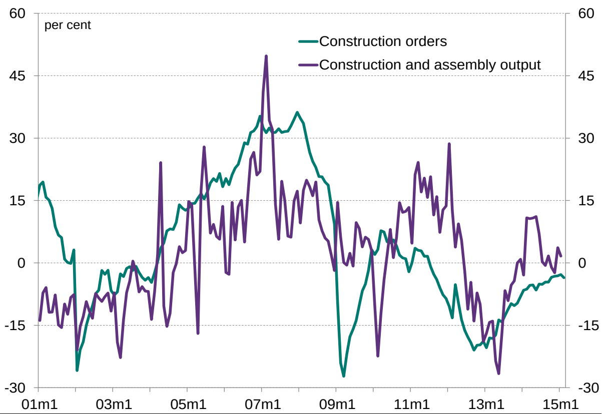
Source: NBP data and estimates.

Figure 2.18 Sector contribution to gross value added y/y growth



Source: GUS data, NBP calculations.

Figure 2.19 Annual growth of construction and assembly output and construction orders



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

[39] The export profitability threshold exchange rate is determined as the average of values quoted in response to the relevant question of the NBP business climate survey. The survey question is as follows: "What is the threshold exchange level, in terms of PLN, at which exports are (will become) unprofitable?"; *NBP Quick Monitoring Survey. Economic climate in the enterprise sector in 2014 Q4 and forecasts for 2015 Q1*, NBP.

[40] *NBP Quick Monitoring Survey. Economic climate in the enterprise sector in 2014 Q4 and forecasts for 2015 Q1*, NBP.

[41] Data on industrial output, orders, the PMI index, construction and assembly output and orders in construction are based on seasonally adjusted data (NBP calculations).

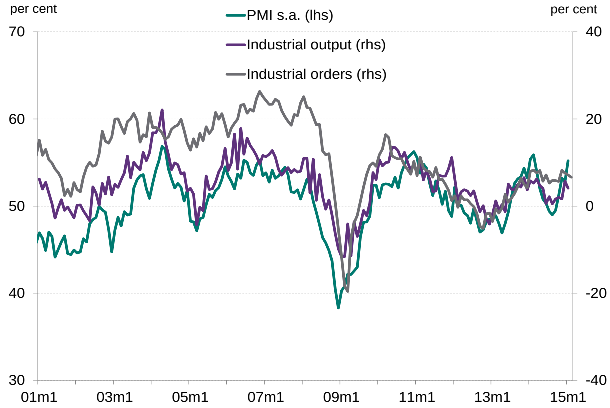
in wholesale sales.[42] At the same time, amidst a steady rise in consumption demand, retail sales growth was sustained at moderate levels (see Chapter 2.2.2 *Consumption demand*).[43]

Some weakening in the activity of the construction sector in 2014 Q4 was indicated by the slowdown in construction and assembly output, accompanied by a further decline in orders in the construction sector (Figure 2.19).

Turning to industry, business climate in the sector improved in 2014 Q4, as reflected in higher growth of industrial output, amidst a stable rise in orders (Figure 2.20).

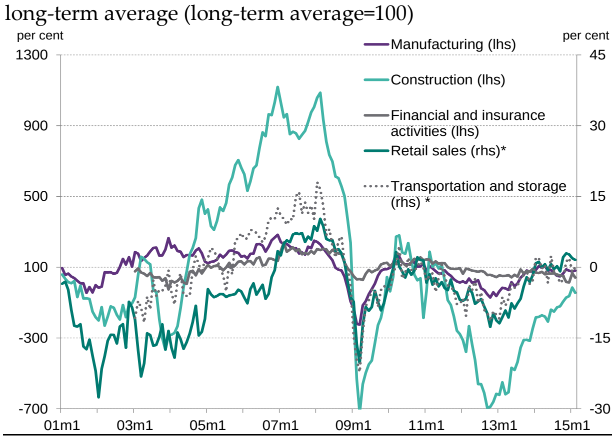
Recently published data indicate a likely stabilization in economic activity at the beginning of 2015. The growth of construction and assembly output as well as growth of industrial output remained similar to the levels observed in 2014 Q4[44], while business climate indicators are running close to their long-term averages (Figure 2.21).

Figure 2.20 PMI and annual growth of sold production of industry and of industrial orders



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

Figure 2.21 Forecast of economic conditions in relation to the long-term average (long-term average=100)



Source: GUS business tendency survey, NBP calculations.

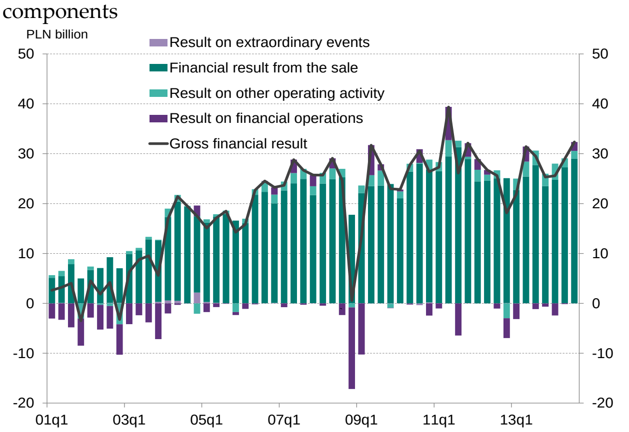
*As the value of the indicators of transportation and storage and retail sales are close to zero, the Figure presents their level instead of its changes against its long-term average.

2.3 Financial situation in the enterprise sector

In 2014 Q3, the financial position of the enterprise sector remained sound, and improved as compared with the corresponding period of the previous year. Gross financial result – including operating profits – increased, while profitability ratios for the sector improved (Figure 2.22; Table 2.5).

Better operating activity performance was the result of positive – although weaker than in the previous quarter – annual growth in sales, accompanied by a

Figure 2.22 Gross financial result of enterprises and its components



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

[42] In 2014, the growth in the sales of services in transportation (in constant prices) amounted to 4.4% y/y compared to 7.5% y/y in the first three quarters of 2014. Corporate wholesale sales decreased (in nominal terms) by 1.4% y/y in 2014 Q4 as against a fall of 1.1% in 2014 Q3.

[43] Data on retail sales presented in this chapter refer to retail sales by businesses employing more than nine people, which are published by GUS on a monthly basis. The data do not fully reflect total retail sales growth.

[44] Industrial output increased by 4.1% y/y in January 2015 as against 5.7% y/y on average in 2014 Q4, while construction and assembly output rose by 1.6% y/y and 0.1% y/y respectively.

fall in costs. Low revenue growth was related to weaker foreign demand, mainly from the euro area, Russia and Ukraine. At the same time, prices of commodities and energy – which were lower than in the previous year – contributed to the decline in costs of sales. Despite weaker growth in foreign sales, exporting companies remained more profitable than non-exporting firms.

The NBP business climate survey indicates an improvement in the corporates' assessment of the current and expected demand in 2014 Q4, which suggests – under low cost pressure – the continuation of good financial results over this period[45].

The liquidity position of companies remained sound, as indicated by a slight rise in the cash ratio in 2014 Q3, the historically highest share of companies with this ratio exceeding the reference value (20%) and a reduction in the percentage of enterprises reporting payment delays as a barrier to their development in 2014 Q4.[46]

Table 2.5 Selected financial efficiency ratios in the enterprise sector

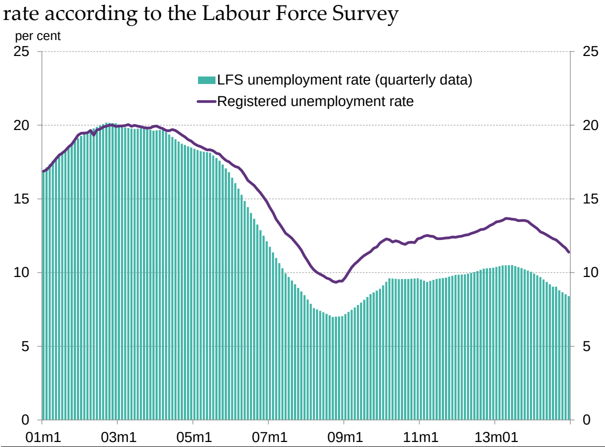
per cent	2010	2011	2012	2013 q1	2013 q2	2013 q3	2013 q4	2014 q1	2014 q2	2014 q3
Sales profitability ratio	5.2	5.3	4.3	4.3	4.5	4.6	3.8	4.5	4.7	4.8
Net turnover profitability ratio	4.4	4.5	3.4	3.2	4.7	4.1	3.4	3.8	4.1	4.5
Percentage of profitable enterprises	78.4	78.0	76.8	61.6	68.8	73.4	79.6	67.6	73.9	77.0
dane na koniec okresu										
Liquidity ratio of the first degree	0.40	0.38	0.34	0.33	0.33	0.33	0.35	0.34	0.35	0.36

Source: GUS data.

Figure 2.23 Change (y/y) in the number of persons working in the economy

Source: GUS data, NBP calculations.
LFS data adjustment for the findings of the 2011 National Census in GUS publications refers to the period starting in 2010 Q1. In order to preserve data comparability, earlier data in the graphs presented in this chapter have been corrected by the NBP.

Figure 2.24 Registered unemployment rate and unemployment rate according to the Labour Force Survey



Source: GUS data (seasonally adjusted).

2.4 Labour market

2.4.1 Employment and unemployment

In 2014 Q3 and Q4, the labour market conditions improved, despite a slight slowdown in GDP growth.

According to the Labour Force Survey data, growth in the number of working persons in the economy remained relatively high and amounted to 2.1% y/y in 2014 Q3 and 1.9% y/y in 2014 Q4 (compared to 1.7% y/y in 2014 Q2). This was driven by a sustained recovery in services, which contributed to a strong rise in the number of persons working in this

[45] *NBP Quick Monitoring. Economic climate in the enterprise sector in 2014 Q4 and forecasts for 2015 Q1*, NBP.

[46] *NBP Quick Monitoring. Economic climate in the enterprise sector in 2014 Q4 and forecasts for 2015 Q1*, NBP.

sector.[47] At the same time, high growth in the number of persons working in industry continued.[48]

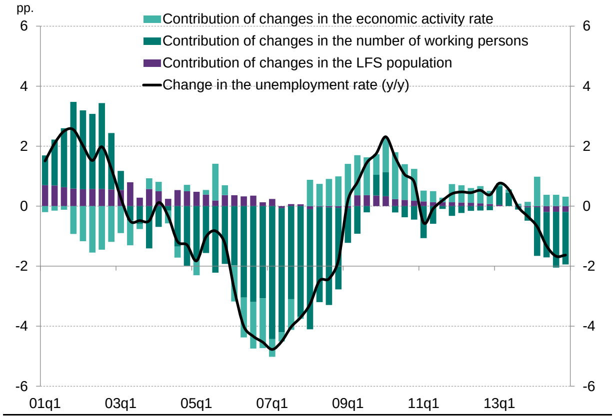
Data from the enterprise sector also confirm growth in employment at the end of 2014 and the beginning of 2015. In accordance with them, employment increased by 1.0 y/y in 2014 Q4 (compared to 0.7% y/y in 3Q) and 1.2% y/y in January 2015.

According to the NBP business climate survey of 2014 Q4, the number of enterprises declaring their intention to enlarge employment continues to exceed the number of those which intend to reduce it in the next quarter. Moreover, the predominance of enterprises planning to increase employment over those planning to cut it[49] has widened, which suggests that the rate of employment growth could rise further at the beginning of 2015.

The rise in employment is accompanied by a decline in unemployment. In 2014 Q4, the LFS unemployment rate stood at 8.4% (seasonally adjusted) and was lower than in the previous quarter (8.8%, Figure 2.23) and a year before (10.3%, Figure 2.24). The fall in unemployment was primarily the result of a rise in the number of persons working in the economy. At the same time, the decline in unemployment was mitigated by an increase in labour supply, which was mainly related to higher labour activity of persons approaching the retirement age.

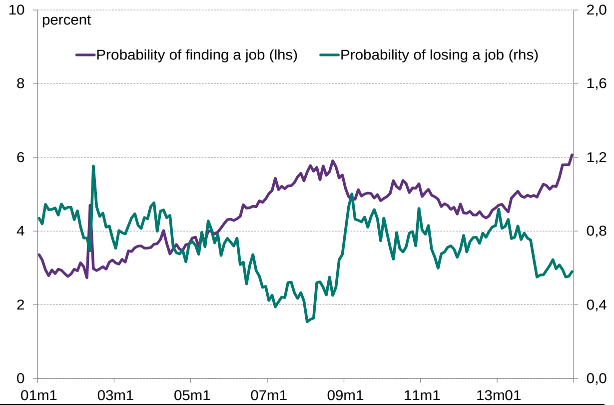
Data from labour offices indicate a further reduction in unemployment in 2014 Q4. In December, the registered unemployment rate – seasonally adjusted – reached 11.4% (compared to 11.8% in October)[50,51]. Alongside that, NBP estimates show that in recent

Figure 2.25 Breakdown of change in the unemployment rate in y/y terms according to LFS data



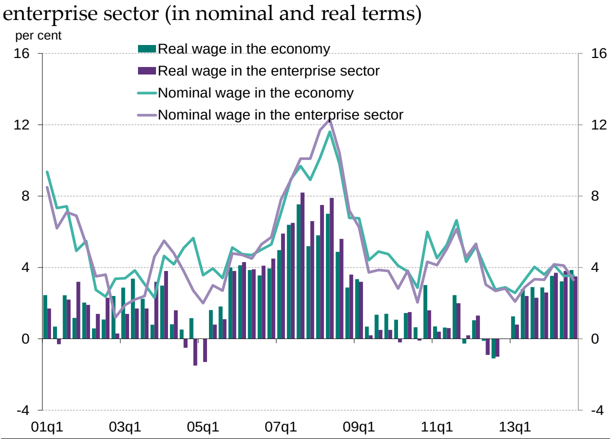
Source: GUS data, NBP calculations.

Figure 2.26 Probabilities of finding and losing a job



Source: NBP calculations.

Figure 2.27 Annual wage growth in the economy and in the enterprise sector (in nominal and real terms)



Source: GUS data.

[47] In 2014 Q3 and Q4 the growth in the number of working persons in services amounted to, accordingly, 3.8% y/y and 2.0% y/y (against 2.8% y/y in 2014 Q2).

[48] In 2014 Q3 and Q4 the growth in the number of working persons in industry amounted to, accordingly, 1.0% y/y and 2.0% y/y (against 1.5% y/y in 2014 Q2).

[49] *NBP Quick Monitoring. Economic climate in the enterprise sector in 2014 Q4 and forecasts for 2015 Q1*, NBP.

[50] In November, the registered unemployment rate stood at 11.7% (seasonally adjusted).

[51] There are two reasons for the difference between the LFS unemployment rate and the registered unemployment rate: (1) the definition of an unemployment person is different, (2) the definition of the population to which the number of unemployed persons is referred is different.

months the likelihood of finding a job has stabilised at a relatively high – and the likelihood of a job loss at a relatively low – levels.

2.4.1 Wages and labour productivity

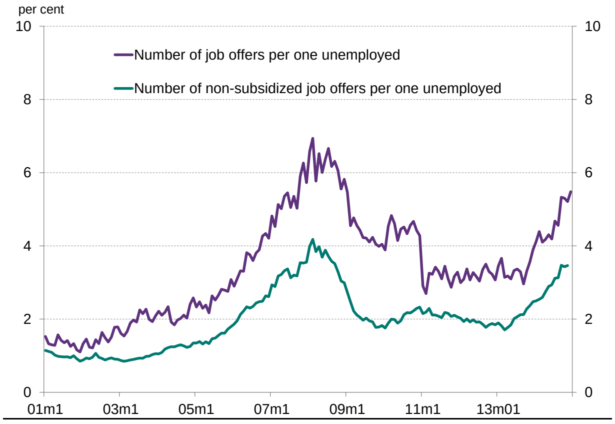
Data on wages and unit labour costs point to a continued lack of wage pressure in the economy, despite increasing employment and falling unemployment.

In 2014 Q4, wage growth in the economy decreased somewhat and stood at 3.1% y/y (compared to 3.5% y/y in 2014 Q3). Wage growth in the enterprise sector in this period stabilised at 3.3% y/y (Figure 2.27).

The index of labour market tensions has risen gradually in recent quarters (Figure 2.28).[52] Yet NBP surveys point to a limited risk of significant wage growth.[53] In 2014 Q4, there was only a slight increase in the percentage of employees for whom a wage rise was planned compared to 2014 Q3. At the same time, the size of the average envisaged wage rise fell.

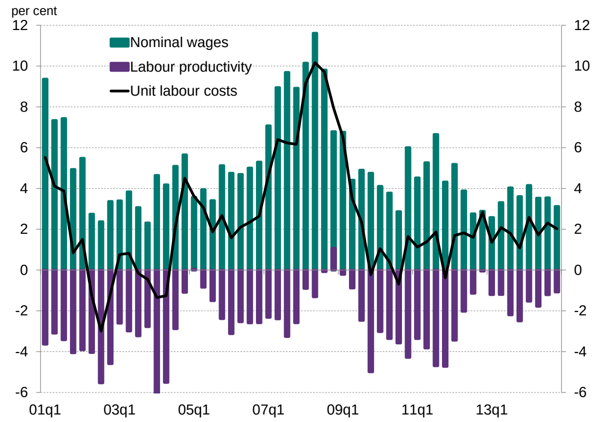
The growth in unit labour costs in the economy remained moderate in several recent quarters, despite certain fluctuations. In 2014 Q4, it decreased slightly driven by weaker wage growth, accompanied by stable labour productivity growth (Figure 2.29). Data on unit labour costs growth in industry also point to its fall in this period. Similarly to the developments in the whole economy, the fall resulted from a slight decrease in wage growth, although in industry also productivity growth increased, fuelled by a slight acceleration in output at the end of 2014 (Figure 2.30).

Figure 2.28 Labour market tension index (vacancies per unemployed)



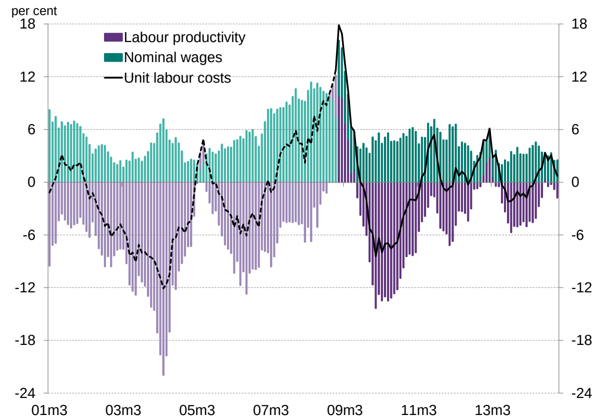
Source: GUS data, NBP calculations.

Figure 2.29 Annual growth in labour productivity, wages and unit labour costs in the economy



Source: GUS data, NBP calculations.

Figure 2.30 Annual growth in labour productivity, wages and unit labour costs in industry (moving three-month averages)



Source: GUS data, NBP calculations.

Due to new PKD classification, wage and industry employment growth rates from December 2008 (in brighter colours) are not fully comparable with earlier data.

[52] The index of labour market tensions is calculated as the number of nonsubsidised job offers per one unemployed person.

[53] *NBP Quick Monitoring. Economic climate in the enterprise sector in 2014 Q4 and forecasts for 2015 Q1*, NBP.

2.5 Financial markets and asset prices

In the recent months, the volatility of financial asset prices in Poland rose due to an increase in global risk aversion and decisions taken by the major central banks. The recovery in the housing market continued, supported by favourable developments in the labour market and easier bank lending conditions.

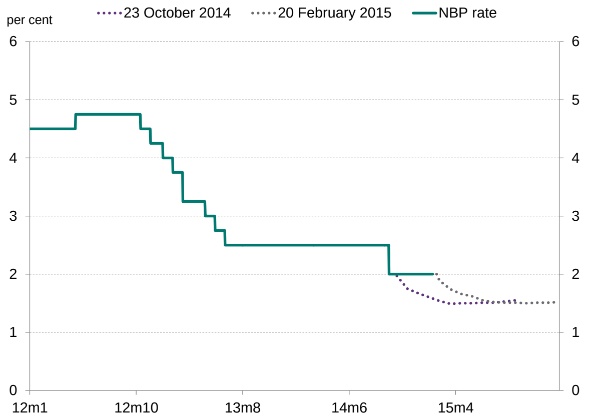
2.5.1 Interest rates and financial asset prices

Since the interest rate cut of 0.50 percentage points in October 2014, the Monetary Policy Council has kept the NBP interest rates unchanged, including the reference rate of 2.0%. Financial market participants expect a further decrease of the NBP interest rates, by a total of 0.50 percentage points in 2015 (Figure 2.29).[54]

Expectations of an interest rate cut and the monetary policy easing by the ECB translated into a fall in Polish government bond yields to their historical lows (Figure 2.32), despite an increase in risk aversion in the international financial markets. As a result, the spread between the yields on ten-year Polish government bonds and their equivalents in the major advanced economies narrowed over the past year. The decline was significant especially in relation to the yields on the United States Treasuries, which was due to an increase in expectations for monetary policy tightening by the Fed.

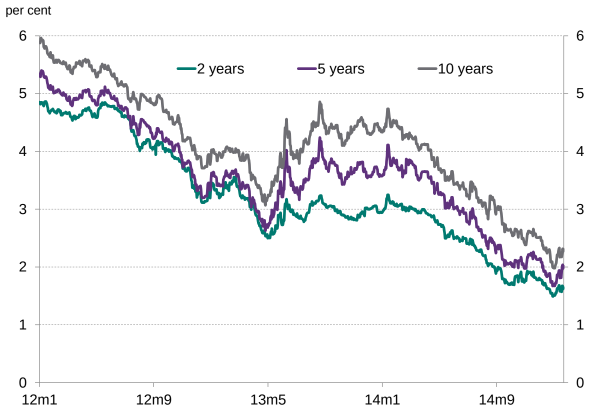
The rise in risk aversion contributed to a decline in stock prices in Poland. A particularly sharp fall was recorded for the shares in the energy sector companies, which was related to a fall in prices of oil and coal in the global markets and the resultant poor financial performance of these companies. In addition, in mid-January 2015 the prices of shares in

Figure 2.31 NBP reference rate and 1M interest rate implied by FRAs (since February 2015)



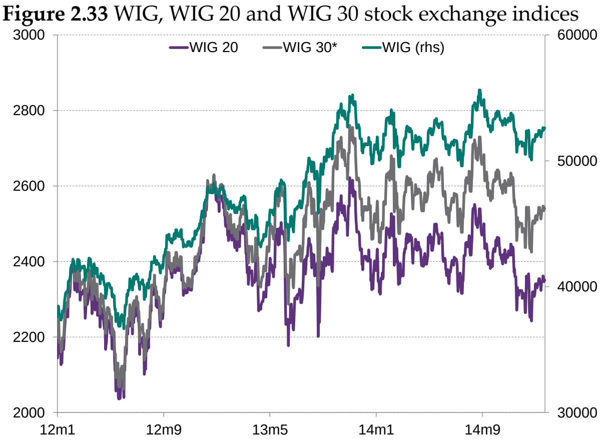
Source: Bloomberg data, NBP calculations.

Figure 2.32 Yields on Polish sovereign bonds



Source: Bloomberg data.

Figure 2.33 WIG, WIG 20 and WIG 30 stock exchange indices



Source: Bloomberg data.

[54] In March, the Monetary Policy Council decided to decrease interest rates by 0.50 percentage points, to 1.50% in the case of the reference rate. At the same time, the Council announced that the decision to lower the interest rates concluded the monetary easing cycle.

Polish banks declined due to concerns about their profitability and the capital position following the SNB's decision to abandon exchange rate floor against the euro. Equity prices rebounded after a substantial expansion of monetary policy easing by the ECB, yet remained below the levels from the end of October 2014 (Figure 2.33).

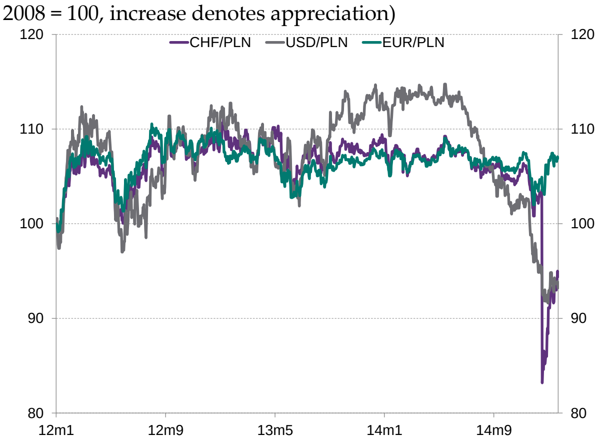
2.5.2 Exchange rate

Since the publication of the previous *Report,* the exchange rate of the zloty has depreciated against the US dollar and – particularly sharply – against the Swiss franc, while simultaneously gaining against the euro (Figure 2.34). The developments on the Polish FX market have been determined mainly by external factors, including the monetary policy of major central banks and a rise in risk aversion.

The considerable scale of the depreciation against the Swiss franc was due to the SNB abandoning the exchange rate floor against the euro. As a result of this decision, the Swiss franc strengthened significantly against the euro, and hence against the zloty and the currencies of other emerging market economies with considerable exposure of households to the Swiss franc (see Box 3: *Floating the Swiss franc and its potential impact on household consumption in Poland*; Chapter 1.3 *Monetary policy abroad and international financial markets*).

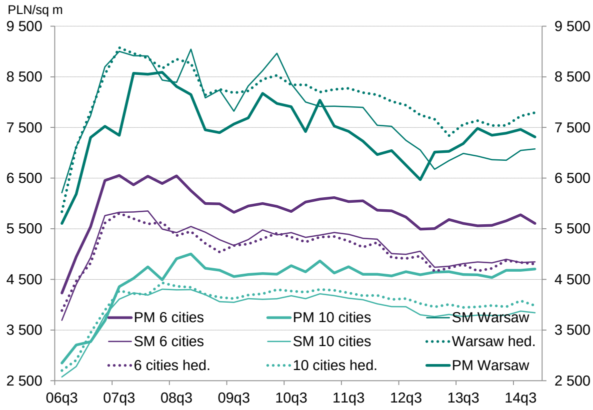
The zloty also weakened against the US dollar. The main drivers of this depreciation included the rise in aversion towards emerging markets at the turn of 2014 and 2015, the divergence of the monetary policies between the Fed and the ECB and an increase in geopolitical risk – all of which was translating into a sharp rise in the dollar against the euro (see Chapter 1.3 *Monetary policy abroad and international financial markets*). In addition, from mid-January 2015, the depreciation of the zloty against the dollar was exacerbated by the decision of the SNB.

Figure 2.34 Nominal exchange rate of the Polish zloty (January 2008 = 100, increase denotes appreciation)



Source: Bloomberg data.

Figure 2.35 Average prices of flats in seven and nine major cities



Source: NBP calculations on the basis of sale price data from the NBP survey and PONT Info Nieruchomości asking price data.

Similarly to many other emerging market currencies, the zloty appreciated against the major currencies following the ECB's decision to substantially expand the scale of financial asset purchases.

2.5.3 Home prices[55]

In the second half of 2014, the housing market in Poland continued to recover. The recovery was reflected in high home sales and stable prices. The recovery was supported by an improvement in the labour market, high loan affordability and the low interest rates. The high turnover in the housing market was additionally supported by the first home buyers scheme ("Home for the Young") (Figure 2.35)[56]. The high sales of homes in the primary market along with ongoing decline in construction costs were conducive to start new projects (Figure 2.36). As a result, the supply in the primary market, in spite of some decrease, was still high.

2.6 Credit and money

Since the publication of the previous *Report*, total lending growth – despite some acceleration – has remained moderate (Figure 2.37). Within that, corporate loan growth increased, while growth in household loans declined slightly. At the same time, the supply of broad money accelerated, mainly reflecting a significant rise in household deposits.

2.6.1 Corporate lending

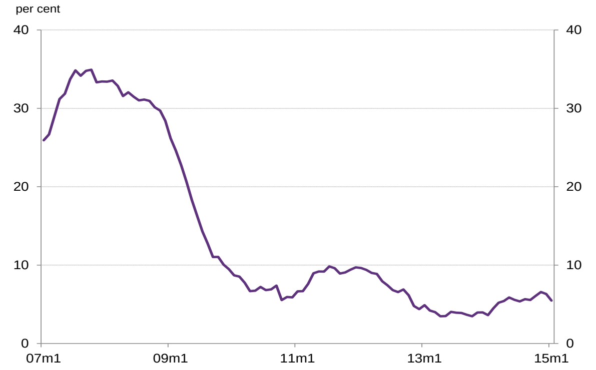
Lending growth to the corporate sector – after a period of stabilisation – increased slightly in 2014 Q4 (to 6.9% y/y from 6.5% y/y in 2014 Q3; Figure 2.38),

Figure 2.36 Housing construction in Poland, total in a year

Source: GUS data, NBP calculations.

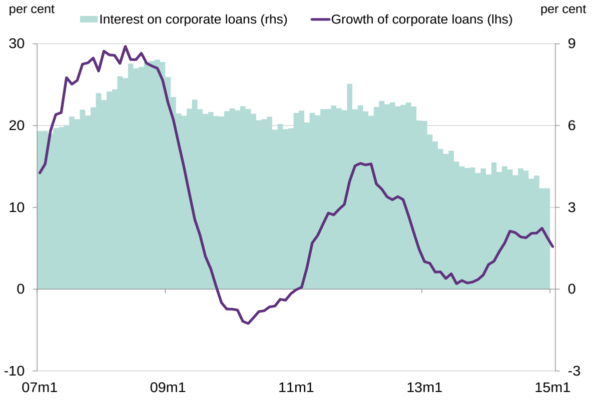
* Production index is a number of development projects started in the real estate market less introduced into the market (12-month moving value).

Figure 2.37 Annual growth of total liabilities of non-financial sector, non-monetary financial institutions, local government units and social insurance funds



Source: NBP data.

Figure 2.38 Annual growth and average interest on new zloty denominated loans to corporations



Source: NBP data.

[55] More information on the Polish housing market can be found in the NBP publications *Information on home prices and the situation in the residential and commercial real estate market in Poland in 2014 Q2*, available at the NBP website www.nbp.pl.

[56] PM – primary market, SM – secondary market, hed. – hedonic price index. Sale prices in the primary market weighted with the share of the housing stock in a given city in the total housing stock of all cities. Sale prices in the secondary market adjusted for differences in the qualities of flats. The index for seven cities includes: Gdańsk, Gdynia, Kraków, Łódź, Poznań, Szczecin and Wrocław, and the index for nine cities – Białystok, Bydgoszcz, Katowice, Kielce, Lublin, Olsztyn, Opole, Rzeszów and Zielona Góra.

which was driven by an acceleration in growth of both current loans and – albeit to a lesser extent – investment loans.[57] The growth in corporate loans in 2014 Q4 was supported by the easing of credit standards and a fall in interest on loans following the October decision of the Monetary Policy Council to cut NBP interest rates (Figure 2.38).[58,59]

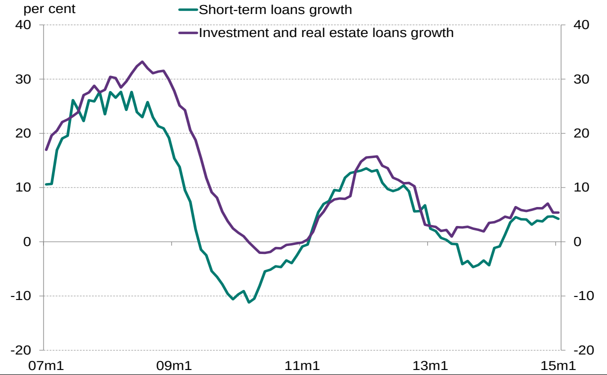
At the end of 2014 Q3, corporate foreign debt grew by 1.8% compared to the corresponding period of 2013 (Figure 2.40)[60], largely reflecting an increase in liabilities to foreign direct investors.[61]

2.6.2 Loans to households

Following a stabilisation in 2014 Q3, the growth in household loans declined in 2014 Q4, driven by a slight slowdown in housing loans and a decrease in the growth of consumer loans (Figure 2.41, Figure 2.40).

In 2014 Q4, the annual growth of housing loans slowed down to 3.9% y/y (from 4.2% y/y in 2014 Q3; Figure 2.41), due in part to tighter lending standards applied by banks for this credit category.[62] On the other hand, the growth in housing loans was supported by reduced interest on loans and the on-going improvement in labour market conditions(see Chapter 2.4 *Labour market*).[63]

Figure 2.39 Annual growth of short-term loans and investment loans to corporations



Source: NBP data.

Figure 2.40 Corporate foreign debt

Source: NBP data.

[57] Average monthly data.

[58] The easing of credit standards was applied to the majority of corporate loan categories. According to the survey on credit conditions, easing in lending policy by banks was related mainly to lower risk of future economic situation, better condition of largest borrowers and a rise in competitive pressure among banks. From September 2014 to November 2014, the average interest on new zloty corporate loans fell by 35 basis points to 3.7%. According to NBP data, the interest fell despite a rise in spreads charged by banks (to 1.9% in 2014 Q4 from 1.7% in 2014 Q3).

[59] Since the December 2014 data, NBP releases time series concerning new statistics on interest rates applied by monetary financial institutions to deposits and loans vis-a-vis households and non-financial corporations. More information on this issue can be found on the NBP website: http://www.nbp.pl/homen.aspx?f=/en/statystyka/oproc/oproc.html

[60] Since the previous *Report,* data on foreign corporate debt are based on the revised methodology that takes into account new standards outlined in the Balance of Payments and International Investment Position Manual (BPM6). According to this approach, data on direct investment comprise the volume of investment made in Polish banks. More information on this issue can be found on the NBP website: http://www.nbp.pl/en/aktualnosci/2014/Revision-BoP-IIP-2014.pdf

[61] Corporate foreign debt to non-fellow enterprises increased only slightly and resulted from some rise in credit and short-term loan-related debt, accompanied by a fall in long-term liabilities. Corporate domestic debt to monetary financial institutions (MFI) at the end of January 2015 amounts to PLN 278 billion.

[62] *Senior loan officer opinion surveys on bank lending practices and credit conditions, 1st quarter 2015, NBP.*

[63] Transaction data presented in this chapter do not take into account changes in the volume of loans arising from valuation changes or reclassification. A change in the value of foreign currency denominated housing loans in January 2015 will be

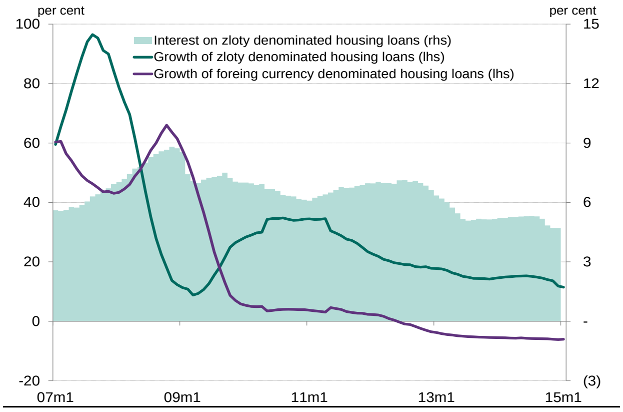
In 2014 Q4, the growth in consumer loans declined to 5.6% y/y (compared with 6.4% y/y in the previous quarter). That was accompanied by an increase in household deposits, which – given the favourable labour market situation – supported financing of a rise in consumption with households' own funds. On the other hand, a further rise in lending was favoured by credit policy easing as well as a lowering of interest on loans triggered by NBP interest rate cuts.[64]

2.6.3 Deposits and monetary aggregates

In 2014 Q4, the growth of broad money continued to accelerate (to 7.8 % y/y from 7.2% in 2014 Q3; Figure 2.43), which was driven mainly by higher growth of household deposits (both current and term deposits) and a stable rise in corporate deposits.

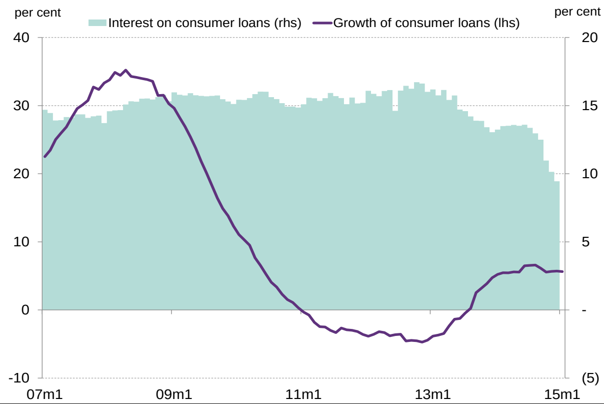
The acceleration of household deposit growth was supported by a further improvement in labour market conditions (see Chapter 2.4 *Labour market*).[65] At the same time, the higher deposit growth was accompanied by a slowdown in the rise of riskier assets of households (shares, bonds), which was related to higher price volatility in the financial markets (see Chapter 1.3 *Monetary policy abroad and international financial markets* and Chapter 2.5 *Financial markets and asset prices*).

Figure 2.41 Annual growth and average interest on new housing loans to households



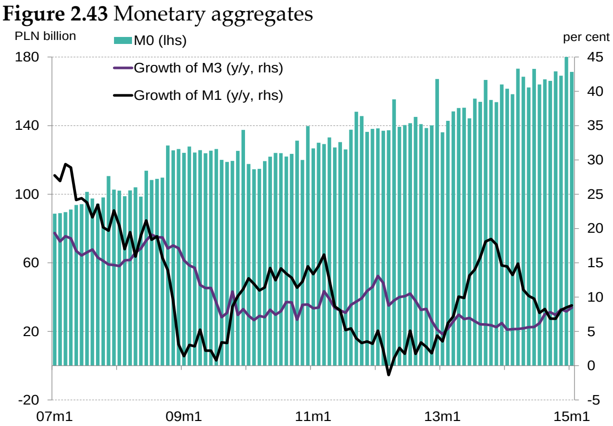
Source: NBP data.

Figure 2.42 Annual growth and average interest on new consumer loans to households



Source: NBP data.

Figure 2.43 Monetary aggregates



Source: NBP data.

influenced by the Swiss National Bank decision of 15 January 2014 resulting in a strong depreciation of the zloty against the Swiss franc. The change in the volume of housing loans in January 2015 arising from exchange rate factor was amount to PLN 17 billion, compared to transaction change in this credit category at the level of PLN 0,8 billion. Furthermore, the liabilities of monetary financial institutions (MFI) due to housing loans in the described period decreased by PLN 2.1 billion in December as a result of the liquidation procedure of the SKOK Wołomin credit union (classified as a MFI). The above amount was reclassified to liabilities of the other financial institutions sector.

[64] *Senior loan officer opinion surveys on bank lending practices and credit conditions, 1st quarter 2015, NBP.*

[65] A high increase in households deposits in December has to be tied, inter alia, with the payouts of annual premiums and bonuses. Moreover, the deposits grew also after the Agency for Restructuring and Modernisation of Agriculture had started to transfer 2014 direct payments to farmers.

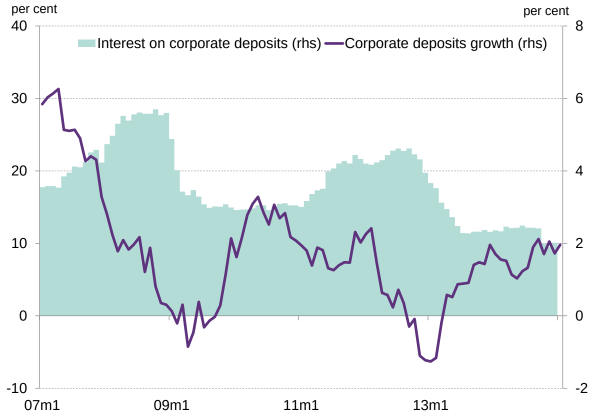
2.7 Balance of payments

In 2014 Q3, the deficit on the current account widened slightly (to EUR 1.8 billion, from EUR 1.5 billion in 2013 Q3), while remaining at the historically low level. The rise in the deficit on the year before partly reflected the increase in the income of foreign direct investors. The deficit was further risen by flagging external demand observed amidst a concurrent expansion in domestic demand, which reduced the surplus in Poland's external trade (seen in a diminished surplus on the goods and services account). In turn, the rise in the deficit was constrained by higher than the year before inflow of EU funds and lower EU membership fee, which added to the balance on the secondary income account.[66] Monthly data indicate that in 2014 Q4 the current account deficit remained at the level observed in the corresponding period of the previous year, i.e. EUR -1.3 billion[67].

In 2014 Q3, EU funds continued to flow into Poland, sustaining the surplus on the capital account.[68] Yet the surplus on this account was smaller than a year before (EUR 1.9 billion as against EUR 2.3 billion in 2014 Q3), as the scale of those inflows was smaller (notably this of structural funds). In 2014 Q4, the balance on the capital account increased slightly to EUR 2.9 billion (as compared to EUR 2.7 billion a year before).

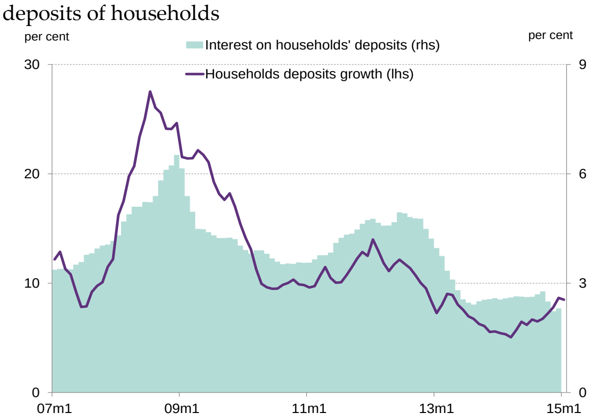
In 2014 Q3, the inflow of capital under foreign direct and portfolio investment increased. At the same time, monetary financial institutions reduced their foreign assets in comparison with the corresponding period of the previous year. Monthly data indicate that in 2014 Q4 foreign direct investment funds

Figure 2.44 Annual growth and average interest on bank deposits of corporations



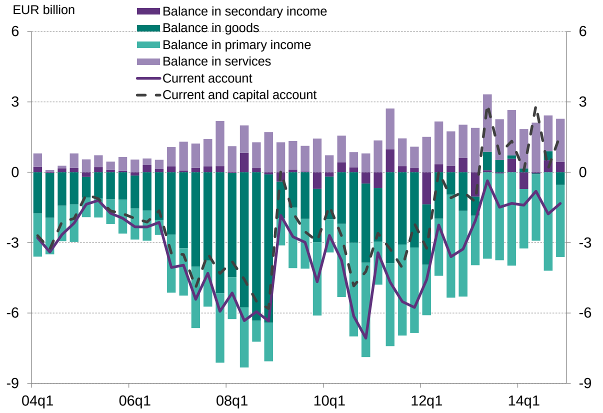
Source: NBP data.

Figure 2.45 Annual growth and average interest on bank deposits of households



Source: NBP data.

Figure 2.46 Current account balance



Source: NBP data and estimates.

[66] Since 30 September 2014, NBP has published the data on the balance of payments and international investment position in accordance with the guidelines contained in the balance of payments manual BPM6. For more information on the new presentation of data, see the NBP website http://www.nbp.pl/home.aspx?f=/aktualnosci/wiadomosci_2014/info-ds.html.

[67] Presented data on balance of payments and its components in the text, figure and table were calculated based on monthly data from the period October – December 2014.

[68] 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 are presented in primary income account.

continued to flow to Poland. Simultaneously, a certain outflow of portfolio capital was observed (in the form of both debt and equity instruments).

Due to the widening of the current account deficit in 2014 Q3 and Q4, Poland's indicators of external imbalances deteriorated slightly on their 2014 Q2 performance. That notwithstanding, the current and capital account balances continued to add up to a surplus (Table 2.6)[69].

Table 2.6 Selected external stability indicators (four-quarter moving average, in % unless stated otherwise)

	2011	2012	2013				2014			
			q1	q2	q3	q4	q1	q2	q3	q4
Current account balance (CAB)/GDP (w %)	-5.2	-3.6	-2.9	-2.4	-1.9	-1.3	-1.1	-1.2	-1.3	-1.3
Current and capital account balance/ GDP (%)	-3.3	-1.3	-0.8	-0.1	0.4	1.0	1.3	1.2	1.1	1.1
Trade balance/GDP (%)	-3.4	-1.9	-1.4	-0.7	-0.3	0.2	0.4	0.2	0.2	0.0
Official reserve assets (in monthly imports of goods and services)	5.4	5.7	5.9	5.7	5.5	5.3	5.1	5.0	5.3	5.4
Foreign debt/GDP (%)	68	73	73	71	73	71	70	70	71	-
Net international investment position/GDP (%)	-60	-68	-66	-64	-68	-70	-70	-68	-69	-
Official reserve assets/foreign debt (up to 1Y) plus estimated CAB (%)*	80	100	95	90	84	88	92	90	93	-
Official reserve assets/foreign debt (up to 1Y) (%)*	93	107	100	96	89	95	100	99	105	-

Source: NBP and Ministry of Finance data.

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

[69] Data in Table 2.6 differ from those reported in the NBP *Balance of Payments of the Republic of Poland for 2014 Q2* (Table XXVI) as they are presented in terms of four-quarter moving averages.

3 Monetary policy in November 2014 – March 2015

At the meetings in November and December 2014 as well as January and February 2015 the Monetary Policy Council decided to keep NBP interest rates unchanged. At the meeting in March 2015 the Council decreased interest rates by 0.5 percentage point to the following levels: reference rate 1.50%, lombard rate 2.50%, deposit rate 0.50%, rediscount rate 1.75%.

What follows in the next part of the chapter are the previously published *Minutes of the Monetary Policy Council decision-making meetings* held between November 2014 and February 2015 as well as the *Information from the meeting of the Monetary Policy Council* in March 2015. *Minutes of the Monetary Policy Council decision-making meeting in* March 2015 will be published on 19 March, and thus included in the next *Report*.

Minutes from the Monetary Policy Council Decision Making Meeting held on 5 November 2014

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

Some Council members emphasized that current and expected economic conditions in Poland's external environment had deteriorated in recent months. It was noted that forecasts for global economic growth prepared by external institutions had been again revised downwards. This included also forecasts for growth in the euro area, which is expected to remain stagnant in the coming quarters. It was emphasized that concerns about a prolonged stagnation in the euro area were rising. Some Council members also pointed to economic slowdown in major emerging market economies. It was indicated that growth in China was weakening and economic stagnation was likely to have occurred in Russia, while recession in Ukraine was deepening. Some Council members assessed that slower economic growth in emerging market economies would affect GDP growth in the euro area. This concerns in particular Germany, Poland's main trading partner, whose export share to these economies is large. However, other Council members pointed to signs of improvement in industry, including in the euro area and Germany, that were appearing irrespective of unfavourable external conditions. Attention was also drawn to ongoing moderate economic recovery in the United States. Moreover, according to these Council members, economic growth in the euro area next year may be slightly faster than this year.

While discussing inflation developments abroad, it was highlighted that inflation in many economies was still low, including countries with relatively robust growth. Council members pointed out that inflation in the euro area was very low and still declining. Few Council members observed that in some countries strongly linked to the euro area, price growth was negative. It was emphasized that low global inflation resulted from a decline in commodity prices in global markets and relatively weak global economic growth, which – according to few Council members – indicates that attempts to accelerate price growth by means of domestic monetary policy would prove ineffective.

While discussing monetary policy abroad, it was noted that it remained strongly expansionary in the case of major central banks. Particularly, although the Federal Reserve had concluded its financial asset purchases, it would continue to roll over maturing debt securities. Few Council members pointed out that the Federal Reserve was signalling interest rate increases in the following year. On the other hand, the European Central Bank started purchasing securities in October, whereas the Bank of Japan increased financial asset purchases to a significant extent. In this context, it was highlighted that the European Central Bank intended to continue purchasing securities for at least two years, and the interest rates in the euro area might stay close to zero even over a longer term. Attention was also drawn to interest rate decreases in countries strongly linked to the euro area, including economies which were still growing at a relatively fast pace. Moreover, few Council members pointed out that the expansionary monetary policy of the major central banks had resulted in an increased upward pressure on currencies of some countries with a significant interest rate differential to the major economies.

While discussing economic conditions in Poland, the Council members emphasized that in 2014 Q3 the economic growth had probably continued to decelerate. Some Council members indicated the slowdown in economic growth could be shallow. It was noted that the slowdown had been caused mainly by weaker external demand, which was translating into slower export growth, and declining sentiment of economic agents, which resulted in a deceleration in private investment outlays. These factors of economic slowdown are reflected in the incoming data, which show that export growth has almost come to a halt and export orders have decreased, while industrial production in 2014 Q3 grew slower than a quarter before, on average. However, some Council members pointed out that recent data readings might indicate recovery in economic activity in the coming quarters. In particular, in September both industrial production and construction output increased, while sentiment improved after several months of decline. Moreover, a gradual acceleration of corporate lending and stable growth of housing loans suggest that growth in investment demand in 2014 Q3 might remain moderate. Some Council members also pointed to still favourable consumer confidence, stable retail sales growth and a steady increase in employment. They indicated that the probability of finding a job had increased, while the probability of losing a job remained stable.

While discussing the economic outlook for Poland, Council members highlighted that the November projection pointed to lower GDP growth than in the previous round. However, some Council members emphasized that in accordance with the central projection path, i.e. the most likely outcome, the annual GDP growth would start to slightly accelerate in 2015 Q2. Economic growth should then stabilise above 3%, i.e. will grow at a pace close to potential output growth. This underpins the view expressed by these Council members that – notwithstanding the adverse external conditions – economic outlook for Poland remains favourable. Furthermore, these members cited external forecasts, which also suggested that moderate recovery of the Polish economy could resume in the following quarters. At the same time, some Council members stressed that the probability of economic growth being weaker than indicated by the central projection path was significant. This is demonstrated in strong asymmetry of the probability distribution in GDP projection, associated mainly with the risk of prolonged weak economic growth in the euro area. These members also highlighted that several external institutions had revised their forecasts for economic growth in Poland downwards and that the uncertainty related to global economic conditions continued.

Referring to inflation developments in Poland, Council members noted that in September the annual growth of consumer price index was still negative. It was emphasized that although deflation in Poland had been caused largely by external factors (reflected, in particular, in a decline in food and energy prices), the price growth in Poland had been also dampened by no demand pressure, as most core inflation indicators were at zero. In this context, it was highlighted that wage and cost pressures in the economy were still low, as shown by the weak growth of unit labour costs and the continued decline in producer prices on an annual basis.

With regard to the outlook for inflation, it was emphasized that in the November projection the inflation path was below the July projection, and stayed below the NBP inflation target throughout the projection horizon. At the same time, some Council members highlighted that, like for the GDP projection, the asymmetry in the balance of risks for the inflation forecast was significant. This points to a relatively high probability of inflation staying below the central path. These members pointed out that, in contrast with the July projection, the output gap would remain negative throughout the November projection horizon. Therefore, the period of low demand pressure will be longer than envisaged in the previous projection. They also argued that external forecasts supported the view that inflation in Poland would remain low. On the other hand, other Council members emphasized that, in line with the central projection path from November, inflation should rise gradually, to return to the band for deviations from the target by the end of the projection period. According to these Council members, inflation might be slightly higher than in the November projection, returning close to target within the monetary policy horizon, as indicated by several forecasts.

While discussing the interest rate decision, some Council members assessed that the monetary policy adjustment should be continued at the November meeting. In their opinion, factors in favour of further interest rate adjustment included ongoing deflation, very low inflation expectations and the forecasts indicating that inflation would remain below the target in the following years. Further monetary policy adjustment was also justified by a deceleration in domestic economic growth and a risk of further slowdown due to the weakening economic growth outlook in the external environment of the Polish economy. In the opinion of these Council members, further decrease in interest rates would cushion the adverse impact of weakening external demand on domestic economic activity growth. Moreover, they emphasized that the persistence of the significant interest rate differential between Poland and its external environment might result in later return of inflation to its target through upward pressure on the zloty. Few Council members noted that interest rate decreases would reduce the public debt servicing costs and therefore support the economic policy of the Government.

Nonetheless, the majority of Council members were of the opinion that the interest rates should remain unchanged at the November meeting. These members argued that the slowdown in GDP growth could be temporary and shallow. They also emphasized that the decrease in inflation and the weakening in economic activity were mainly driven by factors beyond the impact of domestic monetary policy, including significant uncertainty undermining the growth of spending by private agents. Few Council members stressed that after the NBP reference rate had been decreased in October, another large cut would imply that the real interest rates deflated by inflation expected over the monetary policy horizon would be near zero or even negative, which could result in emergence of economic imbalances. In the opinion of some Council members, further interest rate decreases could stimulate excessive credit growth in the economy and weaken the incentives to restructure enterprises. In the assessment of the Council members who were in favour of keeping interest rates unchanged, given the current level of interest rates there is still space for monetary policy easing, should it become necessary in case of significant turbulence in global financial markets.

Some of the Council members who supported keeping interest rates unchanged assessed that the October adjustment of interest rates provided sufficient monetary policy impulse to support the return of inflation to close to the target within the monetary policy horizon, in the light of the current data and the November projection results. Few of them also emphasized a need for an assessment period to analyse the impact of the October interest rate cut. They also highlighted that prudent monetary policy was a value which should be preserved in order to maintain macroeconomic and financial stability. However, these members indicated that uncertainty over economic conditions in the future had recently increased. Hence, they did not exclude a possibility of further monetary policy adjustment if economic conditions deteriorate in Poland and abroad, particularly in the euro area.

At the meeting a motion was submitted to lower NBP interest rates by 1.00 percentage point. The motion did not pass. A motion was also submitted to lower NBP interest rates by 0.50 percentage points. The motion did not pass. A motion was also submitted to lower NBP interest rates by 0.25 percentage points. The motion did not pass. The Council decided to keep NBP interest rates at the following levels: the reference rate at 2.00%, the lombard rate at 3.00%, the deposit rate at 1.00%, the rediscount rate at 2.25%.

Minutes from the Monetary Policy Council Decision Making Meeting held on 3 December 2014

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

While discussing business conditions in Poland's external environment, Council members pointed out that global activity growth remained moderate. It was emphasized, that the business conditions in the United States remained favourable. Few Council members also noted that the economic situation in the euro area had slightly improved. However, some Council members pointed out that economic growth in the euro area remained sluggish and business climate indicators point to low activity growth probably continuing in the following quarters. Slow GDP growth in Germany – Poland's main trading partner – was highlighted, along with the decline in the PMI index for that country. With regard to the situation in the largest emerging economies, it was observed that also in these countries economic activity remained relatively slow, with growth weakening further in China.

While discussing monetary policy abroad, it was stressed that major central banks continued to pursue highly expansionary monetary policy. In particular, the European Central Bank was keeping its interest rates at a historically low level, while simultaneously running an asset purchase programme; the European Central Bank does not exclude the possibility that the programme might be expanded to include more instruments. According to few Council members this could limit the risk of deflation in the euro area.

While discussing economic situation in Poland, Council members observed that GDP growth in 2014 Q3 had weakened only slightly and was higher than expected. Some Council members also highlighted the favourable structure of GDP growth. They pointed to flagging external demand as the principal source of weaker economic growth. Domestic demand, in turn, remained relatively robust, supported by a stable expansion in consumer demand and steeper growth in investment spending. Some Council members also pointed to rising business climate indicators, faster than a year ago credit growth and a further improvement in labour market conditions. Other Council members emphasized that retail sales growth and industrial output growth had remained low in October, while construction and assembly output had declined, which might signal further growth weakening in 2014 Q4. Few Council members believed that this enhanced the risk of slower growth in investment expenditures in the Polish economy. Some Council members also drew attention to the fact that nominal GDP growth – due to GDP deflator having sunk almost to zero – was running at one of the lowest levels in the past decade. Slow nominal growth hampers the process of reducing the debt in relation to GDP – both public and private. In the opinion of those Council members, moderate real GDP growth coupled with core inflation running close to zero, corroborate the existence of negative output gap in Poland. Yet, other Council members believed that despite a slight slowdown, GDP growth was running close to that of the potential output, with domestic demand growing even faster. According to those Council members, should robust expansion in domestic demand be sustained, it might boost the current account deficit, currently being contained by the declining commodity prices.

While discussing the prospects for economic growth in Poland, some Council members stressed that both the baseline scenario of the November projection and internal short-term forecasts pointed to only slight weakening of GDP growth in the coming quarters, with a subsequent return of moderate recovery. Council members pointed out that since the current weakening of GDP growth had mainly been driven by external factors, future economic growth in the euro area would be of particular significance to economic activity trends in Poland. Few Council members argued that a slight rise in economic growth expected in the euro area over the next few quarters would support GDP growth in Poland. Yet, other Council members highlighted the continued risk of prolonged low economic growth in the euro area, which might adversely affect GDP growth in Poland in the longer term.

With regard to inflationary processes at home, it was pointed out that the annual consumer price growth fell yet again in October and was running below the forecasts. Consumer prices deflation was accompanied by a further decline in producer prices in industry. Some Council members emphasized that inflation in Poland was currently driven mainly by external factors bringing about, above all, a decrease in energy and food prices. Few of the Council members were of the opinion that such sources of negative price growth were indicated by sound – despite a rapid rise in the corporate wage bill – financial performance of enterprises, as well as a decline in corporate operating costs, in particular costs of materials. Some Council members, in turn, emphasized the absence of demand pressure as a factor, which, along with external factors, contributed to lower inflation. In the opinion of those Council members this was indicated by a further decline in core inflation indices, whose average – for the first time on record – sank below zero.

Some Council members also pointed to very low inflation expectations of households and businesses, and declining inflation expectations of professional forecasters. At the same time, it was emphasized that inflation forecasts had been once again revised downwards, indicating that deflation was likely to persist somewhat beyond the end of 2014. In the opinion of few Council members, CPI growth in Poland might remain relatively low in the longer term, due to the persistent downward trend in commodity prices in the global markets. Yet, other members of the Council argued that the impact of lower commodity prices on inflation should be short-lived. While discussing the outlook for inflation, attention was also drawn to a significant impact of future exchange rate of the zloty on price developments.

While referring to the possible effects of deflation in Poland, it was emphasized that considerable uncertainty remained as to its impact on decisions of economic agents, in particular enterprises. In addition, it was noted that economic consequences of deflation would depend on its level, sources and duration. Some Council members pointed out that extended period of negative price growth increased the risk of inflation expectations remaining at low levels and – as a consequence – adverse effects of deflation on the economy. Other Council members argued, however, that no negative effects of deflation on decisions of businesses and households had been observed so far. They pointed out that 2014 Q3 brought an acceleration in growth of consumption and investment, and enterprises continued to post good financial results. Financial results of enterprises were supported by declining production costs driven by falling commodity prices. In the opinion of few members of the Council, deflation in the coming months would not adversely affect economic growth; on the contrary, it could rather support consumption and investment, as its main driving force was the decline in agricultural and energy commodity prices.

While discussing the interest rate decision, most members of the Council believed that at the current meeting interest rates should remain unchanged. Some Council members indicated that the decline in GDP growth was slight, and its growth prospects in the coming quarters remained relatively favourable. According to those Council members, the weakening of GDP growth and deflation were mainly driven by external factors and therefore the impact of domestic monetary policy on economic processes was limited. Few members of the Council pointed out that – considering current inflation forecasts – the level of real interest rates ex ante was at present relatively low, while other Council members stressed that the real interest rates deflated with current CPI were higher than the nominal interest rates. According to few members of the Council, further interest rate cuts could lead to external imbalances and excessively boost credit growth in the economy, including lending to households, which did not finance investments supporting growth of potential output. Those members were also of the opinion that low interest rates weakened the selection of economic agents and – consequently – inhibited productivity growth. In this context, they pointed to the recent years' very low contribution of the movement of production factors between sectors to productivity growth. Other Council members indicated that without growing consumption and with flagging external demand also private investment would decelerate.

Few Council members also argued that interest rates if kept unchanged at the current meeting would leave room for possible easing of monetary policy in the event of a significant economic downturn or disturbances in the financial system.

Some Council members who were in favour of keeping interest rates unchanged at the current meeting emphasized that they did not rule out the possibility of a further adjustment of interest rates. In the opinion of those members, lowering of interest rates could be justified by longer periods of price declines, increasing the risk of adverse effects of deflation on the economy. Interest rate adjustment would also be justified if the incoming data confirm that the slowdown in domestic economic activity would prevail and that weak growth in the environment of the Polish economy was likely to continue. Some Council members also pointed out that persisting significant spread in interest rates between Poland and its environment would increase the risk of appreciation of the zloty, which, in turn, could delay the return of inflation to the target. Few members argued that interest rate cuts would reduce the spread between the deposit rate and the expected rates of return on investment, which would, in turn, support growth in investment outlays and limit the negative impact of deflation on businesses' propensity to invest.

Few Council members were of the opinion that amidst persistently negative price growth and moderate GDP growth, as well as the high likelihood of inflation remaining below the target in the event of low probability of significant acceleration of economic growth in the coming quarters, it was justified to lower interest rates considerably already at the current meeting. According to those members of the Council, such decision was also supported by the fact that interest rate cuts in the absence of inflation risk would reduce the public debt servicing costs and thus support the government's economic policy. These members also believed that interest rate cuts – reducing their spread between interest rates in the environment of the Polish economy – would minimize the risk to the country's financial stability related to the potential inflow of speculative capital and its subsequent outflow.

At the meeting a motion was submitted to lower the NBP interest rates by 1.00 percentage point. The motion did not pass. The Council decided to keep the NBP interest rates at the following levels: the reference rate at 2.00%, the lombard rate at 3.00%, the deposit rate at 1.00%, the rediscount rate at 2.25%.

Minutes from the Monetary Policy Council Decision Making Meeting held on 14 January 2015

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

While discussing business conditions in Poland's external environment, Council members emphasized the continued recovery in the United States. In particular, they highlighted the upward revisions of GDP data for 2014 Q3 and the strength of macroeconomic data for 2014 Q4, including, in particular, the sustained employment growth and a further decline in the unemployment rate. A few Council members observed that the recovery in the United States would support global economic activity. Yet, in some Council members' assessment, the economic situation in countries which are Poland's main trading partners continued to be unfavourable. In the euro area, including Germany, the average level of the PMI index in 2014 Q4 had been lower than in the previous quarters. It was argued that in some economies of the euro area, activity growth was being hampered by the measures aimed at reducing the public debt. Furthermore, uncertainty surrounding the outlook for euro area growth was emphasised. A few Council members observed that a recovery in this currency area was delaying, citing the recent downward revisions of GDP growth forecasts for this economy, including those by the European Central Bank. Yet, other Council members were of the opinion that despite the persistently heightened uncertainty in the euro area, driven, among others, by the nearing elections in Greece, GDP growth should accelerate gradually in the following quarters supported by the considerable decline in oil prices. Council members also pointed to the halt in economic growth in Russia in 2014 Q4 and the likelihood of a marked GDP decline in this economy in 2015. On the other hand, a few Council members emphasised that economic activity in many other countries of the Central and Eastern European region remained stable.

Members of the Council highlighted further substantial decline of oil prices observed in the recent period, leading to lower inflation and inflation forecasts in many economies. It was noted that deflation was observed in the euro area in December and the ECB had markedly revised downward its inflation forecasts for 2015. It was assessed that under these circumstances the announcement of new quantitative easing programmes by the ECB was likely as early as in January 2015. Council members also pointed to the likelihood of forthcoming interest rate rise in the United States, which would probably support an inflow of portfolio capital to the US economy.

Heightened risk aversion that had prevailed recently in the financial markets was pointed out. As expectations of an interest rate rise in the United States had been mounting, the US dollar had gained considerably, while emerging market currencies, including the zloty, had weakened. Yet, it was emphasised that the decline in the zloty exchange rate vis-à-vis the euro was much smaller than that vis-à-vis the dollar. A few members of the Council argued that the zloty had weakened partially on the back of the slump of the rouble. It was further pointed out that the currencies of Poland's other trading partners had depreciated much more than the zloty. As a result, the nominal effective exchange rate of the zloty had been stronger in December than in the month before.

While analysing the conditions in the real economy in Poland, Council members assessed that GDP growth could have weakened somewhat in 2014 Q4. Yet, some Council members were of the opinion that despite this likely slowdown, GDP growth remained stable and forecasts pointed to its gradual rebound in the following quarters. Against this background, those Council members argued that the observed decline in global oil prices would support domestic demand as well as – through higher GDP growth abroad – Polish exports. As a result, economic growth in Poland might prove to be stronger than previously forecasted. Other Council members believed that GDP growth in the second half of 2015 would be propped up by higher inflow of European Union funds. Pointing to the relatively strong outlook for demand in the Polish economy, a few Council members observed that the financial situation of enterprises continued to be sound, fuelled by low oil prices. Investment kept on rising at a robust pace, supported by low credit cost, while forecasts of orders and production were above their long-term average. They also argued that corporate lending was rising, and money supply in the real terms expanded at the highest pace since the onset of the global financial crisis. They also assessed that corporate business climate indicators had stabilised and that household sentiment was improving.

However, some Council members pointed out that the pace of GDP growth did not ensure fast closure of the output gap and there were no signs of a marked pick-up in the economic activity in the following quarters. A few Council members emphasised the risk of a substantial slowdown in GDP growth. In this context, it was argued that industrial production growth had decreased close to zero in November, while construction and assembly output had continued to contract and retail sales growth had weakened. Some Council members pointed out that domestic economic conditions were being adversely affected by the delay of recovery in the euro area and by the slump in activity in Russia. It was emphasised that a further tightening of the macroprudential policy at the beginning of this year would probably limit mortgage lending growth. A few Council members also drew attention to the fact that in recent quarters, domestic demand had been supported by a considerable rise in inventories, which could have resulted from shortage of demand for already produced goods. This could result in lower production growth in the future.

While analysing labour market conditions, sustained corporate employment growth was highlighted, as well as the declining seasonally adjusted unemployment rate. A few Council members also pointed to business climate surveys suggesting further growth in corporate employment. At the same time it was pointed out that no signs of wage pressure had been observed in the corporate sector, and that wage growth in the government sector was being curbed by the wage fund freeze in this sector.

When discussing inflationary processes in Poland, Council members pointed to the possibility of deflation continuing longer than previously expected. It was also emphasized that price growth forecasts for the following quarters had been revised downwards in the recent period. As a result, deflation might persist for another few months, and the horizon of inflation returning to the NBP inflation target might get longer.

Some members of the Council emphasized, however, that deflation was primarily due to lower prices of commodities. Those members assessed that for this reason deflation was conducive for domestic demand growth, as it supported wage growth in real terms and increased the ability of economic agents to service debt, thus supporting the economic upturn. They pointed to the fact that the decline in energy prices boosted the sentiment of most economic agents. A few members of the Council emphasized that an extended period of slow price growth was currently a feature of many economies.

Some members of the Council highlighted, however, that the observed decline in prices was not only driven by falling commodity prices, but also by negative output gap in the economy. In their opinion, this was reflected by the lowest in history and negative average of core inflation measures as well as the continued negative growth rate of producer prices. Those members of the Council also indicated that most retail sales deflators were negative, and the growth of prices of services – which were most responsive to domestic demand pressure – had followed a downward trend for many quarters. It was pointed out that deflation led to expectations of households and enterprises running consistently at very low levels, and that inflation expectations of analysts for the following two years were below the inflation target.

While discussing the NBP interest rates, the majority of the members of the Council judged that they should remain unchanged at the current meeting. The majority of the members of the Council expressed the opinion that leaving interest rates unchanged at the current meeting was justified by the heightened risk aversion in the international financial markets, resulting, inter alia, from the foreign exchange crisis in Russia.

Some members of the Council who were in favour of keeping the interest rates unchanged pointed out that the prolonged deflation resulted from supply shocks, hence was beyond the direct impact of the domestic monetary policy. It was also pointed out that the observed decline in commodity prices supported economic activity. A few Council members assessed that a further reduction in interest rates – amidst domestic demand growth exceeding, in their opinion, potential GDP growth – could lead to excessive lending growth and an increase in the current account deficit, which was currently curbed by a significant drop in import prices. They also argued that a possible increase in interest rates abroad might worsen the income balance on the current account. Those members of the Council also pointed out that currently the NBP interest rates were at historically low levels, and their further lowering would inhibit corporate restructuring and curb potential economic growth. Some of the members of the Council observed that slow price growth was typical for many economies, and the experience of other central banks showed that under the current conditions interest rate cuts might fail to bring inflation to the target. Some members of the Council also judged that the expected acceleration in the growth of prices would bring about a decline in real interest rates.

Yet, some Council members assessed that it might be justified to adjust the NBP interest rates in the coming months. Those members emphasized that the period of deflation and the time horizon of inflation returning to the target were extending. They also assessed that the incoming data pointed to a risk of a slowdown in economic activity, and sluggish economic growth persisted in the external environment of the Polish economy. They indicated that continuing deflation boosted real interest rates, which were now relatively high in Poland both in historical terms and when compared with other economies. The possibility of the ECB's further easing of its monetary policy was also emphasized. A few of those members of the Council also pointed out that interest rates on loans to the private sector were higher than the nominal GDP growth. In real terms they were higher than the profitability of enterprises, and so – in the opinion of those Council members – did not pose a risk of excessive debt growth nor inhibit corporate restructuring. Those members also pointed out that due to the limited array of monetary policy tools, corporate restructuring should be supported primarily by structural policy. A few members of the Council who did not rule out an adjustment of interest rates in the coming months, underlined that the potential need to adjust monetary policy could be assessed better after the possible measures of the ECB had been evaluated and the new projection of inflation and GDP had been released.

A few Council members assessed that due to the continuing decline in prices, extended period of inflation returning to the target as well as the risk of a slowdown in GDP growth in the coming quarters, interest rates should be cut already at the current meeting. In their view, lower NBP interest rates would not only boost economic activity, but also – in the absence of inflationary threats – would help to reduce the cost of public debt servicing, which would support the government's economic policy. Given these arguments, a few of those members of the Council were in favour of a considerable cut in interest rates.

At the meeting a motion to cut the NBP interest rates by 1.00 percentage point was submitted. The motion was rejected. A motion to lower the NBP interest rates by 0.25 percentage points was submitted. The motion was rejected. The Council decided to keep the key interest rates at the following levels: the NBP reference rate at 2.00%, the lombard rate at 3.00%, the deposit rate at 1.00%, the rediscount rate at 2.25%.

Minutes from the Monetary Policy Council Decision Making Meeting held on 4 February 2015

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

While discussing business conditions in Poland's external environment, some Council members pointed to the lack of significant improvement in the economic situation of Poland's main trading partners. It was noted that in the euro area economic activity remained weak compared with other developed countries. In addition, some Council members assessed that an upturn in the euro area economy would be limited by sluggish growth in investment, partly driven by the forecasted weakening of demand growth in the emerging markets. These Council members also highlighted the deteriorating situation of Poland's eastern trading partners. In particular, it was noted that in Russia economic growth had slowed down to near zero in 2014 Q4, with recession forecasted in 2015, which might be further deepened by the renewed escalation of the conflict in Ukraine. Yet, other Council members pointed out that in the euro area GDP growth was forecasted to speed up in 2015. They expressed the opinion that accelerating consumer demand – supported additionally by the fall in oil prices – would translate into a more marked recovery in the euro area economy in the next quarters than previously observed. It was also pointed out that GDP growth in the United States – despite a slowdown in 2014 Q4 – remained high compared to other developed countries, and that the prospects for the US economy were favourable. It was noted that economic activity there would most likely remain markedly stronger than in the euro area, which was primarily the result of smaller scale of regulation and lower taxes in the US economy. At the same time, few members of the Council expressed the opinion that the expected acceleration of GDP growth in the United States in 2015 might fail to materialize, as indicated by the slowdown in GDP growth in 2014 Q4.

Members of the Council highlighted the fall in prices of a large group of commodities in the recent period, which – amidst moderate global economic growth – had resulted in a decline in inflation in many countries. At the same time, it was emphasised that the fall in commodity prices would help to stimulate economic activity in countries that are net commodity importers. Few Council members pointed out that oil prices had increased somewhat in recent days and noted that the changes in commodity prices were an important source of uncertainty about economic activity and inflation developments in the global economy.

With regard to monetary policy in Poland's external environment, it was highlighted that – in response to the deepening deflation and persistently slow economic growth in the euro area – the European Central Bank (ECB) had significantly extended its asset purchase programme by adding sovereign bonds. When discussing the possible effects of the ECB's quantitative easing, some of the Council members expressed the opinion that its impact on the real economy might be limited. According to them, an increase in liquid reserves in banks in the euro area might fail to significantly stimulate lending activity, including loans for investment purposes. They noted that the low growth in corporate lending was related to the continued uncertainty about the future economic situation in the euro area and – therefore – the financing cost had little influence on demand for credit. This was indicated, according to few Council members, by persistently falling value of corporate loans in the euro area despite decreasing interest rates on corporate loans in recent months. Some of the Council members assessed that declining yields on debt instruments in the euro area would be the main effect of the ECB's activities. Few Council members expressed the opinion that declining yields on assets and interest rates on deposits in the euro area could increase the propensity of some households to save, so that the growth in savings, and thus future consumption, would remain at a constant level, which, consequently, might limit current consumption. At the same time, some Council members pointed out that the ECB's quantitative easing might increase the inflow of portfolio capital to non-euro area economies, including Poland, causing exchange rate appreciation pressures.

Council members also discussed the decision of the Swiss National Bank to remove the Swiss franc asymmetric peg against the euro and reduce its interest rates. In this context, it was pointed out that currently it is not possible to assess in full the consequences of the Swiss franc appreciation for Polish economic agents with franc-denominated liabilities, due to the high volatility of the zloty against the franc and the unknown reaction of the banking sector and supervisory and regulatory authorities to this situation. Few Council members noted, that persisting weak exchange rate of the zloty against the Swiss franc would exacerbate the problems with repayment of the franc-denominated debt and would deteriorate banks' asset structure.

While discussing the business climate in Poland, Council members pointed out that GDP growth in 2014 Q4 had slowed down slightly, remaining above 3%. Members of the Council emphasised a higher growth of industrial production, construction and assembly, and retail sales in December, as well as an increase in some business climate indicators and a further improvement in labour market conditions. Some Council members assessed that despite a slight slowdown, GDP growth was at a level similar to that of the potential output. Few Council members pointed out that growth in domestic demand in 2014 Q4 – despite the negative contribution of inventories to GDP growth – was above the expectations and higher than the growth of the whole GDP. In the opinion of these Council members, the continued high growth of domestic demand contributed to the widening of the current account deficit, the size of which is currently lowered by the fall in commodity prices and the related improvement in the terms of trade. Other Council members assessed, however, that although GDP continued to grow at around 3%, the output gap in Poland remained negative.

While discussing the prospects for economic growth, some Council members emphasised that in the following quarters economic growth in Poland would gradually pick up. These members argued that a further increase in employment, amidst moderate growth in wages and an improvement in consumer confidence indicators, would be conducive to continued high growth in consumer demand. According to these Council members, investment demand would, in turn, be supported by a further fast growth in investment expenditure of enterprises, and in the second half of 2015 also by an acceleration in infrastructure investment financed from EU funds. Few Council members emphasised that the favourable prospects for corporate investment activity were largely the result of a growing propensity of enterprises to invest driven by falling perceived uncertainty in their environment, increasing capacity utilisation and an improvement in the demand forecasts, alongside favourable financing conditions. Some Council members pointed to the forecasted acceleration in GDP growth in the euro area as an additional source of the economic upturn in Poland.

Other Council members expressed the opinion that even if GDP growth accelerated gradually in the following quarters, it would not lead to a build-up of imbalances in the economy. Few Council members also pointed to the risk of a slowdown in growth at the end of 2015 and at the beginning of 2016. It was noted that the rise in consumer demand would be limited by an increase in the Swiss-franc denominated debt of households. In turn, in the opinion of few Council members, growth in investment outlays of enterprises might be adversely affected by continued uncertainty about demand and their low expected profitability compared to the yields on alternative forms of savings allocation. Against this background, few Council members pointed to the persistence of the low contribution of investment to GDP growth and the small percentage of enterprises planning to start new investments. Some Council members were of the opinion that the main source of risk for acceleration of economic activity in Poland was the possibility of lower than expected GDP growth in the euro area. Few Council members also noted that the possible appreciation of the zloty could adversely affect GDP growth.

While discussing the inflationary processes in Poland, it was pointed out that in January the annual consumer price index had fallen once again and was below the expectations. At the same time, the short-term inflation forecasts had been significantly revised downwards, and the expected period of deflation had been extended. In addition, an acceleration in the decline in producer prices was noted. Some Council members expressed the opinion that the deflation in Poland was mainly driven by external factors, primarily the decline in commodity prices. They noted that the extension of the expected period of deflation was the result of a downward revision of the forecasted paths for energy and food prices. In the opinion of these Council members, the deflation – as it was supply driven – would not have adverse economic effects. On the contrary, it would support GDP growth, by stimulating an increase in the purchasing power of incomes. Few Council members noted that there are currently no signals indicating a risk of deflationary spiral. Few Council members also expressed the opinion that the low price growth – amidst moderate economic growth in Poland's external environment and a fall in commodity prices – was a normal phenomenon, and taking into account the expected persistence of these developments, inflation would most likely remain low also in the long-term.

Some Council members, in turn, were of the opinion that the decline in prices in Poland was not only a result of external factors, but was also due to low demand pressure in the domestic economy. In their opinion, this was indicated by both the further decline in the majority of core inflation measures and the fact that producer prices had been decreasing for almost three years, thus much longer than the fall in commodity prices in the global markets. These Council members also emphasised that against the background of a sustained fall in prices, inflation expectations of households and enterprises remained very low, while the expectations of analysts had recently been significantly revised downwards. Moreover, these Council members were of the opinion that the longer the period of deflation, the higher the risk of its adverse effects for the economy.

Referring to the level of interest rates, some Council members emphasised that although nominal interest rates had been lowered in 2014 Q4, deepening deflation and the strong downward revision of price growth forecasts had led in recent months to an increase in interest rates in real terms, driving them to relatively high levels. They also pointed to the record low yields on long-term bonds, indicating that in the long-term inflation or the equilibrium real rate would be markedly lower than to date. However, other Council members noted that nominal rates were at record lows, and real rates would decline along with forecasted rise in price growth.

While discussing the decision on NBP interest rates, the majority of the members of the Council judged that they should remain unchanged at the current meeting.

Some of the Council members pointed out that GDP growth was currently close to that of the potential output and its acceleration was forecasted in the following quarters. Moreover, these members argued that deflation in Poland was mainly supply driven and – as a consequence – did not have a negative impact on the economy, while the influence of monetary policy on inflation processes was limited. Few Council members were of the opinion that against the background of sustained high growth in domestic demand, a lowering of interest rates could result in a build-up of external imbalances and lead to excessive growth of credit, including housing credit, and expose the borrowers to significant rise in debt servicing costs in case of interest rates increase. Excessive credit growth could also create the risk of real estate bubble. These Council members expressed the opinion that further adjustment of interest rates – while reducing the cost of servicing the public debt only temporarily – could lead to increased instability of public finance in the future. At the same time, in the opinion of these Council members, maintaining nominal interest rates at low levels has an adverse effect on the process of selection of economic agents and thus limits the productivity growth in the economy.

However, some Council members pointed out that deepening deflation and its longer duration increased the risk of inflation remaining below the target in the medium term and therefore justified interest rate cuts. In addition, they noted that the risk of negative consequences of deflation for the economy rose along with its duration. These members judged that the persistence of a significant interest rate differential between Poland and its external environment, amidst a strong easing of monetary policy by the ECB, increased the risks of an inflow of portfolio capital and excessive strengthening of the zloty exchange rate, which would additionally hinder the return of inflation to its target and could weaken GDP growth. Few members of the Council also emphasised that interest rate cuts – in the absence of inflation risk – would lead to a reduction in public debt servicing costs, and thus support the government's economic policy. Moreover, few members noted that the adjustment of interest rates would make the deleveraging of economic agents easier and could also support the process of currency conversion of housing loans. However, some Council members judged that due to the significant volatility in the financial markets in the recent period, it was justified to leave interest rates unchanged at the current meeting. Yet, these members did not rule out an adjustment of monetary policy in the nearest future, when evaluation of inflation prospects in the medium-term would be possible, taking into account NBP's March projection.

Few Council members assessed that despite a significant volatility in the financial markets, the extension of the period of falling prices and the low likelihood of significant GDP growth in the coming quarters, posing the risk of macroeconomic imbalances, justified the lowering of interest rates already at the current meeting. These members indicated that in view of the above developments, the lack of a decision on easing monetary policy might lead to growing uncertainty in the economy.

At the meeting a motion to cut the NBP interest rates by 0.25 percentage points was submitted. The motion was rejected. The Council decided to keep the key interest rates at the following levels: the NBP reference rate at 2.00%, the lombard rate at 3.00%, the deposit rate at 1.00%, the rediscount rate at 2.25%.

Information from the meeting of the Monetary Policy Council held on 3-4 March 2015

The Council decided to decrease NBP interest rates by 0.5 percentage points to: 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.

The rise in global economic activity remains moderate, although the situation varies across countries. In the euro area, GDP growth remains low despite a slight acceleration in 2014 Q4. In the United States, economic growth is significantly higher than in the euro area, though it slowed down somewhat in 2014 Q4. In the largest emerging market economies, including China, GDP growth remains low as for these countries, and in Russia it has probably slid below zero.

Since the previous Council meeting, oil prices have increased slightly, but remained far lower than in previous years. At the same time, the prices for other commodities, including agricultural products, continued to decrease. The fall in commodity prices amid moderate global economic growth has been adding to a deceleration in price growth in many countries, and has been deepening deflation in most European countries. At the same time, the fall in commodity prices is supporting economic growth in countries that are net commodity importers.

Major central banks have kept their interest rates at historical lows. The European Central Bank is starting to purchase government bonds, while the majority of non-euro area central banks have eased their monetary policies, also by lowering interest rates.

In Poland, the pace of economic growth in 2014 Q4 slowed down slightly, but stayed close to 3%. GDP growth remained stable due to further rise in consumer demand and still high, despite some deceleration, investment growth. Meanwhile, lending growth was stable and labour market conditions continued to improve. The seasonally-adjusted unemployment rate has been declining driven to a large extent by rising employment. At the same time, the uncertainty about demand outlook continues to contain economic activity in Poland.

Despite improving labour market, wage growth in the economy remains moderate which indicates low wage pressure. Moderate wage growth, the fall in global commodity prices and no demand pressure, all contribute to deepening deflation, both in terms of consumer and producer prices. Inflation expectations of enterprises and households 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 March projection based on the NECMOD model – prepared under the assumption of unchanged NBP interest rates and taking into account data available until 17 February 2015 (projection cut-off date) – there is a 50-percent probability that the annual price growth will be in the range of -1.0÷0.0% in 2015 (as compared to 0.4÷1.7% in the November 2014 projection), -0.1÷1.8% in 2016 (as compared with 0.6÷2.3%) and 0.1÷2.2% in 2017. 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 2.7÷4.2% in 2015 (as compared with 2.0÷3.7% in the November 2014 projection), 2.2÷4.4% in 2016 (as compared with 1.9÷4.2%) and 2.4÷4.6% in 2017.

Taking into account prolonging deflation and a significant increase in risk of inflation remaining below the target in the medium term, as indicated by the March projection, the Council decided to decrease NBP interest rates. Decision to lower the interest rates at the current meeting concludes the monetary easing cycle.

The Council adopted *Inflation Report – March 2015*.

4 Projection of inflation and GDP

This inflation and GDP projection was prepared by the Economic Institute of the National Bank of Poland and presents a forecast of economic developments under the assumption of 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[70], 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 the 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 NBP interest rates.

The March projection based on the NECMOD model covers the period from 2015 Q1 to 2017 Q4. The starting point for the projection is 2014 Q4.

The cut-off date for the projection was 17 February 2015 (i.e. the projection does not take into account the MPC's decision to lower the NBP interest rates by 0.50 percentage points on 4 March 2015).

[70] Current version of the documentation of the model is available at the NBP website.

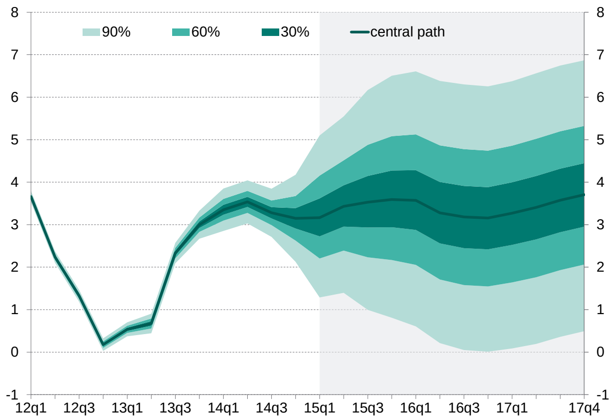
4.1 Summary

Since the work on the last projection was finalized, crude oil prices have fallen sharply, and to a lesser extent also prices of other energy commodities. Revision of commodity quotations in the global markets most rapidly translates into domestic fuel prices, and with a certain time lag – also into the price of natural gas and electricity. Lower energy prices affect the reduction of operating costs of businesses, in particular enterprises in the transport sector, which translates, with a certain time lag, into prices of other products. As Poland is a net importer of energy commodities, the decline in their prices improves the terms of trade, supporting economic growth. Apart from lowering costs for businesses, lower prices of crude oil, coal and natural gas also have a positive impact on households' real income, contributing to consumption growth.

Currently, the Polish economy is undergoing a slight slowdown, driven by the deterioration in its external environment. Yet, the weakening of the domestic economic activity translates only to a small extent into the situation in the labour market, which remains relatively favourable. Employment continues to rise, the unemployment rate is falling and wages continue to grow moderately. Due to the increasing household income from paid employment and low inflation, private consumption is now a major component contributing to domestic growth and will remain so over the projection horizon.

Over the projection horizon economic growth will also be supported by corporate investment expenditure. Investment activity will be fuelled by the good financial conditions of companies, expected to continue in the future, allowing companies to finance investment with their own

Figure 4.1 GDP (y/y, %).



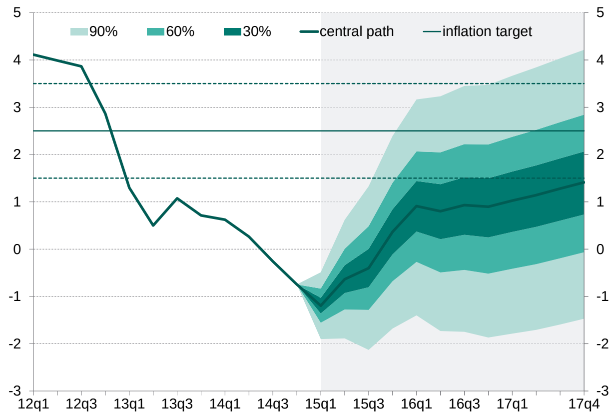
Source: NBP (if not otherwise stated, this concerns all the figures and tables in this Chapter).

funds. The favourable financial situation of companies will be supported by low energy commodities prices. Also, interest rates being kept at their current historically low level (which results from the projection assumption of a constant NBP reference rate) help to finance investment with bank loans.

Amidst gradual, yet moderate upturn in the euro area, economic growth over the projection horizon will be largely based on increasing consumption and investment expenditure of the domestic private sector. GDP growth will pick up slightly, yet, by the end of 2017, it will continue at a level lower than the long-term average from before the global financial crisis.

In 2014 Q4 deflationary tendencies in the Polish economy strengthened, with the consumer price index declining in this period by 0.8% y/y. The price decline is largely due to the impact of supply-side factors – a slump in crude oil prices and the high supply of agricultural products. Moreover, low inflation will also be supported by weak demand pressure and low cost pressure, reflected in a fall in import prices and domestic producer prices (PPI).

Figure 4.2 CPI inflation (y/y, %).



The moderate recovery in the Polish economy will support the gradual increase in the growth rate of prices of all major components of consumer goods and services basket (core inflation, food prices, energy). Yet, CPI inflation will stay well below NBP inflation target over the entire projection horizon.

Apart from low demand pressure, as indicated by the negative output gap throughout the projection horizon, low commodity prices in the world markets amidst slowly growing global demand will also be conducive to low inflationary pressure.

The main source of uncertainty to the outlook for inflation and GDP is the possibility of the prolongation of deflation in Poland and the euro area, which could occur in the event of a combination of unfavourable factors leading to the emergence of a wage-price spiral in these economies. The risk of unanchoring of inflation expectations is related to the longer-than-expected slowdown in the euro area, resulting from structural weaknesses of some of the economies of the euro area as well as from heightened geopolitical risk and deteriorating sentiment of consumers and producers. Negative price growth would increase the real cost of money, which – in the absence of the possibility of nominal interest rate cuts as a result of reaching the zero bound – would further curb economic activity in the euro area and increase the real value of euro-denominated debt.

Due to the unfavourable external environment, it is more likely that inflation will run below the path assumed in the central projection scenario. This is reflected in the downward asymmetry of the fan chart for this variable (Figure 4.1, Figure 4.2). The risk to GDP growth is balanced.

4.2 External environment

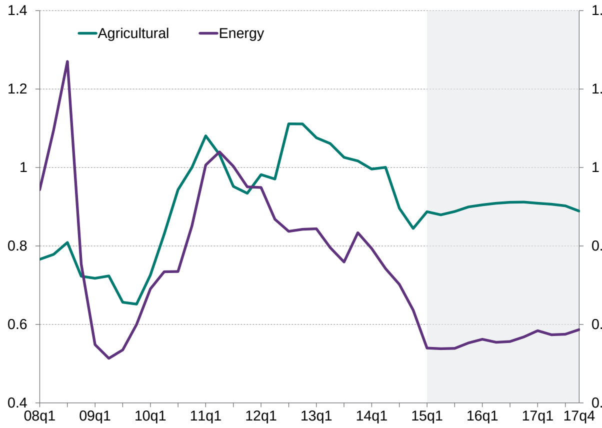
Since the last projection, prices of oil have fallen sharply, and to a lesser extent also prices of other sources of energy have decreased. At the same time the process of economic divergence between the US and the euro area continued.

Recently, oil prices have remained on the downward trend which started in mid-2014 (see Chapter 1.4 Global commodity markets). In January 2015 the Brent oil prices were at an average level of 51 USD/barrel, and thus 54% below the average recorded in the first half of 2014. The strong oil price decrease is primarily due to the high supply of this commodity, which was driven by a rapid increase in production from shale deposits in the United States, as well as the high level of oil extraction in Russia, Iraq and Saudi Arabia. Moreover, further deterioration of the global economic outlook, particularly in Russia and China, implicates weaker growth forecasts of global demand for fuel. In a longer projection horizon, it is anticipated that the current decline in oil prices will drag down the growth of this commodity supply The production adjustment may occur mainly in the United States, due to the higher marginal cost of extracting oil from shale rock as compared to the methods based on traditional oil rigs. Despite the assumed extraction slowdown, oil prices throughout the projection horizon are substantially below the expectations of the November 2014 projection. In the coming years a growth of the oil price will be curbed by the moderate demand resulting from a weaker economic outlook in developing countries, including Russia and China, as well as the persistently high level of this commodity stock.

Low oil prices affect the world economy through multiple channels. Firstly, in nominal terms low oil prices reduce inflation – both through a decline in prices of other sources of energy and fuels and indirectly through other components of the basket of consumer goods. Secondly, in real terms low oil prices support economic growth of countries importing this commodity by increasing the real income of households, as well as reducing the operating costs of enterprises and improving terms of trade.

In the wake of falling oil prices, prices of other sources of energy that are substitutes in energy production also followed a downward trend. Lower coal prices resulted also from weaker demand from China. On the other hand, a decline in the current and forecasted gas prices was also driven by the relatively favourable weather

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



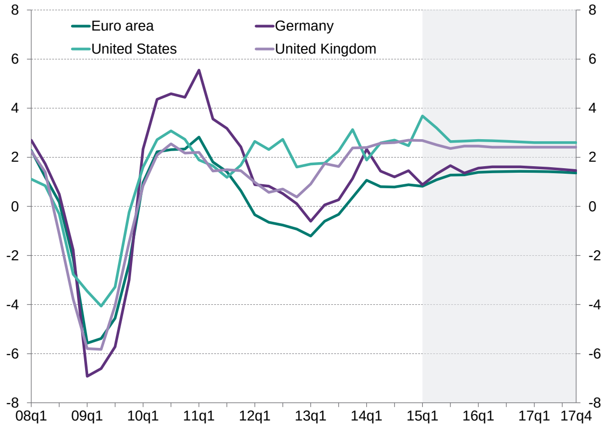
conditions during the heating season in Europe as well as the high level of stocks of this commodity. As a result, the energy price index in the current projection round is at a significantly lower level than assumed in November 2014 (Figure 4.3).

The forecast of the global agricultural commodity price index, expressed in euro, remain at a level similar to the November projection assumptions (Figure 4.3). In the coming years, prices of agricultural commodities are still expected to remain stable, in line with the forecasted moderate level of global consumer demand for these goods. Currently there are no clear signs of supply disruptions from food producers – either due to the production costs or to meteorological conditions.

Apart from falling oil prices, another factor supporting the current scenario is the divergence of the forecasted GDP growth between the euro area and the United States. Current forecasts confirm the November projection assumptions and point to the persisting relatively high rate of economic growth in the United States and Great Britain amidst only a slight recovery in the euro area (Figure 4.4). In consequence, throughout the projection horizon GDP growth abroad will remain below the long-term average recorded before the financial crisis.

The small-scale growth acceleration in the euro area, with GDP dynamics at 1.4% y/y in 2016-2017, will result from the expected continuation of low investment activity over the projection horizon and the low level of exports in this economy. Investments are limited by weak domestic demand, low production capacity utilization and continued deleveraging in the corporate sector. On the other hand, the relatively low exports growth is due to the structural problems in some of the euro area economies and their low competitiveness in the world trade. Furthermore the demand for euro

Figure 4.4 GDP abroad (y/y, %).



area exports from emerging markets, especially China and Russia is on the decline. Therefore, despite the positive impact of lower oil prices and the depreciation of the euro, the forecasted GDP growth in this economy remained at a low level, close to the expectations of the previous projection.

The outlook for growth in the United States and in Great Britain is much more optimistic. In both economies, GDP growth in the years 2015-2017 is assumed to be relatively high, which is supported by optimistic forecasts of consumer demand, fuelled by the improving situation on the labour market and good consumer sentiment (see Chapter 1.1 Global economic activity).

Downward revision of the assumed energy commodity prices, as well as declining inflation expectations (see Box 1. Long-term inflation expectations in the euro area) contributed to lower forecasts of inflation in the external environment of the Polish economy as compared to the November projection round (Figure 4.5). Inflation abroad runs at a very low level throughout the projection horizon due to low commodity prices and moderate economic recovery, especially in the euro area.

Taking into account the anticipated lack of inflationary pressure and only a slight pick-up of economic growth, no increase in interest rates is expected in the euro area by the end of the projection horizon. It is confirmed also by the measures undertaken by the ECB in January 2015 involving the extension of the list of assets to be purchased to include bonds of the euro area governments and government agencies as well as the announcement of the continued purchases of debt instruments, at least until September 2016. (See Figure 4.6, see Chapter 1.3 Monetary policy abroad and international financial markets).

In case of the US economy, in line with higher

Figure 4.5 Inflation abroad (y/y, %).

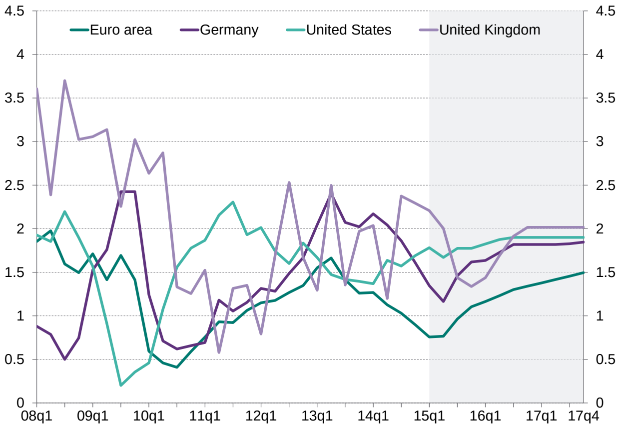
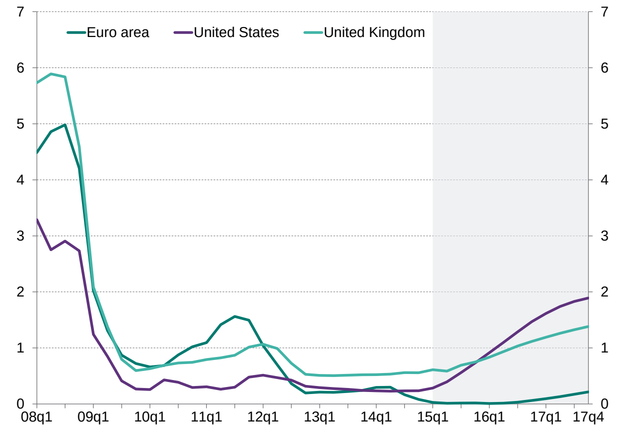


Figure 4.6 Interest rate abroad (%).



growth forecasts than in the euro area, the monetary policy is expected to be tightened. Due to the expected low energy prices and a deteriorated outlook for the global economy, this tightening will be postponed until the turn of 2015 and 2016.

Divergence of economic growth and monetary policy between the Federal Reserve and the ECB was reflected in a strong depreciation of the euro against the dollar. Furthermore, the appreciation of the US dollar, considered as a safe currency, was driven also by heightened risk aversion caused by mounting geopolitical tensions. In the long-term projection horizon, in the wake of a gradual recovery in the euro area, a slight strengthening of the euro against the US dollar is expected.

4.3 Polish economy in the years 2015-2017

GDP growth in Poland will progress at a relatively stable rate in the projection horizon, averaging 3.4% in the years 2015-2017 (Figure 4.7). Given the steady but modest recovery in the euro area, growth will be largely underpinned by rising consumption and investment spending of the domestic private sector. A temporary slowdown, at the turn of 2016, will be driven by a decline in EU capital transfers related to the final settlement of the 2007-20013 financial framework (Figure 4.12).

CPI inflation will remain negative early in the projection horizon (Figure 4.9). The decline in prices will result largely from supply-side factors, i.e. a sharp fall in oil prices and ample supply of agricultural commodities. In addition, low inflation will be supported by weak demand pressure and weak cost pressure, reflected in falling import prices and domestic producer prices (PPI). The impact of these factors on the inflation

Figure 4.7 Economic growth.

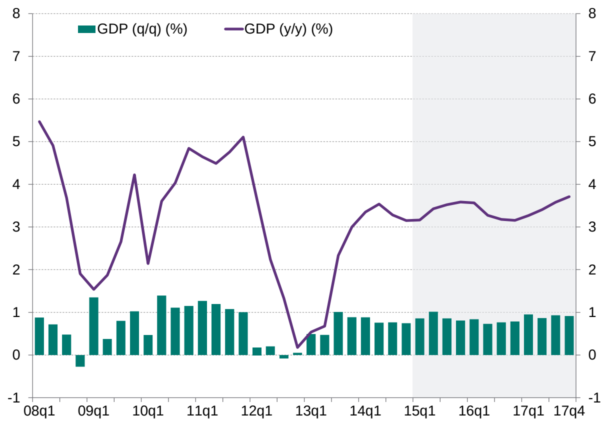
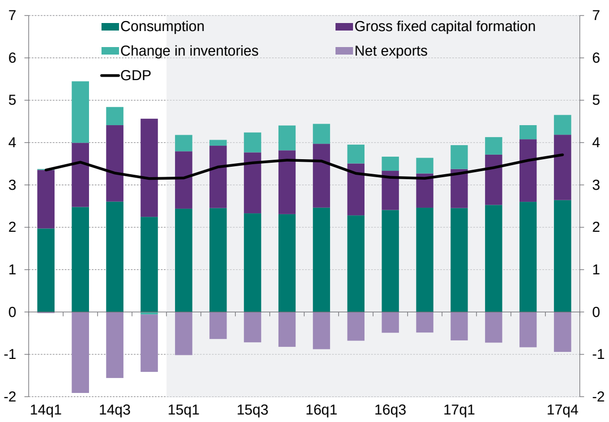


Figure 4.8 GDP growth (y/y, %) – breakdown.



rate will gradually wane over the projection horizon, yet inflation will persist well below the NBP inflation target until the end of 2017.

Domestic demand

In the projection horizon, consumption growth will be sustained at a stable level, close to the long-term average and slightly above that recorded in 2014 (Figure 4.10). Private consumption growth will be supported by a steady improvement in households' financial situation, comprising a rise in income from hired work – resulting from a relatively strong labour market outlook – and a higher income from self-employment related to improving business conditions. Weak momentum of consumer goods and services prices, in particular a significant decline in energy prices, will also boost the purchasing power of households. Yet, the rise in consumption demand may be dragged down by the restoration of the savings rate – which in 2011-2013 fell to an all-time low, close to zero, level. Thus, it is expected that despite the low interest rates, which enable the funding of consumption with credit, the increase in private consumption in the coming quarters will progress at a slightly slower pace than households' disposable income.

Gross fixed capital formation growth in the corporate sector will be weaker in the projection horizon than in 2014. A factor which will continue to constrain corporate investment, especially early in the projection horizon, will be sluggish growth in the euro area and the uncertainty in the region related to the Russian-Ukrainian conflict. Although, according to entrepreneurs' assessments, this uncertainty has diminished recently. The NBP's business climate surveys indicate that despite a certain improvement, insufficient or unstable demand will continue to

Figure 4.9 CPI inflation (y/y, %) - breakdown

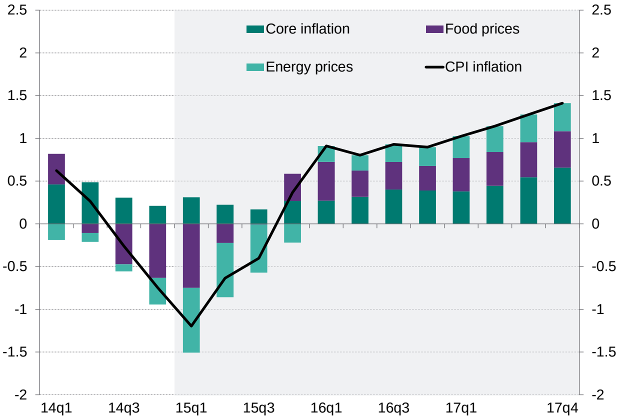
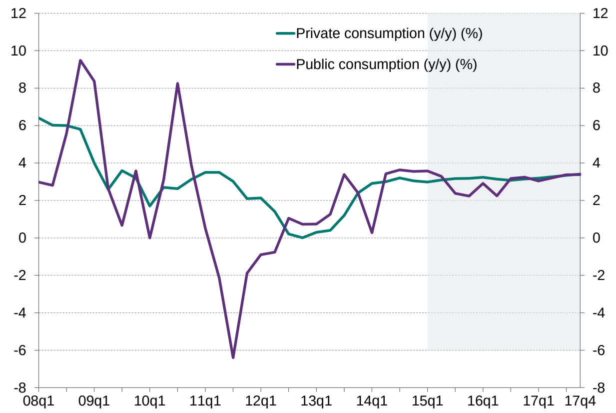


Figure 4.10 Private and public consumption.

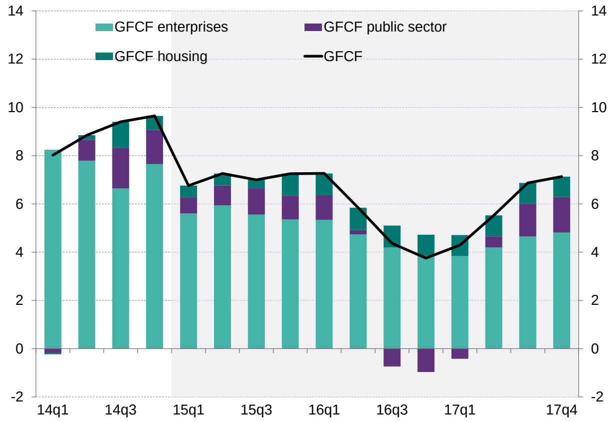


pose a material hurdle to investment growth.[71] This is corroborated by entrepreneurs' declarations, according to which investment continues to be earmarked for replacement and renovation of the assets owned, and not acquisition of new capital, which would be instrumental for a stronger and more permanent investment growth[72]. Weaker growth of investment outlays expected in the coming quarters is also reflected in the decline observed in the cost value of the newly started investment projects[73]. The scale of corporate investment expenditure in 2016 will in turn be stemmed by the end of the process of drawing on EU funds under the 2007-2013 financial framework, resulting in a significant drop in the utilisation of the EU funds designated to fund private sector capital expenditures.

Despite investment growth losing some momentum, it will exceed GDP growth over the entire projection horizon, which means that the investment rate will continue to rise. Investment will be supported by the sustained sound financial situation of enterprises enabling them to fund new investment internally – especially given low commodities prices. Additionally, the current historically low level of interest rates (which follows from the assumption of a constant NBP reference rate adopted in the projection) facilitates funding investment with bank credit.

Following almost a year of declines, there was a marked increase in housing investment in the second half of 2014. Further improvement in this sector is expected in the subsequent quarters, as indicated by the increasing number of granted dwelling permissions as well as an increase in the number of already started dwellings[74]. The outlook

Figure 4.11 Gross fixed capital formation (y/y, %) - breakdown.



[71] *Economic climate in the enterprise sector in 2014 Q4 and forecasts for 2015 Q1, NBP*

[72] *Economic climate in the enterprise sector in 2014 Q4 and forecasts for 2015 Q1, NBP*

[73] *Financial situation in the enterprise sector in 2014 Q3, NBP.*

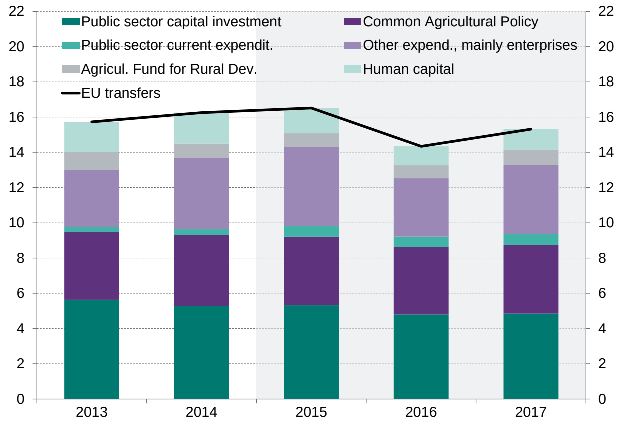
[74] *Information on home prices and the situation in the residential and commercial real estate market in Poland in 2014 Q3, NBP*

for housing demand is enhanced by the improved financial condition of households. Housing investment may also benefit from the "Home for the Young" government programme launched in 2014 and the raising, in October of that year, of the ceiling on the price per square metre of the apartments that are eligible within the programme. Also, the historically low level of interest rates will have a positive impact on housing investment by decreasing the debt servicing cost-to-rent ratio. In contrast, the tightening of the terms for extension of housing loans, resulting from last year's amendment to the "S recommendation" will work in the opposite direction.

In 2015, public consumption growth will remain at a relatively low level, close to that observed in 2014, which will result from the government's continued effort aimed at meeting the requirements of the excessive deficit procedure. This includes, *inter alia,* a further freeze in government sector wages. Since no information has been released to date about a possible continuation of those activities beyond 2015, a slight acceleration in the pace of public consumption is expected later in the projection horizon.

The level of public sector investment spending is in turn closely related to the absorption of EU capital funds.[75] In 2016, the absorption of EU funds under the 2007-2013 financial framework will end; previous experience and the schedule for adoption of programme documents suggest only a gradual utilisation of the funds allotted under the 2014-2020 perspective (Figure 4.12). This concerns, in particular, regional programmes to be implemented by local government units and will cause a temporary drop in public investment, in 2016.

Figure 4.12 EU transfers (in bn. EUR) – breakdown.



[75] Capital transfers from the EU finance about 30% of the investment spending of the public sector.

External imbalance

In 2014, due to the break out of the Russian-Ukrainian crisis and the slowdown in the euro area, Polish export growth slowed down, resulting in a significant decline in the contribution of net exports to growth (Figure 4.13). The impact of those factors on foreign trade will gradually wane, causing exports growth to accelerate. Yet, the scale of this acceleration will be smaller than in the previous recovery periods. This is due to the fact that the previously observed tendency of global corporations to move some stages of their production process to countries with lower production costs has been waning. In the past, this trend substantially boosted the volume of Polish trade. Given the significance of domestic demand for GDP growth, imports will be rising relatively more steeply than exports in the projection horizon and thus the negative contribution of net exports to growth will continue to weigh on GDP growth.

The negative contribution of net exports to growth in the projection horizon largely accounts for the forecasted decline in the current and capital account (CCA) balance from the historically high level of 1.1% of GDP in 2014 to -1.7% of GDP in 2017, which is expected to take place despite the favourable impact of the improving terms of trade on nominal amounts (see Box, Figure 4.14). The decrease in the CCA balance will also be driven by the deepening deficit on primary income,[76] related to the improved income of non-residents on direct and portfolio investment along with improving business conditions. In the projection horizon, the secondary income and capital account balance will also decline in connection with the final settlement

Figure 4.13 Foreign trade.

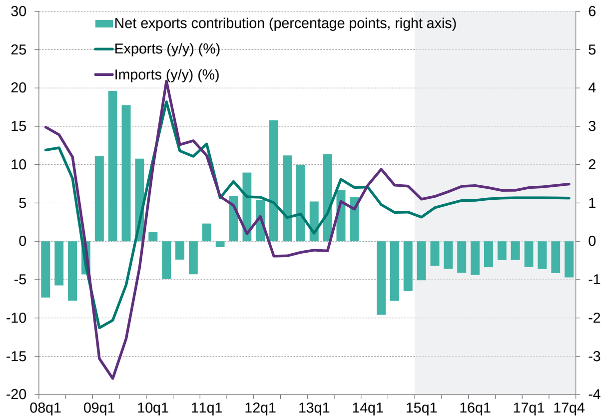
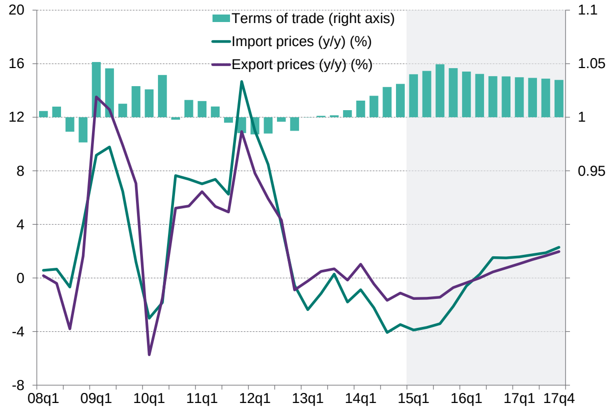


Figure 4.3 Export and import prices.



[76] As of 30 September 2014, the balance of payments is compiled according to the new methodology (BPMv6). As a result of the changes introduced, two components of the current account – the balance of income and the balance of current transfers – were replaced with the balance of the primary account and the balance of the secondary account. Methodology differences between these categories have been presented in the publication *Bilans Płatniczy – nowe standardy statystyczne (BPM6)*, available at the NBP website.

of the EU 2007-2013 financial framework.[77]

Potential output

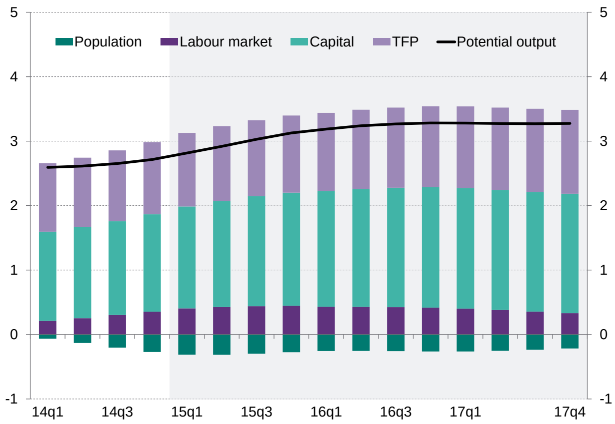
Potential output growth, which slowed down markedly in the wake of the 2007-2009 financial crisis, will rebound gradually in the projection horizon, without returning, however, to its long-term average. Higher potential output growth will be supported by three factors.

Firstly, the moderate growth – originating in the first half of 2013 – in the currently weak total factor productivity (TFP) will continue; yet TFP will not be restored to the level seen before the global financial crisis.

Secondly, potential output growth will benefit from the currently observed favourable trends in the labour market, reflected in the sinking equilibrium unemployment rate (NAWRU, Figure 4.18) and the rise in the labour participation rate.

Another factor contributing to a decline in the equilibrium unemployment rate will be the waning phenomenon of hysteresis due to a decrease in the current unemployment rate (which so far has driven up the equilibrium unemployment rate). Further, the relatively high flexibility of the domestic labour market will be conducive to a decline in the unemployment rate. 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 services sector[78]. Also, wage indexation is applied less frequently, which facilitates wages adjustment to market conditions.[79]

Figure 4.15 Potential output (y/y, %) - breakdown.



[77] Payments for the completed projects financed from EU funds are deferred in relation to the time of obtaining the financing, presented in Figure 4.11. 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 4.11), while the decrease in payments, which has a bearing on the balance of payments, will occur in 2017.

[78] Labour market survey. *Report 2013, NBP* and Labour market survey. *Report 2014, NBP*.

[79] Labour market survey. *Report 2012, NBP*.

The gradual rise in the labour participation rate will, in the projection horizon, stem primarily from a higher participation of persons aged over 44, due to, among others, the increase in the retirement age introduced at the beginning of 2013. Yet, the rise in the labour participation rate will be significantly slower than in recent years owing to the changing age structure of the population as a result of the rising proportion of persons of post-retirement age in the general population.

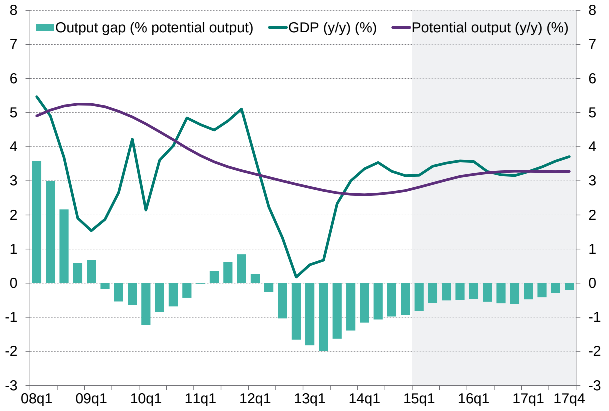
Thirdly, potential output growth will be also boosted by corporate capital growth gaining momentum in 2015-2016; its faster growth will be driven by relatively high investment spending of the private sector in 2014 and 2015 (Figure 4.15).

Another factor exerting an adverse impact on potential output growth by undermining the positive influence of the above factors will be the decline in the population due to emigration, which predominantly concerns the working age population (Figure 4.15).

Output gap

Given the projection's assumptions as to domestic demand growth and the contribution of net exports, economic expansion should stabilize at approx. 3.4% y/y in the projection horizon; thus, GDP will rise faster than potential output. As a consequence, the output gap, which has been negative since the second half of 2012, will gradually start closing, although it will remain negative at -0.2% of the potential output until the end of the projection horizon, (Figure 4.16). 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 climate, currently hampering inflation, will gradually wear away. Yet, due to the nature of price adjustments, CPI inflation has a lagged response to the changes in the output gap. Hence,

Figure 4.16 Output gap.



weak demand pressure will continue to keep consumer price growth below the inflation target in the entire projection horizon.

Labour market

In 2014 Q1-Q3, there was a considerable rise in the number of working persons - a consequence of the Polish economy entering a recovery phase of the business cycle. However, LFS data were additionally boosted by the statistical effect resulting from the extension of the maternity leave from 6 to 12 months for parents with children born after 1 January 2013.[80] In the projection horizon – given stable GDP growth and the waning statistical effect – the pace of the expansion in the number of persons working will decline substantially, running at a slightly positive level in 2016-2017 (Figure 4.17). Slower growth in the number of working persons is also related to an increase in labour productivity resulting from the forecasted pace of TFP and productive capital growth.

Moderate growth in the number of working persons in the projection horizon, coupled with a concurrent decline – due to migration – in the number of professionally active people, will translate into a decrease in the LFS unemployment rate to 7.3% in 2017 (Figure 4.18). Yet, owing to a simultaneous decrease in the equilibrium unemployment rate (Figure 4.18), wage pressure will rise only moderately. It will also be limited by the expected low levels of CPI inflation, especially early in the projection horizon, which will translate into lower wage demands posed by employees. As a result, the growth of nominal wages in the projection horizon will gradually pick up while remaining relatively weak, substantially below the rates seen before the onset of the global financial crisis (Figure 4.19). The assumptions concerning

Figure 4.17 Employment and activity in the labour market.

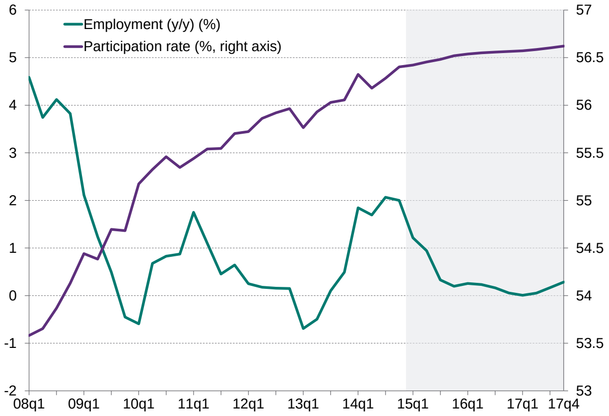
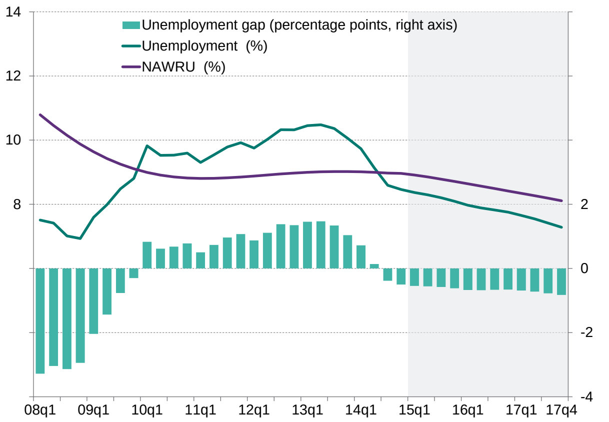


Figure 4.18 Unemployment.



[80] In accordance with the LFS methodology, persons on maternity leave are considered occupationally active and in employment. In turn, persons on child care leave lasting more than three months are deemed occupationally inactive (and the number of such persons has fallen due to the extension of the maternity leave.

wage trends provide for a merely modest rise in the unit labour cost growth, not exceeding 2% y/y until the end of 2017.

Exchange rate

Following depreciation in the first half of 2015, the exchange rate will start to appreciate slightly in the following quarters, to stabilise in the last year of the projection horizon. Throughout the entire projection period, the appreciation of the domestic currency will be supported by the ongoing process of convergence of the Polish economy, reflected in faster growth of the country's potential output in comparison with Poland's main trading partners. The strengthening of the zloty will also be driven by the current high balance in the current and capital account. Yet, the impact of this factor will wear away as – in line with the projection – the deficit in this account increases. The strengthening of the Polish currency will also be halted by the narrowing of the interest rate disparity in 2017, resulting from the projection's assumptions of a constant NBP reference rate amidst a gradual increase in interest rates abroad.

Components of CPI inflation

In the entire projection horizon, core inflation will stand at low levels, i.e. below 1% y/y (except for the last quarter of the projection period), which will be driven by both domestic and external factors (Figure 4.20). Weak demand pressure in the economy poses a barrier to faster growth of prices, which is reflected in the negative – although gradually closing, over the projection horizon – output gap. Persistently low core inflation levels are also supported by weak cost pressure, as manifested in the decline in import prices observed for over a year, and the declining – for two years – PPI index. In the projection horizon, cost pressure in the Polish economy is expected to rise only moderately. Also, unit labour cost growth will

Figure 4.19 Unit labour costs.

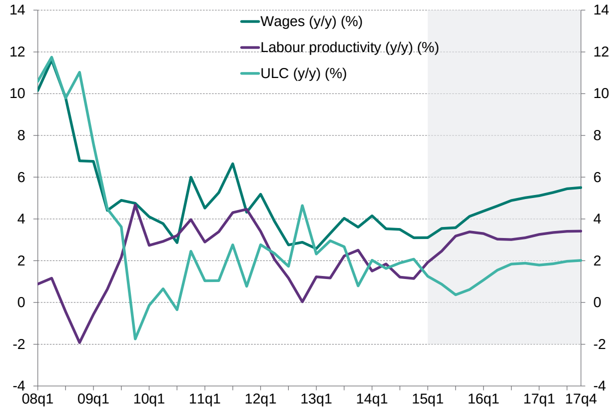
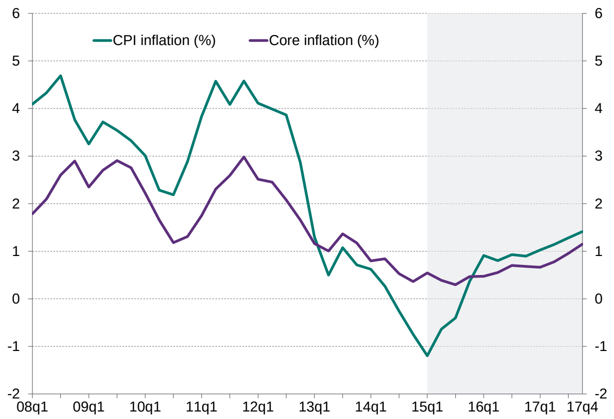


Figure 4.20 CPI and core inflation (y/y, %).

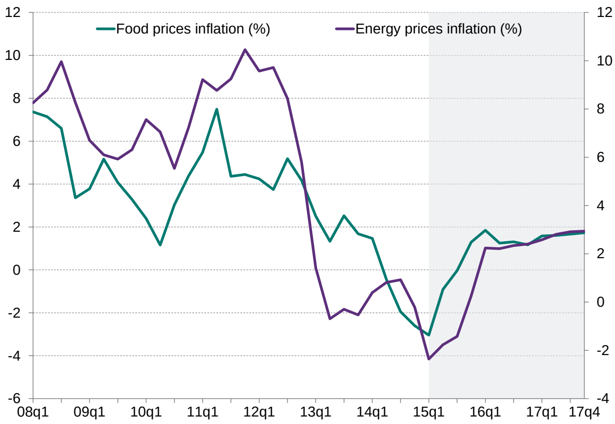


remain moderate (Figure 4.19). Furthermore, the currently observed decline in energy commodity prices is expected to have a positive impact on corporate costs (including, in particular, transportation companies). An important factor limiting domestic inflation is low inflation abroad, especially in the euro zone. Since Poland is a small open economy, a slow growth of traded goods' prices in the Poland's main trading partners is expected to effectively curb domestic price growth of these goods despite the closing output gap.

In 2015, the energy prices, especially those of fuels, which are forecasted to decline, will help keep CPI inflation below zero (Figure 4.21). The sinking fuel prices result from a slump in crude oil prices observed since 2014 Q4. In addition, the new tariffs on the distribution and sale of natural gas approved by the Energy Regulatory Office (URE) on the 17th of December 2014 have remained unchanged – despite prior expectations of a rise. In the years 2016-2017, energy price inflation will pick up, although it will still run substantially below the long-term average. It will be dragged down by both the domestic prices of natural gas and the prices of electric energy charged to households, whose adjustment to the low global prices of energy commodities is lagged.

The negative rate of CPI inflation in 2015 is also underpinned by a decline in the food prices (Figure 4.21). This decline is the combined effect of weaker business conditions and the increased supply of agricultural commodities. At the markets for fruit, vegetable, meat, fish, milk and dairy products an excess supply is currently observed, largely due to the imposition of the Russian embargo on imports of products from these groups. Furthermore, following an exceptionally short and warm winter, fruit and vegetable crops in Poland and Southern Europe have been exceptionally good. Later in the projection horizon, assuming that the positive supply shocks will be waning, food price inflation

Figure 4.21 Inflation of food and energy prices (y/y, %).



should start to rebound gradually. However, the increase will be curbed by weak demand pressure in the domestic market and the moderate rise in the prices of agricultural commodities in the global markets (Figure 4.3).

Box 5: The impact of improved terms of trade on Poland's trade balance

Since 2012 Q3, the transaction prices of exports have been observed to rise faster than those of imports. It has been the longest period since at least year 2000 during which price relationships in external trade have been sustained at favourable levels. In the second half of 2014, the favourable *terms of trade* were largely supported by a marked drop in crude oil prices. Thus, the positive *terms of trade* curbed, to a large extent, the impact on the trade balance of faster rise in real imports than exports (which resulted from a stronger expansion of the Polish economy compared with the external environment).

In 2014 Q3, owing to, above all, the decline in crude oil prices, the Poland' *terms of trade* increased to 105.2 (compared with 103.6 in 2014 Q2). This resulted in a reduction in the deficit of trade in goods, which had been generated by a markedly faster growth of real imports as compared with exports (in 2014 Q3, imports grew by 8.7% whereas exports by a mere 1.8%).

The improvement in Poland's *terms of trade* in 2014 Q3 resulted, on the one hand, from a much steeper decline in the global prices of commodities and fuels in comparison with those of processed goods, on the other hand - from a higher share of fuels and other commodities in imports than in exports.

According to the CPB Netherlands Bureau for Economic Policy Analysis data, in 2014 Q3 global prices of processed goods (as expressed in USD) remained practically unchanged in annual terms, whereas prices of fuels decreased by around 7% y/y (and prices of the remaining commodities, by 2% y/y). As a result, the index of prices of processed goods to prices of fuels in the global trade rose to 107.7, which meant an improvement in price conditions for the economies which are net-oil importers.

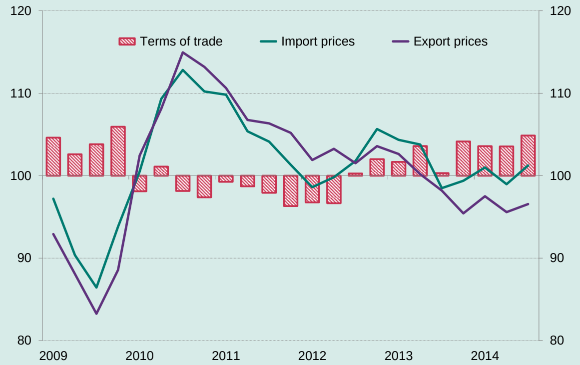
Poland is one of those economies. In 2013, fuels and commodities accounted for 17% of Polish imports (of which oil accounted for 9%), as compared with 5% of exports. The deficit in the group comprising fuels belongs to the highest in Polish trade (in 2013, it amounted to EUR 10.9bn).

The movements in import vs. export prices of manufactured products (which make up 83% of imports and 95% of exports) were very similar in 2014 Q3. The *terms of trade* for manufactured goods stood at 100.4 (transaction prices of exports expressed in EUR increased by 0.4% y/y, while import prices remained at the previous year's level). Out of the 22 manufacturing industries, 9 saw export prices rise faster than import prices.

The two opposing trends - real imports growing faster than exports, and the improvement in the *terms of trade* - together added up, according to the Central Statistical Office data, to a higher deficit recorded in trade in goods, amounting to EUR 690m (as compared with EUR 430m, in 2014 Q2). This was because the lower deficit in trade of fuels coincided with a significant decrease in the surplus on processed goods.

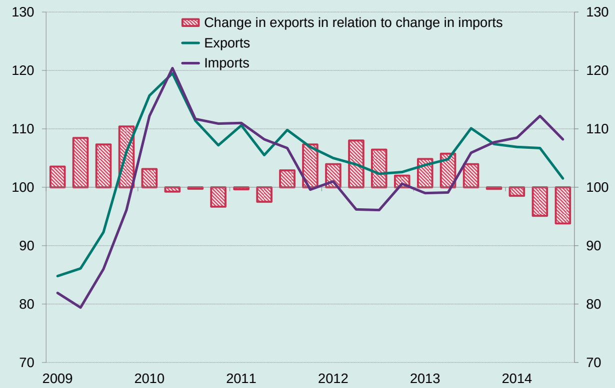
The even steeper downward trend in crude oil prices, observed in 2014 Q4, probably boosted Polish *terms of trade* further. In 2014 Q4, oil prices were 30% lower than a year before (compared with a 6% decline in 2014 Q3). At the same time, preliminary data suggest an improved ratio of the change in the volume of exports vs. imports, which might have reversed the upward trend in the trade deficit at the end of 2014.

Figure B.5.1 Transaction prices of exports and imports (EUR, previous year=100).



Source: GUS data, NBP calculations.

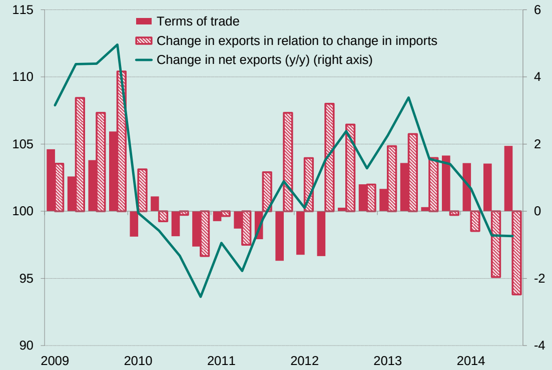
Figure B.5.2 Changes in exports and imports (previous year=100)



Source: GUS data, NBP calculations.

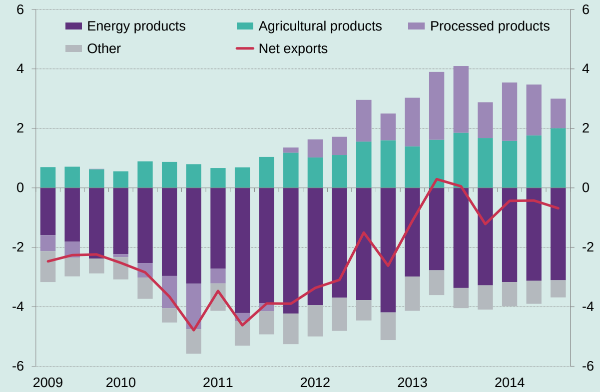
The significantly steeper downward shift, in comparison with the previous forecasting round, of the path of energy commodity prices in the global markets, which improves *terms of trade,* constitutes the key premise for the downward revision of inflation projection in the current forecasting round. They also contribute to a higher expected GDP growth in comparison with the November projection, especially early in the projection horizon.

Figure B.5.3 Changes in price and volume ratio (previous year =100) against change in net exports (bln EUR y/y, right axis).



Source: GUS data, NBP calculations.

Figure B.5.4 Net exports – breakdown according to main group of products (bln EUR).



Source: GUS data, NBP calculations.

4.4 Current versus previous projection

As compared with the November projection, in the current forecasting round, the path of CPI inflation has been significantly revised downwards. The forecasted GDP growth in 2015 was slightly revised upwards, and remained unchanged in 2016 (Table 4.1).

The revision of the forecasts of consumer price inflation is driven by a marked reduction in energy commodity prices in the world markets, especially prices of crude oil. Apart from lower path of inflation, higher GDP growth was driven by, a higher than expected GUS estimate of GDP in 2014 Q3 and entire 2014.

Inflation

Data released after the cut-off date of the November projection point to a significantly lower CPI inflation throughout the projection horizon.

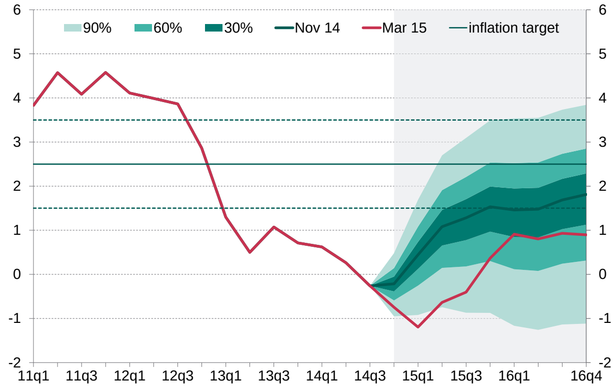
In 2015 this will be driven, in particular, by a lower forecasted growth rate of energy prices. This is related to the sharp decline in crude oil prices in the global markets, which resulted in fall of domestic fuel prices. In addition, on 17 December 2014, the President of the Energy Regulatory Office approved new tariffs for the sale and distribution of natural gas, according to which prices did not increase as of 1 January 2015 as assumed in the November projection.

The revision of the forecasted growth in consumer prices in 2015 was also driven by the lowering of the expected path of food price inflation. Amidst forecasts of agricultural commodity prices in the global markets similar to the assumptions of the November projection, this reduction results from

Table 4.1 March projection versus November projection.

	2014	2015	2016
GDP (y/y, %)			
III 2015	3.3	3.4	3.3
XI 2014	3.2	3.0	3.3
CPI inflation (y/y, %)			
III 2015	0.0	-0.5	0.9
XI 2014	0.1	1.0	1.6

Figure 4.22 March projection versus November projection: CPI inflation (y/y, %).



stronger, than previously estimated, translation of very large supply of agricultural commodities into domestic food prices.

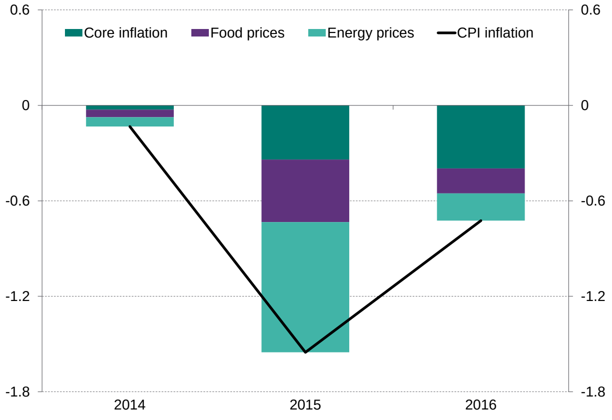
As a result of a marked reduction of cost pressure, the core inflation forecast is also below its central path of the November projection. This is due to significantly lower prices of imported goods (not only energy commodities) in the current projection, which is related to downward revision of inflation forecasts in the euro area and Great Britain.

The growth rate of unit labour costs has also been revised downwards, amidst the decline in the projected wage growth. Apart from lower than expected figures in the second half of 2014, lower wage growth in 2015 is also the result of reduced wage demands of employees, which are affected by a decline in inflation expectations of households observed over the last months (see Chapter 2.1.5 *Inflation expectations*).

The revision of the core inflation forecast in the short term is partially offset by the slightly more favourable economic activity developments, which is reflected in the faster closing of the output gap (being a measure of demand pressures in the economy) than assumed in the previous projection.

In 2016, the direct impact of declining prices of energy commodities on the consumer price index gradually fades – CPI inflation remains, however, below the expectations of the last projection. This is affected by the second-round effects related to the translation of the fall in commodity prices to the prices of other goods and services. In the first place, a lower growth of prices of electricity and natural gas for households can be expected, as they adjust, with delay, to the favourable supply conditions.

Figure 4.23 Decomposition of deviations between March and November projection: CPI inflation (percentage points).[81]



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

Moreover, significantly lower inflation of energy commodities prices throughout the projection horizon reduces operating costs of businesses, in particular those from the transport sector, which with a certain time lag are fed through to prices of other products. In combination with a lower path of wages and, consequently, unit labour costs, core inflation is expected to decline as compared to the November projection round also in 2016.

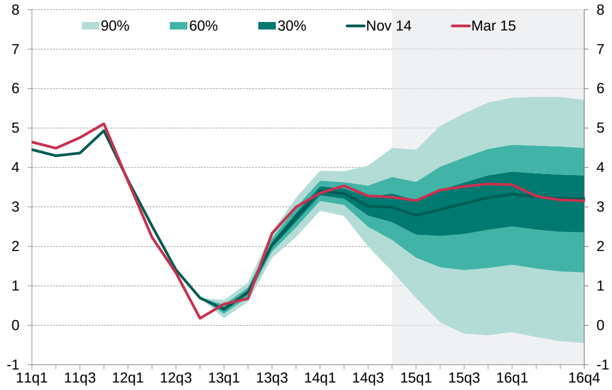
GDP

Data released after the cut-off date for the November projection has contributed to upward revision of GDP growth forecast for 2015. The growth forecast for 2016 has not changed.

Faster GDP growth in the short-term projection horizon results primarily from lower prices of energy commodities that have been accounted for in the current forecasting round. Owing to the fact that Poland is a net importer of crude oil, natural gas and – to a lesser extent – coal, lower prices of these commodities improve the terms of trade (see Box 5 *The impact of improved terms of trade on Poland's trade balance*). Households' increased purchasing power (despite a decline in nominal wage growth), combined with lower corporate costs, have driven up consumption and investment growth in the current projection. At the same time, the contribution of net exports to growth has been adjusted downwards, which diminishes the extent of the upward revision of GDP. Factors contributing to this adjustment include higher domestic demand growth resulting in an upward shift of the growth path of import volume. The contribution of net exports in real terms is additionally reduced by the improvement in the terms of trade.

Since the publication of the November projection, GUS has published an estimate of GDP in 2014 Q3 and in the entire year 2014, compiled for the first

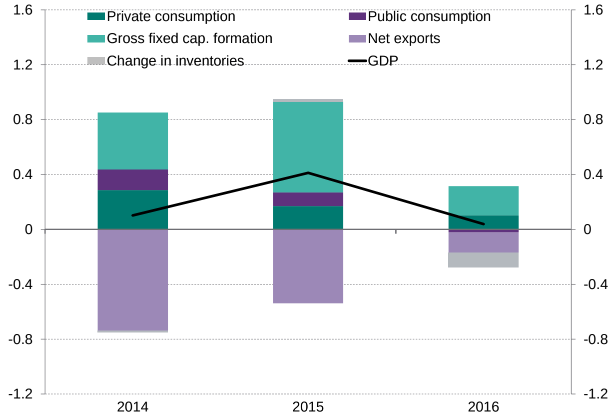
Figure 4.24 March projection versus November projection: GDP growth (y/y, %).



time according to the new methodology standards of the European System of National and Regional Accounts in the European Union (ESA 2010). GUS has also introduced other methodology changes – among others, output resulting from illegal activity has been included in the GDP calculation. The GUS estimate proved to be slightly higher than the expectations of the November projection, which can partially result from the methodology changes. This is indicated by, among others, the upward revision of the historical data for the first half of 2014. GUS estimates belonged to the factors behind the upward shift in the GDP growth path in the short-term projection horizon. They also indicated a somewhat different structure of growth in 2014 than that assumed in the November projection, with higher growth of domestic demand and lower contribution of net exports. This gave rise to a further upward revision of private consumption and investment in 2015, and a downward revision of net exports.

In 2016, the direct effects of lower energy commodity prices as well as higher-than-expected GDP and employment estimates fade – hence in this horizon, GDP growth does not differ from the previous projection. Due to lower inflation, in the long-term projection horizon the path of consumption and investment will continue to run above the expectations of the previous projection. The impact of higher domestic demand growth in 2016 is offset by the lower contribution of net exports.

Figure 4.25 Decomposition of deviations between March and November projection: GDP growth (percentage points).[82]



[82] 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 March projection points to the possibility that CPI inflation will be below the central projection path whereas distribution of uncertainty for GDP growth is symmetrical (Table 4.2). Assuming lack of changes to the 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 in the projection horizon however does not exceed 50% (Table 4.2). The key sources of projection uncertainty are presented below.

Prolonged period of deflation in Poland and the euro area

The possibility of a prolonged deflation period in Poland and in the euro area is the key source of projection uncertainty and is the one mostly responsible for the downside asymmetry in the risk distribution for the CPI inflation path.

A prolonged deflation period in the euro area would be possible in case of a combination of unfavourable factors leading to a wage-price spiral in the economy. A significant economic growth slowdown in this currency area supports the realization of such a scenario. One of the reasons for the current stagnation in the euro area are structural problems resulting from the lack of sufficient reforms aimed at improving competitiveness in the past. If structural weakness of the euro area turned out to be deeper than currently assessed, a lower economic growth would persist for a longer period. Economic slowdown in the euro area combined with an increase in geopolitical risk related to the conflict between Russia and Ukraine as well as the uncertainty concerning the political and economic

Table 4.2 Probability of inflation running:

	below 1.5%	below 2.50%	below 3.50%	below the central projection	In the range (1.5-3.5%)
15q1	1.00	1.00	1.00	0.50	0.00
15q2	1.00	1.00	1.00	0.50	0.00
15q3	0.96	1.00	1.00	0.50	0.04
15q4	0.82	0.96	0.99	0.50	0.17
16q1	0.67	0.88	0.97	0.51	0.30
16q2	0.69	0.88	0.97	0.51	0.28
16q3	0.66	0.85	0.95	0.52	0.30
16q4	0.66	0.85	0.95	0.52	0.29
17q1	0.63	0.83	0.94	0.52	0.31
17q2	0.60	0.80	0.93	0.51	0.33
17q3	0.56	0.77	0.91	0.51	0.35
17q4	0.53	0.74	0.89	0.51	0.36

situation in Greece may lead to a deterioration of consumer and business sentiment.

As a result, given the high unemployment rate in the single currency area and a further unanchoring of inflation expectations that accompanies a slowdown, employees' wage demands and wages offered by employers may be curbed. In this situation, and with an additional impact of lower energy commodity prices on the global markets, there may occur a wage-price spiral, which would result in a prolonged deflation period across the currency union area. Negative price growth would result in a rise of the real cost of money, which, given the lack of possibilities to lower nominal interest rates due to the fact that they have reached the zero bound, would additionally contain economic activity in the euro area and would augment the real value of debt denominated in the euro.

The materialization of the above mentioned risks may lead to the prolonged period of negative CPI inflation in Poland in the baseline scenario. This impact would be significant, especially in case of the escalation of the Russian-Ukrainian crisis which, due to trade relations, has a relatively stronger influence on the Polish economy than on the euro area. The prospects for lower economic activity in countries that constitute Poland's main export markets would be conducive to a decrease in investment outlays of enterprises and worsening of the labour market situation. Lower import prices combined with additional obstacles in export of Polish goods to Russia would also lower inflation expectations of enterprises and consumers. In the situation of unanchored inflation expectations and the risk of relatively small nominal wage downward rigidities, a wage-price spiral could arise in Poland as in the euro area, which would lead to prolonged period of negative growth of consumer prices.

A change in the macroeconomic conditions could, in the projection horizon, lead to a revision of the fiscal policy. In particular, lower tax revenues could make the government withdraw from the reduction of VAT rate announced for 2017, which would be conducive to a slightly slower decline of CPI inflation and a further deceleration of GDP growth.

Increase in domestic demand supported by enhanced economic activity in the euro area

The possibility of the domestic demand rising faster than assumed in the baseline scenario, especially in a short-term horizon, is also a significant uncertainty source for the projection. Business and consumer sentiment in Poland would improve in case of diminished uncertainty associated with the conflict between Russia and Ukraine and a stronger-than-assumed impact of the ECB quantitative easing on economic activity expectations in the euro area. A faster improvement on the domestic labour market could make households use the rise in real wages from the recent quarters to boost consumption at the cost of a slower increase in the rate of savings as compared to the baseline scenario. Improved expectations of future business conditions could also lead to higher investment activity of enterprises, which would benefit from the low level of interest rates on a larger scale. In a longer period, faster economic growth in Poland could be supported by the effects of implementation of The Investment Plan of the European Commission for 2015-2017, which aims at counteracting the structural problems of the EU economy and enhancing its competitiveness. According to the estimates of the European Commission, the plan may contribute to an increase in the GDP growth of the European Union amounting to EUR 330-410 billion and the creation Higher economic growth and stronger improvement on the domestic labour market would result in a faster increase in consumer prices throughout the projection horizon than assumed in the central scenario.

Oil prices on the global markets.

Oil prices and the prices of other energy commodities on the global markets are another source of uncertainty for the baseline scenario.

The risk for the assumed oil price forecast is primarily associated with potential disruptions in the supply of this commodity on the global markets. The uncertainty concerns the scale of shale oil extraction and its export by the United States as well as actions undertaken by the OPEC countries, especially Saudi Arabia. This country is the most important oil exporter and has the lowest marginal cost of oil extraction owing to which it has the greatest possibilities of controlling the global oil supply. Another risk affecting the supply of oil results from the uncertain political situation in Iraq and Libya. Moreover, the demand-side factors related to the global economy growth outlook, also add up to risks concerning the path of oil prices assumed in the baseline scenario, although to a lesser extent. This uncertainty primarily concerns the growth in emerging countries and the materialization of risks to the euro area economy presented above.

Table 4.3 Central path of inflation and GDP projection.

	2013	2014	2015	2016	2017
Consumer Price Index CPI (% y/y)	0.9	0.0	-0.5	0.9	1.2
Food prices (% y/y)	2.0	-0.9	-0.7	1.4	1.6
Energy prices (% y/y)	-1.5	-1.0	-3.0	1.1	1.7
Core inflation net of food and energy prices (% y/y)	1.2	0.6	0.4	0.6	0.9
GDP (% y/y)	1.7	3.3	3.4	3.3	3.5
Domestic demand (% y/y)	0.2	4.6	4.3	3.9	4.3
Individual consumption (% y/y)	1.1	3.0	3.1	3.1	3.3
Public consumption (% y/y)	2.0	2.8	2.9	2.9	3.3
Gross fixed capital formation (% y/y)	0.9	9.4	7.1	5.3	6.0
Contribution of net exports (percentage point y/y)	1.4	-1.2	-0.8	-0.6	-0.8
Exports(% y/y)	5.0	4.8	4.4	5.5	5.7
Imports (% y/y)	1.8	7.8	6.3	6.9	7.2
Gross wages (% y/y)	3.4	3.6	3.6	4.7	5.3
Total employment (% y/y)	-0.2	1.9	0.7	0.2	0.1
Unemployment rate (%)	10.3	9.0	8.2	7.9	7.5
NAWRU (%)	9.0	9.0	8.8	8.5	8.2
Labour force participation rate (%)	55.9	56.3	56.5	56.6	56.6
Labour productivity (% y/y)	1.8	1.5	2.7	3.1	3.4
Unit labour costs (% y/y)	2.2	1.9	0.8	1.6	1.9
Potential output (% y/y)	2.7	2.6	3.0	3.2	3.3
Output gap (% of potential GDP)	-1.7	-1.0	-0.6	-0.6	-0.3
Index of agricultural commodity prices (EUR; 2011=1.0)	1.04	0.93	0.89	0.91	0.90
Index of energy commodity prices (USD; 2011=1.0)	0.81	0.72	0.54	0.56	0.58
Price level abroad (% y/y)	1.5	1.2	1.0	1.3	1.5
GDP abroad (% y/y)	0.1	1.3	1.4	1.6	1.6
Current and capital account balance (% GDP)	1.0	1.1	0.9	-0.2	-1.7
WIBOR 3M (%)	3.03	2.52	2.18	2.21	2.21

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

5 The voting of the Monetary Policy Council members in October 2014 – January 2015

Date: 8 October 2014

Subject matter of motion or resolution:
Motion to lower the NBP reference and rediscount rates by 0.5 percentage point.

MPC decision:
Motion passed.

Voting of the MPC members:

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

Date: 8 October 2014

Subject matter of motion or resolution:
Motion to lower the NBP lombard rate by 1.0 percentage point.

MPC decision:
Motion passed.

Voting of the MPC members:

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

■ Date: 8 October 2014

Subject matter of motion or resolution:
Resolution no 6/2014 on reference rate, refinancing credit rate, deposit rate and rediscount rate at NBP.

MPC decision:
The Council lowered the NBP reference and rediscount rates by 0.5 percentage point and the NBP Lombard rate by 1.0 percentage point.

Voting of the MPC members:

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

■ Date: 8 October 2014

Subject matter of motion or resolution:
Resolution No. 7/2014 on the required reserve ratios for banks, cooperative savings and credit unions and the National Association of Cooperative Savings and Credit Unions and the remuneration of required reserves.

MPC decision:
The Council decided that required reserve funds will be remunerated at 0.9 of the NBP reference rate.

Voting of the MPC members:

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

E. Chojna-Duch and J. Winiecki were absent.

Date: 5 November 2014

Subject matter of motion or resolution:
Motion to lower the NBP interest rates by 1.0 percentage point.

MPC decision:
Motion did not pass.

Voting of the MPC members:

For: A. Bratkowski

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

Date: 5 November 2014

Subject matter of motion or resolution:
Motion to lower the NBP interest rates by 0.5 percentage points.

MPC decision:
Motion did not pass.

Voting of the MPC members:

For: M. Belka
A. Bratkowski
E. J. Osiatyński
A. Zielińska-Głębocka

Against: E. Chojna-Duch
A. Glapiński
J. Hausner
A. Kaźmierczak
A. Rzońca
J. Winiecki

Date: 5 November 2014

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

■ Date: 3 December 2014

Subject matter of motion or resolution:
Motion to lower the NBP interest rates by 1.0 percentage point.

MPC decision:
Motion did not pass.

Voting of the MPC members:

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

■ Date: 3 December 2014

Subject matter of motion or resolution:
Resolution No. 8/2014 on approving the Financial Plan of the National Bank of Poland for 2015.

Voting of the MPC members:

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

Date: 14 January 2015

Subject matter of motion or resolution:
Motion to lower the NBP interest rates by 1.0 percentage point.

MPC decision:
Motion did not pass.

Voting of the MPC members:

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

Date: 14 January 2015

Subject matter of motion or resolution:
Motion to lower the NBP interest rates by 0.25 percentage points.

Voting of the MPC members:

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

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