

NATIONAL  
BANK OF  
ROMANIA

# Inflation Report

## February 2016

Year XII, No. 43

# Inflation Report

## February 2016

## **NOTE**

Some of the data are still provisional and will be updated as appropriate in the subsequent issues.

The source of statistical data used in charts and tables was mentioned only when they were provided by other institutions.

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# Foreword

The primary objective of the National Bank of Romania is to ensure and maintain price stability, with monetary policy being implemented under inflation targeting starting August 2005. In this context, active communication of the monetary authority to the public at large plays a key role, and the major tool that the central bank uses to this end is the Inflation Report.

Apart from analysing the most recent economic, monetary and financial developments and explaining the rationale and the manner of implementing monetary policy in the previous period, the Report includes the National Bank of Romania's quarterly projection on inflation over an eight-quarter horizon, including the associated uncertainties and risks, and a policy assessment built upon the recent and future macroeconomic context from the perspective of the monetary policy decision.

By drafting and publishing the Inflation Report on a quarterly basis, in accordance with the frequency of the forecasting cycle, the National Bank of Romania aims to provide all those interested with the opportunity of best comprehending its analytical framework and hence the reasons underlying the monetary policy decisions. Securing a transparent and predictable monetary policy is meant to strengthen monetary policy credibility and thus help achieve an effective anchoring of inflation expectations and lower the costs associated with ensuring and maintaining price stability.

The analysis in the Inflation Report is based upon the most recent statistical data available at the date of drafting the Report, so that the reference periods of indicators herein may vary.

The Inflation Report was approved by the NBR Board in its meeting of 5 February 2016 and the cut-off date for the data underlying the macroeconomic projection was 1 February 2016.

All issues of this publication are available in hard copy, as well as on the NBR website at <http://www.bnr.ro>.



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# SUMMARY

## Developments in inflation and its determinants

In 2015 Q4, the annual CPI inflation rate remained in negative territory. However, given the positive monthly rates seen during this period, at end-December it stood 0.8 percentage points above the level reported at end-Q3 (-0.9 percent compared to -1.7 percent). The annual inflation rate has posted negative values since June, under the impact of broadening the scope of the 9 percent reduced VAT rate to all food items, non-alcoholic beverages and food service activities. In the absence of this measure, in Q4, the annual inflation rate would have returned inside the variation band of the target (2.5 percent  $\pm$  1 percentage point), nearing 2 percent at year-end. Under the impact of the same measure, the average annual HICP inflation rate<sup>1</sup> turned negative in October 2015, falling to -0.4 percent in December.

All the main components of the aggregate index contributed to mitigating the negative value of the annual CPI inflation rate in Q4. The largest contribution was made by a base effect on the annual dynamics of fuel prices: the fall in the international crude oil prices in 2015 Q4 was by far smaller than that in the same quarter of the previous year. Significant influences came from the faster increase in tobacco product and alcohol prices and the decelerating negative dynamics of prices in the adjusted CORE2 index<sup>2</sup>. The positive contribution made by developments in administered prices and volatile food prices was marginal.

<sup>1</sup> Calculated as the average price change in the last 12 months compared to that in the previous 12 months.

<sup>2</sup> This core inflation measure excludes from the overall CPI a number of prices on which monetary policy (via aggregate demand management) has limited or no influence: administered prices, volatile prices (of vegetables, fruit, eggs and fuels), tobacco product and alcohol prices.

Broadening the scope of the reduced VAT rate to all food items led to a more significant initial drop in the annual adjusted CORE2 inflation rate than in the CPI inflation rate<sup>3</sup>. At end-Q4, the annual core inflation rate went up to -3.1 percent, from -3.4 percent at end-Q3, against the background of the narrowing negative output gap, the effects of the unfavourable agricultural year and the depreciation in annual terms of the domestic currency against both the euro and the US dollar. The inflation expectations remained low, reflecting the incorporation of the information on the VAT rate cut effects.

At end-Q4, the annual CPI inflation rate stood 0.2 percentage points below the level forecasted in the November Inflation Report. The forecast error owes mainly to the larger-than-expected fall in volatile food prices.

After a temporary slowing in 2015 Q3, the annual dynamics of unit wage costs in industry saw a strong acceleration in the first two months of Q4, when wages rose more rapidly than in the previous quarter alongside a decrease in labour productivity on account of some one-off factors. Over the same period, the growth rate of gross wages also witnessed a substantial acceleration economy-wide. The considerably faster advance in wage rises than in productivity gains throughout 2015 hints at the build-up of latent inflationary pressures from labour costs.

## Monetary policy since the release of the previous Inflation Report

In its meeting of 5 November 2015, the NBR Board decided to keep the monetary policy rate at 1.75 percent per year. The analysis underlying

<sup>3</sup> Food items affected by the fiscal measure applied in June account for approximately 42 percent of the core inflation basket and for roughly 31 percent of the aggregate CPI basket.

the decision highlighted the additional difficulties arising from a general context marked by major uncertainties. The update of the quarterly forecast reconfirmed the outlook for the annual inflation rate to remain in negative territory over the following three quarters, before returning to positive values and staying below the lower bound of the variation band of the target until the start of 2017 and inside the band thereafter.

At the same time, significant risks associated with the projection were identified. On the domestic front, the appointment of a new government heightened the uncertainties concerning the macroeconomic policy mix, particularly as the 2016 budget was still pending. The external environment continued to be surrounded by uncertainties associated primarily with the economic developments in China and other major emerging states and with the likelihood of diverging monetary policy stances of the world's major central banks.

Subsequent to the decision made in early November, the end-of-month statistical data revealed the annual inflation rate staying in negative territory, in line with the forecast. The central bank's reassessments of the short-term inflation outlook showed a path similar to that projected in November. Moreover, excluding the impact of the agricultural sector that was strongly affected by the poor autumn harvest, in 2015 Q3, the economic growth reported the fastest annual pace in the post-crisis period (above 5 percent), bolstered by the expansion of private consumption. Risks and uncertainties associated with both the external and domestic environment persisted. Reasons for concern in the latter case were the fiscal policy outlook and the prospects for structural reforms in the context of the elections to take place this year.

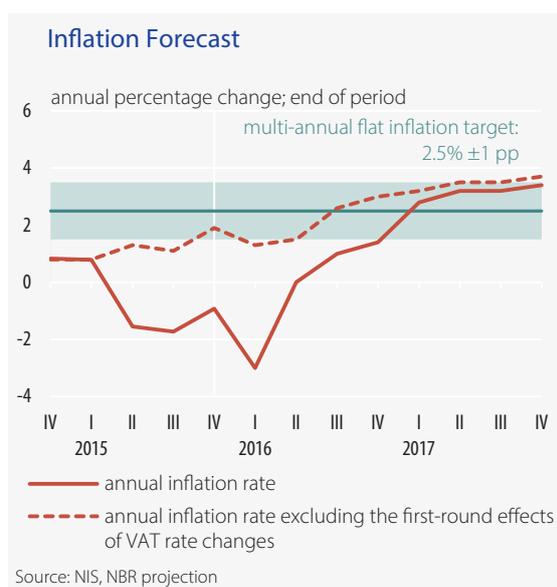
In this context, in its meeting of 7 January 2016, the NBR Board decided to keep the monetary policy rate at 1.75 percent per annum. Furthermore, amid the moderation of foreign currency lending, and with a view to carrying on the harmonisation of the

minimum reserve requirements mechanism with the standards and practices in the field implemented by the European Central Bank and the main central banks in the EU Member States, the NBR Board decided to cut the minimum reserve requirement ratio on foreign currency-denominated liabilities to 12 percent from 14 percent starting with the 24 January – 23 February 2016 maintenance period.

## Inflation outlook

Consumer price developments in the recent quarters and over the forecast interval are markedly affected by the fiscal measures concerning the successive indirect tax cuts, each measure having, however, a first-round effect on the annual inflation rate for a limited period of one year since implementation. Significant effects stem from: the two-step cut in the standard VAT rate to 19 percent, from 24 percent – by 4 percentage points as from 1 January 2016 and by another percentage point as from 1 January 2017; the broadening of the scope of the reduced VAT rates to certain types of goods and services as from 1 June 2015 and 1 January 2016; and the scrapping of the special excise duty on fuels starting 1 January 2017.

Under the current baseline scenario, the annual CPI inflation rate is projected to remain in negative territory until May 2016, before returning to positive levels below the lower bound of the variation band of the inflation target in the latter half of the year. Inflation rate is expected to re-enter the variation band at the beginning of 2017 and stay there until the projection horizon, when it is seen reaching 3.4 percent. At the same time, an alternative measure of the annual CPI inflation rate, which highlights more accurately the underlying inflationary pressures, was calculated by excluding the transitory first-round effects of successive VAT rate cuts. This inflation measure is projected to run inside the variation band of the target through most of the reference interval, yet on an upward trend, reaching the upper bound in 2017 and marginally exceeding it (3.7 percent) at the end of next year.



After the consolidation of economic growth in 2015, despite a below long-term average agricultural output, the baseline scenario envisages swifter increases in 2016 and 2017, as a result of heftier domestic demand. It will be largely underpinned by the fast-paced advance in the individual consumption of households, fuelled by the rise in their real disposable income, on the back of fiscal easing measures, as well as pay rises already implemented or planned for the reference interval. Gross fixed capital formation is foreseen to contribute positively to economic growth, amid stronger private investment growth in particular. This is anticipated to be also supported by the gradual pick-up of economic activity in Romania's trading partners and the stimulative effects of certain provisions in the new Tax Code<sup>4</sup>. However, the projection of favourable investment dynamics is also conditional on the assumption of adequate financing, including through structural and cohesion funds absorption. Both consumption and investment will benefit from the expected upturn in domestic lending, amid stimulative real monetary conditions throughout the reference interval, yet waning somewhat in the latter half of that period.

Net exports are seen having a further negative contribution to GDP growth over the projection interval, with the rise in imports of goods and

services, driven by the domestic demand expansion, being foreseen to outpace that of exports. Hence, the current account deficit-to-GDP ratio is projected to increase from the recent historical lows to levels close to 2 percent over the medium term. In the short run, international reserves and, generally, the anticipated sources for current account deficit financing are deemed to be adequate and favourably distributed in terms of the shares of debt-creating versus non-debt-creating flows. Nevertheless, the reopening of the negative current account balance due to a wider fiscal deficit and the speed-up in consumption could amplify Romania's vulnerabilities to higher capital volatility affecting the emerging economies and thus jeopardise domestic macroeconomic equilibria.

Throughout 2016, the forecast envisages a shift in the cyclical position of the Romanian economy from a negative output gap to excess demand, the latter being expected to build up until the projection horizon. Against the November 2015 projection round, the output gap was reassessed at levels implying stronger inflationary pressures in the latter half of the projection interval. The reassessment took into account, besides historical data revisions, a more stimulative effect of the discretionary income and fiscal policy component, a faster expansion of external demand in the second half of the projection interval (underpinned by the ECB's monetary policy stance) and a slightly more stimulative influence of domestic real monetary conditions.

According to the baseline scenario, the annual CPI inflation rate is expected to stand at 1.4 percent at the end of 2016, 0.3 percentage points above the previously-projected figure, and at 3.4 percent at the end of 2017. The projected path of inflation lies below that described in the previous round until mid-2016 and above it over the remaining interval. The differences in the current projection round stem mainly from a larger contribution of the adjusted CORE2 inflation throughout the reference interval, which is seen to be more than offset in the first part of the said interval by the downward revision of the cumulated contribution from the other CPI components.

<sup>4</sup> E.g., the cut in dividend tax and the removal of tax on special constructions.

The quickly succeeding VAT rate cuts (as of 1 June 2015, 1 January 2016 and 1 January 2017), entailing transitory effects on inflation rate, are largely accountable for the recent and expected volatility over the projection interval and can have an adverse bearing on forecast accuracy. Sharp shifts in the inflation path occur when first-round effects materialise and when they drop out of the annual inflation calculation. Thus, the CPI inflation rate is envisaged to post negative levels until May 2016, bottoming out at -3 percent, to add roughly 4 percentage points in 2016 Q3 and another percentage point in January 2017, before rising gradually by yet another percentage point to 3.4 percent at the end of 2017.

Annual adjusted CORE2 inflation rate will also see negative levels until May 2016, hitting a low of -4 percent, before returning to +1 percent in June and subsequently embarking on an uptrend, marked by a 1 percentage point jump in January 2017. This inflation measure is seen reaching 1.9 percent and 4.3 percent at end-2016 and end-2017 respectively. The core inflation rate which excludes the direct effects of VAT rate cuts will come in at 2.8 percent and 4.4 percent at end-2016 and end-2017 respectively. The upward path during the projection interval is ascribed to stronger underlying inflationary pressures, i.e. an expected rise in excess demand after the reversal of the cyclical position of the economy, along with the swifter increase in unit wage costs; the pattern of inflation expectations whereby second-round effects of VAT rate cuts feed through into prices; and the influence of import prices, amid the movements foreseen in external prices.

The projected path of the adjusted CORE2 inflation rate lies above that described in the November projection over the entire reference interval, widely reflecting stronger inflationary pressures from aggregate demand, on the back of the reassessment of the wage-productivity differential, and faster dynamics of import prices.

The monetary policy stance is shaped with a view to ensuring price stability over the medium term in a manner conducive to achieving lasting economic growth and preserving macroeconomic stability.

The balance of risks to the annual inflation rate projection is assessed as being tilted to the upside against the inflation path in the baseline scenario. The risks to the current projection stem primarily from the domestic environment, with external factors remaining as relevant as in the previous forecast rounds.

On the domestic front, the uncertainty about the consistent implementation of an adequate macroeconomic policy mix and of the already delayed structural reforms is deemed relevant, considering the elections scheduled to take place during the projection interval. Turning to fiscal policy, the risks to the current projection originate, on the one hand, in the possible differences between the actual impact of the implemented and planned fiscal measures and that assessed in the current baseline scenario, given the uncertainty surrounding the adequate financing of the envisaged significant widening of the general government deficit in 2016. On the other hand, there is a concern about the risk posed by possible future pay rises in the public sector, which are likely to amplify the already elevated fiscal easing to an extent that would prevent the compliance with the parameters assumed by Romania under the European fiscal governance treaties. Furthermore, considering the potential demonstration effects on private sector wage dynamics, the risk emerges that the recent mismatch between pay rises economy-wide and labour productivity gains may widen and generate additional inflationary pressures. Such risks could become even more relevant should structural reforms and public investment be postponed, or should EU funds be insufficiently capitalised upon, triggering unfavourable effects on the growth potential and competitiveness of the Romanian economy.

On the external front, despite a recent moderation of global tensions, the following factors remain relevant: the uncertainty surrounding the effects generated by the diverging monetary policy stances of the world's major central banks; the economic prospects for euro area countries and major emerging economies, especially China, considering its economic slowdown that may become more pronounced in the future; the management of the

Greek sovereign debt over the long term. Should some of these risks materialise, the Romanian economy could be negatively affected mostly via indirect channels, through the impact on external demand from the EU, Romania's main trading partner. Moreover, the adverse consequences on investor confidence might lead to portfolio shifts regionally and/or globally and, implicitly, to significant fluctuations in the leu exchange rate, which would reshape the inflation path compared to that in the baseline scenario. For these reasons, in the context of the expiry of the agreements Romania concluded with the European Commission and the IMF, it is necessary to maintain and strengthen the progress achieved over the last years in rooting out major macroeconomic imbalances and improving the resilience of the domestic economy by adequately implementing consistent macroeconomic policies.

Turning to the components of the aggregate consumer price index affected mainly by supply-side shocks, the risk of weaker-than-previously-projected fuel prices is significant in the current projection round, in the context of the recent trends driven by the strong growth in oil production and sluggish global demand. A new

source of risks contributing to the balance of risks being tilted to the upside against the inflation path in the baseline scenario is the measure<sup>5</sup> approved by the authorities concerning the manner in which packaging and the resulting waste are managed.

## Monetary policy decision

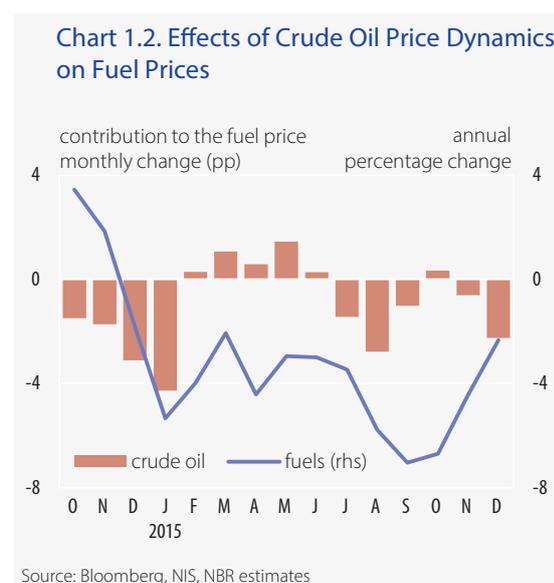
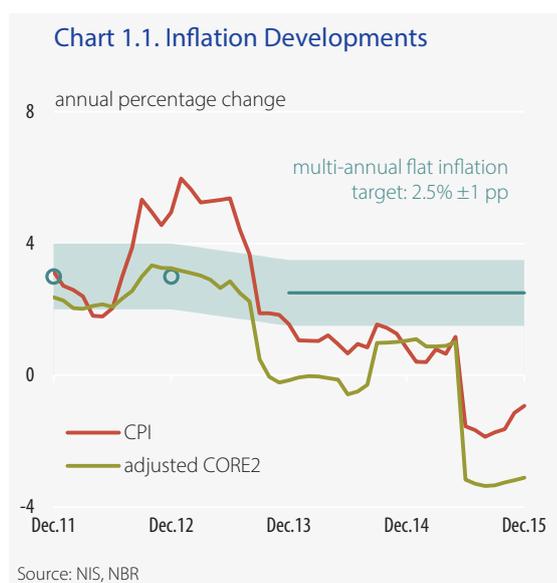
Considering the divergence in the projected trajectory of the annual inflation rate and its major determinants, as well as the accompanying risks induced by the potential fiscal and wage policy stance in the context of this year's elections and by the uncertainty about global economic growth and the recovery of the euro area economy stemming from the developments in China's economy and other major emerging economies, the Board of the National Bank of Romania decided, in its 5 February 2016 meeting, to keep unchanged the monetary policy rate at 1.75 percent per annum. Moreover, the Board decided to further pursue adequate liquidity management in the banking system and to maintain the existing levels of minimum reserve requirement ratios on both leu- and foreign currency-denominated liabilities of credit institutions.

<sup>5</sup> Law No. 249/2015 on packaging and packaging waste management.

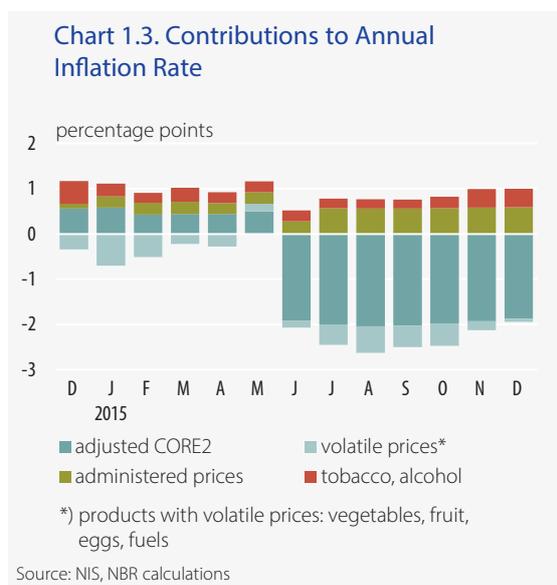
# 1. INFLATION DEVELOPMENTS

The monthly changes in aggregate consumer prices re-entered positive territory in the latter part of 2015, the annual inflation rate standing at -0.9 percent in December, i.e. 0.8 percentage points above the end-Q3 level. Broadening the scope of the 9 percent reduced VAT rate starting June 2015 further accounted for the persistence of the negative annual CPI dynamics; in the absence of this fiscal measure, the annual inflation rate would have returned inside the variation band of the target, nearing 2 percent at end-year. Apart from base effects on fuel price dynamics, the lower decline in consumer prices owed to higher costs for some agri-food commodities, to the depreciation of the domestic currency against the euro, and also to the fast-paced narrowing of the negative output gap in 2015 H2. Moreover, the above-mentioned factors shaped the path of adjusted CORE2 inflation as well, its annual rate accelerating by 0.2 percentage points to stand at -3.1 percent (Chart 1.1).

The international crude oil price movements had a swift and strong impact on fuel prices, thus being an important source of CPI inflation volatility. Crude oil prices kept declining during 2015 Q4, particularly in December, following the OPEC decision to *de facto* set aside its output target and the US lift of the ban on crude oil exports. Nevertheless, the annual rate of decline of fuel prices slowed (+4.7 percentage points to -2.3 percent) owing to the sharp contractions seen towards the end of 2014 dropping out from the 12-month inflation rate (Chart 1.2). This component (with a +0.4 percentage point contribution) largely accounts for the change in the CPI inflation rate. The annual growth rate of the food component of volatile prices inched up to 1.7 percent amid divergent developments in fruit and vegetable prices – the poor harvest pushed vegetable prices up in the course of Q4, whereas in the case of fruits, domestic supply did not exert any pressure, given the weaker impact of adverse weather conditions on crops.



A significant upward contribution to CPI inflation in 2015 Q4 came from tobacco product and alcoholic beverage prices, their annual growth rate rising by 2.7 percentage points to 5.2 percent (Chart 1.3). This was mainly the result of the unexpected hike in cigarette prices, possibly on account of companies in this business sector postponing price adjustments normally made in July-September and of the changes in indirect taxes applicable starting 1 January 2016.

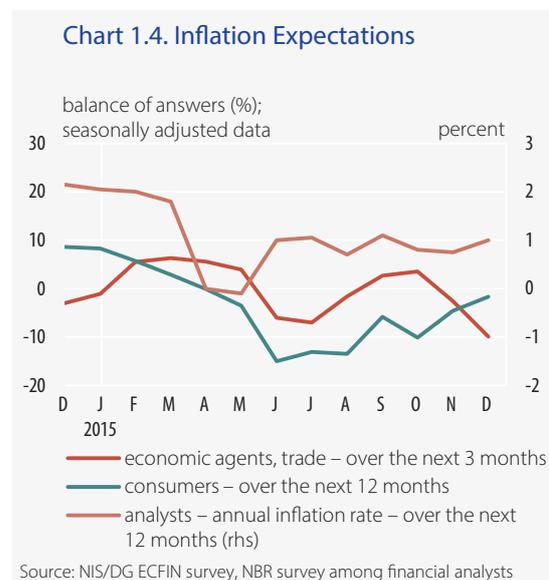


Administered prices recorded a relatively stable annual rate of change in 2015 Q4, standing at 3.1 percent at year-end.

The impact of broadening the scope of the 9 percent VAT rate to all food items, non-alcoholic beverages and food service activities starting June 2015 was mirrored primarily by annual adjusted CORE2 inflation (-3.1 percent as at December 2015), given that the fiscal measure concerned 42 percent of the adjusted CORE2 basket. However, current developments reveal a step-up in core inflation in Q4, with monthly growth rates (around 0.2 percent) higher than those reported in the same year-ago period (0.1 percent) and in 2015 during the months when fiscal measures did not apply (below 0.1 percent); behind these developments stood the sharp narrowing of the negative output gap amid stronger household purchasing power, as well as the impact of the unfavourable agricultural year and the weakening of the leu against the euro. The temporarily downward adjustment of inflation

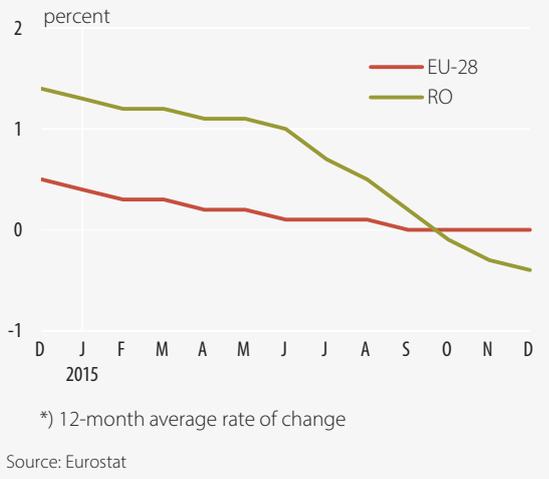
expectations exerted an opposite influence due to incorporating the direct impact of the lower standard VAT rate as of January 2016.

The breakdown by subgroup shows that market service prices witnessed the most substantial change, with a 0.5 percentage point rise in their annual growth rate (to 1.9 percent), as a result of the price adjustment for Civil Auto Liability insurance policies, in an attempt by insurance companies to recover the losses incurred in recent years. Moreover, the depreciation of the domestic currency versus the euro acted in the same direction, given the highly exchange rate-sensitive nature of market services. Monthly increases were also seen in food prices, particularly in those of commodities affected by the poor agricultural output, such as oil and sugar. By contrast, non-food prices reported a steady annual growth rate (+1.5 percent), given that the build-up of pressures due to the fast growth of wage expenses is further offset by the low costs of raw materials.



In the latter part of 2015, the path of inflation expectations was marked by further fiscal easing through the cut in standard VAT rate to 20 percent starting 1 January 2016, with downward adjustments in financial analysts' 12-month outlook, as well as in retail trader and consumer expectations (Chart 1.4). As for the other economic agents, the NIS/DG ECFIN survey points to a relative price stability in industry and services, and to a slight upturn in the construction sector.

Chart 1.5. Average Annual HICP Inflation Rate\*



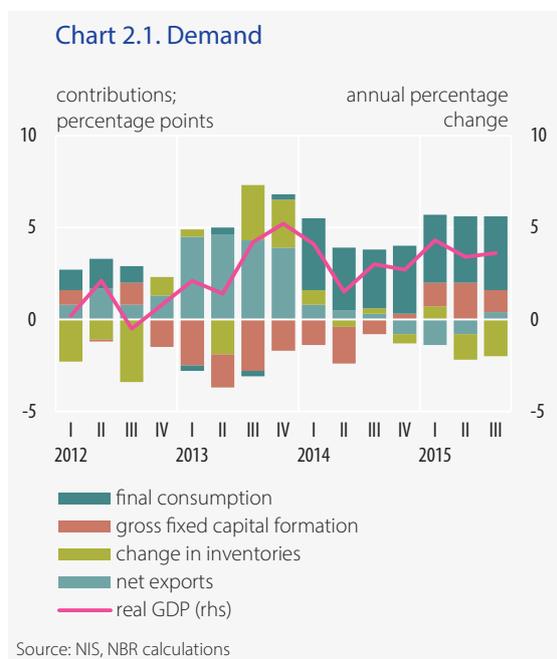
The average annual HICP inflation rate fell into negative territory as of October 2015, dropping to -0.4 percent at end-year, due to the gradually higher influence of the statistical effect associated with the June 2015 broadening of the scope of the 9 percent reduced VAT rate in calculating the average rate. Thus, the differential versus the EU-wide average inflation turned negative, reaching -0.4 percentage points in December 2015 (Chart 1.5).

Compared to the projection in the November 2015 Inflation Report, the annual rate of change in consumer prices at end-Q4 stood 0.2 percentage points below the forecasted level, chiefly as a result of the larger-than-expected drop in citrus fruit prices, despite previous signals pointing to a contraction in world output.

## 2. ECONOMIC DEVELOPMENTS

### 1. Demand and supply

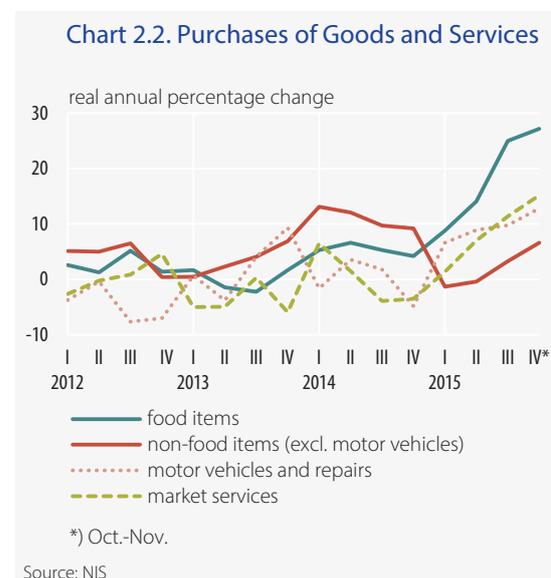
2015 Q3 saw further strong economic growth, the faster quarterly pace of increase of real GDP (1.4 percent, seasonally adjusted data) translating into an acceleration of annual growth (up 0.2 percentage points, to 3.6 percent). Final consumption remained the main contributor in Q3, but the recovery of the external sector is also worth mentioning. Conversely, the annual pace of growth of investment lost momentum as against the prior quarter (Chart 2.1). Under the circumstances, with the exception of agriculture (hit by the poor harvest reported in the autumn of 2015), economic activity recorded the swiftest post-crisis annual dynamics, i.e. 5.5 percent.



#### 1.1. Demand

In line with expectations, private final consumption rose at a faster tempo (i.e. 6.1 percent year on year). This development was driven by the increase in

the purchasing power of households, as a result of lower consumer prices, as well as of the rise in the nominal wage (also reflecting the direct and indirect effects of the new hike in the minimum gross wage economy-wide and the pay rises for certain public sector employees – public administration and education). Thus, sales of food items expanded by 25 percent against 2014 Q3 (with a favourable impact on the related industry), the main driver being the broadening of the scope of the 9 percent reduced VAT rate to all food items, non-alcoholic beverages and food service activities starting 1 June 2015 (Chart 2.2). Sales of non-food items grew at a swifter pace too, being also bolstered by borrowed funds. To this end, a major contribution was made by customers' faster access to non-collateralized borrowing (namely consumer loans, overdraft loans and credit cards), following an agreement between the Romanian Banking Association and the National Agency for Fiscal Administration, according to which the loan applicant's income is checked in real time, based on an agreement he/she has previously signed.



Consumer demand is expected to continue to increase in the coming months as well, the favourable conditions in 2015 Q3 being supplemented by the impact of at least two factors: the Black Friday event in November 2015, with sales, particularly of ICT equipment and electronics, exceeding those on Black Friday 2014, and the cut in the standard VAT rate to 20 percent from 24 percent as of 1 January 2016.

In 2015 Q3, the general government budget ended on a surplus worth approximately lei 2 billion<sup>6</sup> (0.3 percent of GDP<sup>7</sup>), after the slightly negative balance<sup>8</sup> recorded in the previous quarter. The said surplus was lower than in the same year-ago period<sup>9</sup>, owing almost solely to the faster dynamics of total public expenditure (12.5 percent<sup>10</sup> versus 4.0 percent in Q2), on account of both current expenditure (particularly government spending on goods and services, expenditure for projects financed from non-redeemable external loans, the public wage bill<sup>11</sup> and social payments<sup>12</sup>) and capital expenditure. The annual growth rate of total budget revenues remained virtually unchanged (8.1 percent against 7.8 percent in Q2), given the impact of the slower paces of increase of VAT receipts<sup>13</sup> and the corporate income tax, on the one hand, and of the swifter dynamics of non-tax revenues, social security contributions, excise duties and receipts from the tax related to use of goods, to authorisation of the use of goods or to developing activities, on the other hand.

<sup>6</sup> The analysis relied on the operational data related to the September 2015 budget execution, as published by the MPF.

<sup>7</sup> Corresponding to a primary surplus of 0.6 percent of GDP.

<sup>8</sup> Lei -0.7 billion (the equivalent of -0.1 percent of GDP).

<sup>9</sup> Lei 3.9 billion (0.6 percent of GDP).

<sup>10</sup> Unless otherwise indicated, percentage changes refer to the annual growth rates in real terms.

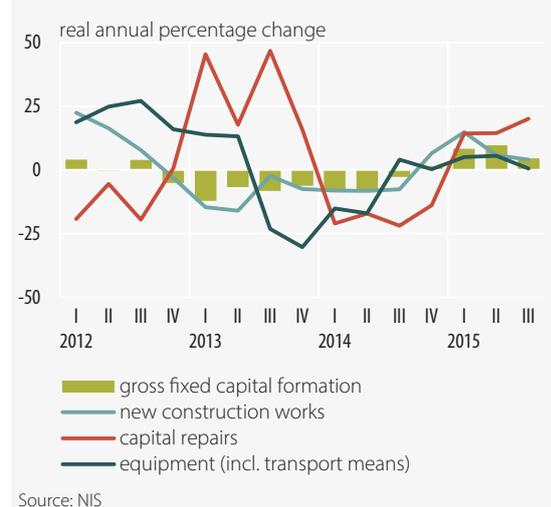
<sup>11</sup> This pick-up also reflected the impact of the wage hike approved via Government Emergency Ordinance No. 27/2015 supplementing Government Emergency Ordinance No. 83/2014 on the public sector wage policy for 2015 and other measures regarding public expenditure and setting some budgetary measures.

<sup>12</sup> The faster dynamics were also bolstered by the rise in the state child benefit starting in June 2015 (Law No. 125/2015 approving Government Emergency Ordinance No. 65/2014 amending and supplementing some pieces of legislation).

<sup>13</sup> Also in the context of the broadening of the scope of the reduced VAT rate to all food items, non-alcoholic beverages and food service activities as of June 2015 (Government Emergency Ordinance No. 6/2015 amending and supplementing Law No. 571/2003 on the Tax Code).

In 2015 Q3, the annual dynamics of gross fixed capital formation decelerated to less than half the level in the previous three-month period, i.e. down to 4.6 percent, amid the lower support from purchases of equipment, including transport means bought by companies and public institutions, up only 0.5 percent versus a 5 percent average in 2015 H1 (Chart 2.3). However, growth of equipment purchases is anticipated to resume in the coming months, as suggested by the rise in the stock of equipment loans in 2015 Q4. In addition, the February 2016 Bank Lending Survey shows that the demand for such loans has remained on an uptrend in 2016 Q1.

Chart 2.3. Investment



Construction investment saw a slowdown too, albeit of a far lower magnitude. New construction works and capital repairs rose by a real 5.6 percent, mainly on account of engineering works, which added 22 percent in annual terms. This increase incorporates a base effect, while also reflecting the significantly faster quarterly dynamics in the reviewed period. New publicly-funded capital investment is expected to be undertaken in the closing months of 2015, as shown by the 6.6 percent advance in engineering works in October-November versus 2015 Q3. Nonetheless, the 2015 budget execution data point to lower-than-planned investment expenditure. In 2015 Q3, the volume of works on buildings fell from the same year-ago period by 7.6 percent for residential construction works and by 4.9 percent for non-residential

construction works respectively. October through November 2015, the construction of buildings further declined as against Q3, albeit at a slacker pace. However, market signals on the outlook for 2016 hint at a potential rebound in non-residential construction works, commercial property developers further preferring to invest mostly in office buildings.

For the first time in 2015, economic growth was supported by net external demand, whose contribution rose to 0.4 percentage points. Throughout 2015 Q1-Q3, Romania's external position remained favourable (the current account deficit was below 1 percent of GDP), given that the wider trade deficit was largely counterbalanced by the increase in the services surplus.

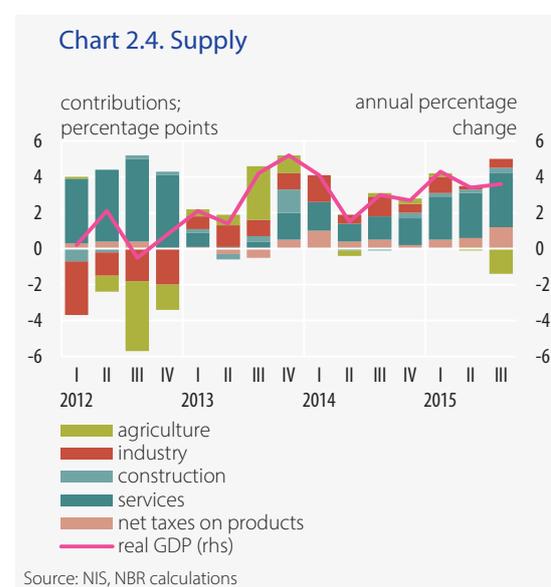
Looking at the trade in goods, the annual growth rate of the volume of exports stood at 4.5 percent, slowing down as compared with 2015 Q2, since the further advance in exports to EU countries (in correlation with the EU economy staying on a slightly upward course) was eroded by the contraction in exports to non-EU countries. In the latter case, the volume of exports decreased by about 7 percent (from +4 percent in Q2), owing chiefly to the strong trend reversal in exports of cereals (particularly wheat), amid the stiff competition from the Russian exporters. In addition, a sharper rate of decline was recorded by exports of metalliferous ores especially to Turkey and Bulgaria (given the decrease in metallurgy output as a result of the downtrend in international metal prices), as well as to China, on the back of the slower economic growth. Exports to EU countries increased mostly in the case of durables and capital goods (in particular transport and communication equipment, household appliances, medical devices, and furniture).

National accounts data reveal that the annual growth rate of imports of goods witnessed a significant deceleration (to 5.4 percent, merely half of the previous quarter's reading), on account of extra-EU trade as well. Thus, slacker annual dynamics than in the prior quarter were posted by extra-EU energy imports (especially petroleum products, due

to a base effect – a marked rise in 2014 Q3, possibly linked with the temporary shutdown of the Petrotel refinery, a decision that led to the increase in fuel purchases for the retail network of Lukoil). Imports of raw materials (excluding energy) also reported a slower pace of growth, particularly on account of metalliferous ores (due to the lower demand for metallurgical products on international markets).

## 1.2. Supply

In 2015 Q3, the tertiary sector further made the largest contribution to real GDP growth, as GVA in this sector witnessed the swiftest annual dynamics over the last three years, i.e. 6.1 percent. GVA in industry and construction also reported faster annual paces of increase than in the previous three-month period (2.1 percent and 5.5 percent respectively). Yet, the performance in non-agricultural sectors was overshadowed by the sharp fall in GVA in agriculture (by nearly 15 percent), on the back of the low yield of the main autumn crops (Chart 2.4).



Similarly to the previous quarters, trade and the ICT sub-sector contributed most to the upward trend in services. In the former case, the annual growth rate of GVA accelerated to 8.2 percent, benefitting from the support of all the major components (retail and wholesale trade, accommodation and food service

activities, tourism, transportation and storage). The development reflects the influence of a number of factors, manifest throughout 2015 – the larger household income, the strengthening of distribution networks and, therefore, enhanced promotional activity, the lower fuel prices, the broadening of the scope of the reduced VAT rate to all food items, non-alcoholic beverages and food service activities. As regards the ICT sub-sector, whose GVA further reported swift dynamics (11.4 percent), prospects remain bright over the medium term, according to the estimates made by ANIS<sup>14</sup>, given the human potential, the projects already launched by foreign partners as well as the low digitalisation rate of the local market. The fast-paced development of ICT services has been fuelled by external demand so far, contributing to the trade in services surplus and therefore to the current account deficit narrowing in recent years (see Box 1. Structural factors behind the adjustment of the external imbalance).

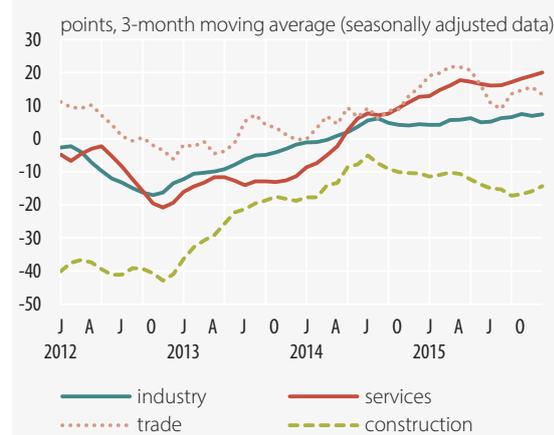
The swifter pace of growth of GVA in industry in 2015 Q3 was largely ascribable to manufacturing, to which added the rise in energy production, given the higher energy consumption driven by the above-average temperatures in the summer of 2015. Significant contributions to the pick-up in manufacturing came from the food industry (bolstered by the higher consumer demand) and road transport means. In the latter case, developments are attributable to the larger production of spare parts, as well as to a base effect associated with the cut in production at the Ford factory in 2014 Q3. Fast dynamics (over 12 percent in annual terms) were also posted by industries producing goods used in construction (non-metallic mineral products and fabricated metal products), due to the increase in such works, and by the manufacture of furniture, following the stronger demand of EU trading partners. The benign impact of the said industries was dampened particularly by the discontinued upward trend in metallurgy, amid the weak global demand for aluminium products, as well as for drilling rigs, given the decline in crude oil prices.

The results of the NIS/DG ECFIN survey for the coming months point to a further optimistic outlook

<sup>14</sup> Employers' Association of the Software and Services Industry.

for services and construction and to a potentially flat industrial activity (Chart 2.5). Agriculture is expected to continue to make a negative contribution to real GDP growth, the latest estimates of the 2015 crops indicating large decreases of around 30 to 40 percent for corn, sunflower and potatoes.

Chart 2.5. Corporate Sector: Confidence Indicators for the Next 3 Months

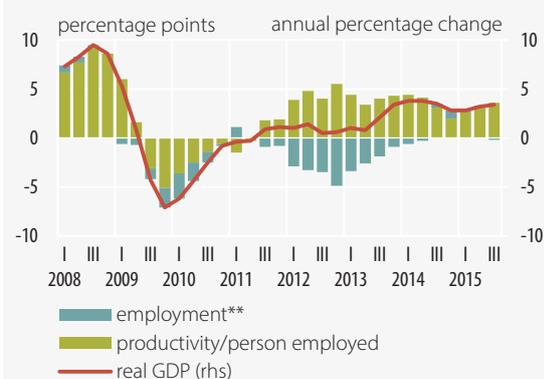


Source: EC-DG ECFIN

### Labour productivity

A further larger contribution to real GDP dynamics came from labour productivity, with the average pace of growth in the last four quarters (2014 Q4 – 2015 Q3) reaching 3.6 percent. Most non-agricultural sectors and especially construction reported productivity gains (Chart 2.6).

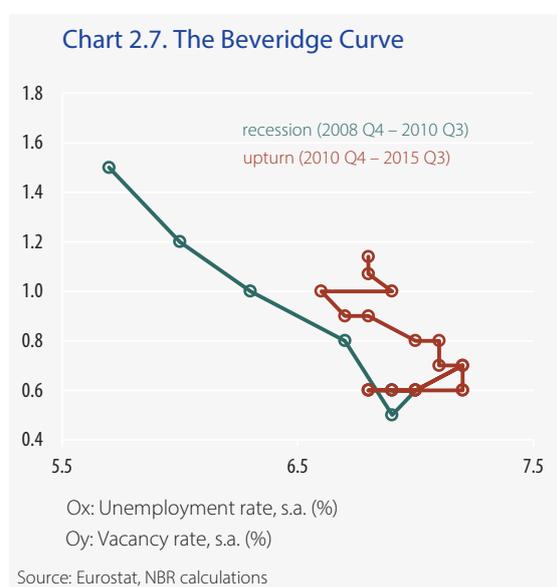
Chart 2.6. Contribution of Labour Productivity to Real GDP Dynamics\*



\*) 4-quarter moving average  
 \*\*) methodological change in 2012 Q1

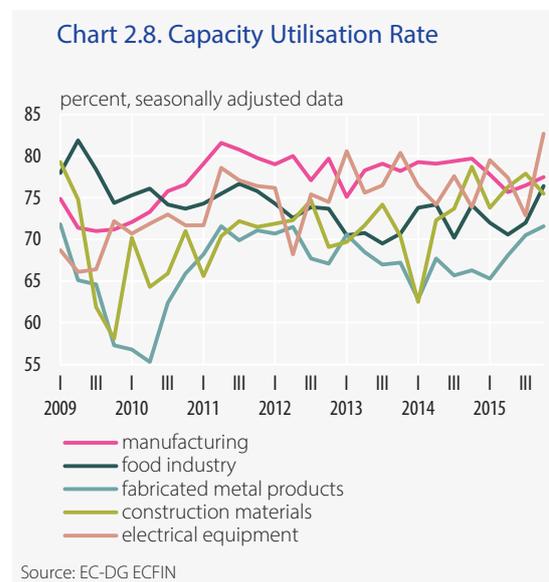
Source: Eurostat, NBR calculations

Nevertheless, in 2015 Q3 the uptrend in productivity benefitted less from the support of persistent factors. Thus, the trend reversal in gross fixed capital formation (after five quarters of successive growth) suggests a discontinued increase in capital stock per person employed. In addition, the efficiency of the search and matching process did not see any improvement, as the Beveridge curve indicated a rise in job vacancies that was not accompanied, however, by a sharper fall in the unemployment rate (in fact, the ILO unemployment rate was virtually flat in the period under review) (Chart 2.7).



As for industry, the rebound in labour productivity in 2015 Q3 occurred against the background of a higher capacity utilisation rate, which has recently neared the historical average. The most remarkable advance was seen in the energy sector, where both electricity production and delivery, and the hydrocarbon processing sub-sector witnessed rises in production along with staff cuts. In the former case, the running at full capacity of certain power plants was driven by a one-off factor, i.e. the high temperatures that boosted electricity consumption, whereas in the latter productivity gains were supported by new investments as well. Moreover, the majority of key industries posted productivity gains, given that the output volume rose at a faster tempo than hiring (the food industry, rubber and plastic products, electrical equipment, the automotive industry, fabricated metal products),

accompanied in certain cases (construction materials) by a markedly higher capacity utilisation rate (Chart 2.8).



October through November 2015, the annual growth rate of labour productivity saw a trend reversal, re-entering negative territory. This development was rather incidental, the sharpest downturns being identified in the hydrocarbon processing sub-sector (amid the technical overhauls launched by some refineries) and the chemical industry (where the undertaking of certain substantial investments entailed the temporary shutdown of some production facilities).

### Labour market developments<sup>15</sup>

July through November 2015, the capacity of the economy to absorb excess labour increased versus Q2, companies anticipating additional hires at the beginning of 2016 as well.

In July to November 2015, the number of employees economy-wide further advanced, the annual pace of increase exceeding 3 percent for the first time over the past two and a half years (Chart 2.9). The rise mainly reflected the resumption of hiring in construction, in the context of stronger growth in this sector. In addition, fast hiring continued in market services, and particularly in support service activities and professional activities, as well as in

<sup>15</sup> The analysis is based on seasonally adjusted data.

certain manufacturing sub-sectors, namely the automotive industry and the related industries, i.e. the manufacture of electrical equipment and of rubber products.

**Chart 2.9. Number of Employees Economy-Wide**



Furthermore, the 3 percent higher number of job vacancies in July to November than in Q2 translated

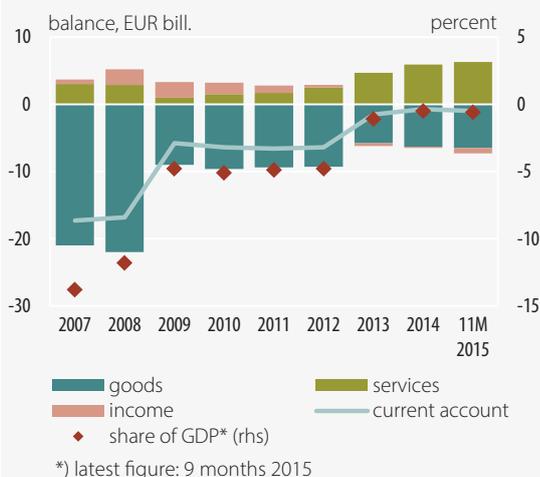
into a reduction in excess labour supply. This was however illustrated solely by the registered unemployment rate (down 0.3 percentage points, to 5.0 percent), whereas the ILO unemployment rate stayed virtually flat at 6.8 percent. Therefore, the favourable labour market developments mirror the improvement in the cyclical position of the economy rather than the increased efficiency of the search and matching process.

For early 2016, the NIS/DG ECFIN survey points to a persistently bright outlook for future hiring, especially in trade, services and construction. Moreover, the Manpower Employment Outlook Survey reveals employers' greater confidence in a robust pace of hiring. From a regional perspective, employers in the Centre and North-West regions showed the highest optimism, amid the capacity expansion of factories manufacturing spare parts and the increase in investments in the services sector, in particular the IT sub-sector. Conversely, managers in the North-East and South-West regions reported weaker prospects for hiring.

**Box 1. Structural factors behind the adjustment of the external imbalance**

The outbreak of the global financial and economic crisis in the autumn of 2008 led to a severe economic downturn in Romania, with the substantial fall in the demand for imports resulting in a correction in the current account (CA) deficit from a peak of 13.8 percent of GDP in 2007 to levels around 5 percent in

**Chart A. Current Account Balance**



Source: NIS, NBR, NBR calculations

2009-2012. An additional adjustment to levels close to or even below 1 percent (Chart A) occurred as of 2013, the recent shift being driven, this time, by structural factors. They refer to the lower energy intensity<sup>16</sup> of industry (a synthetic indicator that captures multiple influences), the smaller import content of exports of goods and the fast-paced growth of exports of services, amid a pick-up in foreign direct investment in certain economic sectors.

The determinants of the current account deficit adjustment stemming from industry are related to the significant drop in energy consumption and the swifter dynamics of export-oriented industries, on the back of foreign investors' favourable perception of the competitive advantages offered by the domestic market (particularly with respect to cheap labour). Thus, the

<sup>16</sup> Energy intensity is energy consumption per unit of value added.

substantial deficit correction in 2013 (by around 4 percentage points) actually mirrors the lower energy intensity of the economy, as also shown by econometric estimates, based on a model that captures the long-term determinants of the current account balance (Chart B).

Chart B. The Determinants of the Current Account Balance

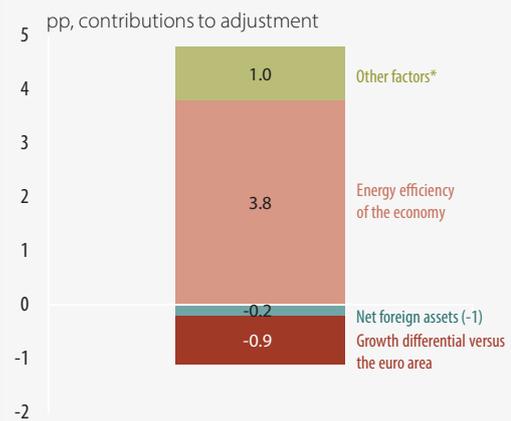
Dependent variable	Equation 1 – long-term relation –	Equation 2 – error correction model –
	CA share of GDP <sub>t</sub>	Δ(CA share of GDP) <sub>t</sub>
Energy efficiency <sup>a)</sup>	0.15***	
Growth differential versus the euro area <sub>t</sub>	-0.45***	
REER (calculated based on ULC) <sub>t</sub>	-0.02***	
Net foreign assets <sub>t-1</sub>	0.04***	
Crisis dummy	0.10***	
ΔFDI share of GDP <sub>t</sub>		-0.06**
ΔEnergy efficiency <sub>t</sub>		0.05***
ΔGrowth differential versus the euro area <sub>t-2</sub>		-0.21**
Error correction term		-0.71***
Half-life		0.56
No. of observations	46	44
Adjusted R <sup>2</sup>	0.8	0.7
Estimation period	2004 Q2 – 2015 Q3	

a) The inverse of energy intensity, i.e. value added per unit of energy consumption.

\*, \*\* and \*\*\*) the coefficient is statistically significant for a confidence level of 90%, 95% and 99%. The variables for the growth differential versus the euro area and REER (calculated based on ULC) are expressed in logarithms.

Source: NBR estimates

Adjustment of the CA Balance in 2013



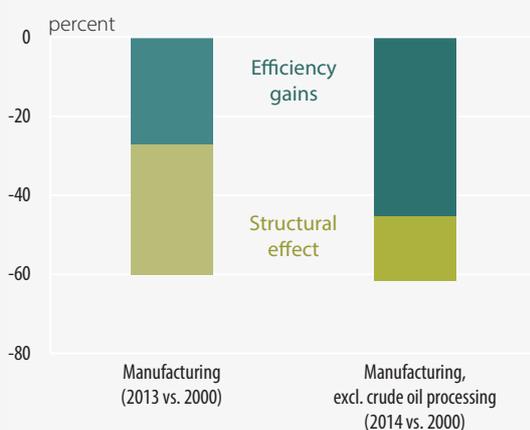
\*) e.g., bumper crops

Note: Estimates based on an error correction model (ECM) starting from the intertemporal approach to factors influencing the current account balance. Opting for an ECM was warranted by the non-stationarity of the current account (% of GDP, quarterly data), given the still small size of the sample.

Source: NIS, NBR, Eurostat, EC, NBR estimates

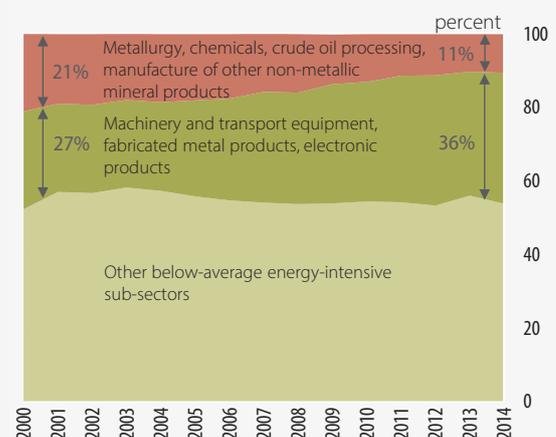
Although Romania further ranks among the EU countries having a markedly above-average energy intensity, in 2002-2013 the indicator posted the third largest decline (-41 percent according to Eurostat data). The downward path posted by the ratio of energy consumption to gross value added economy-wide is suggestive of the trend persisting into the following years as well. This development may be associated with energy efficiency gains, on the one hand, and with a shift in the composition of industrial output towards industries with lower energy consumption, on the other hand (Chart C).

Chart C. Change in Energy Intensity in Manufacturing



Source: Eurostat, NIS, NBR calculations

Chart D. GVA in Industry Based on the Energy Intensity of Sub-sectors

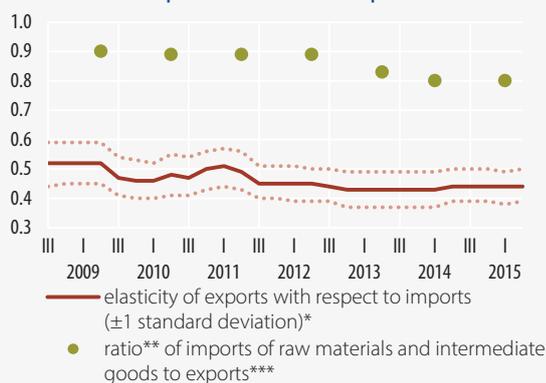


Source: Eurostat, NBR calculations

Aside from the benign influence of technological investment, the lower energy intensity also reflects the impact of the severe contraction in activity or even shutdown of some highly energy-intensive companies (in metallurgy and the chemical industry). The said firms have exhibited a low capacity of withstanding competitive pressures amid weak demand and the deregulation of the domestic energy market as of 2012 H2. This also contributed to a change in the composition of gross value added in industry, with the shares of energy-intensive sub-sectors shrinking markedly. In the same direction acted the fast-paced development of less energy-intensive sub-sectors, particularly the automotive industry and the related industries (Chart D).

The main catalyst of the latter trend was FDI in the aforementioned industries (net flows worth approximately EUR 1.2 billion in 2012-2014 versus EUR 0.4 billion over the previous three years). Foreign direct investors were attracted not only by the cheap labour but also by the opportunity to develop new production facilities close to regional hubs or in areas in which the drawback of poor road infrastructure appears to be less relevant. The step-up in investment had a favourable impact on aggregate productivity growth. Thus, a micro-analysis of the drivers of total factor productivity (TFP) of the firms in Romania shows that companies with majority foreign capital that are part of a group undertaking and carry out foreign trade activities are, on average, about 30 percent more productive<sup>17</sup>.

Chart E. Import Content of Exports



\*) quarterly sample – moving window estimates with 35 observations, the first observation (of the first window) is 2000 Q2 and the last observation (of the last window) is 2015 Q3

\*\*) for 2015, the ratio refers to the first 10 months

\*\*\*) exports of intermediate goods, capital goods and consumer goods

Source: ComExt, BIS, NIS, NBR estimates and calculations

The said investments also resulted in a closer integration of the domestic economy within the global production networks, as shown by the gradually larger intra-sector trade intensity<sup>18</sup>, an indicator that the literature employs as a proxy for the degree of trade integration. However, this development did not affect the adjustment of the current account deficit, given that local companies progressively captured a greater share of the value added chain. Specifically, the advance in exports was not accompanied by a higher import dependency, as revealed by both: (i) the weaker elasticity of exports with respect to imports<sup>19</sup> and (ii) the lower ratio of imports of intermediate goods and raw materials to exports of intermediate goods, capital goods and consumer goods (Chart E).

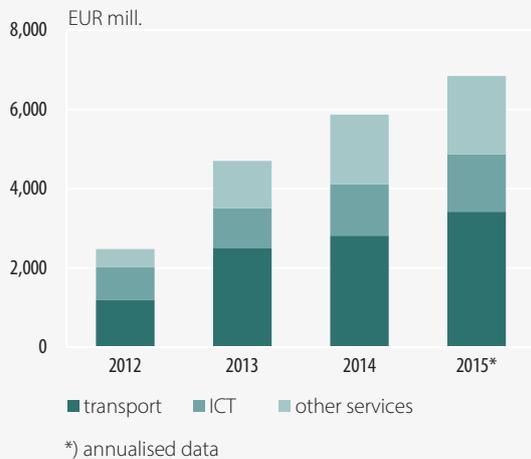
Over the past years, the current account deficit staying at low levels was also bolstered by the substantial and increasing surplus on trade in services, which was associated with structural factors as well (Chart F). On the one hand, the above-mentioned advance in export-oriented industries is highly likely the major contributor to the significant rise in exports of transportation services. On the other hand, the IT sub-sector

<sup>17</sup> Other factors that are positively correlated with the TFP of domestic companies are size, their private ownership, workers' skills and the level of R&D investment. The empirical exercise involved two stages: (i) determining the TFP based on a panel sample of firms, and (ii) estimating the relationship between TFP and a vector of explanatory variables constructed in compliance with the literature. Data source: the Ministry of Public Finance and the NBR survey on the firms' behaviour on the labour market (2014).

<sup>18</sup> Measured using the Grubel-Lloyd index, which rose from 0.198 in 2012 to 0.222 in the first eight months of 2015. Calculations were based on ComExt data at the maximum level of disaggregation (HS standard, over 7,000 goods).

<sup>19</sup> Estimates with time-varying coefficients and moving window estimates of an error correction model suggest a downtrend in the elasticity of exports with respect to imports from around 0.6 in the pre-crisis period to about 0.4 as of 2013.

Chart F. Surplus on Trade in Services



Source: NBR

has accounted for an increasingly larger share of the trade in services surplus (according to ANIS, exports make two thirds of the IT companies' income).

The fast-paced development of this sub-sector may be linked with the adoption of the Digital Agenda for Europe by the European Commission in 2010. It aims at boosting growth of Information and Communication Technologies (ICT) at the EU level with a view to capitalising on their potential to drive TFP increases and consequently competitiveness gains. The environment favoured the expansion of multinational companies on the domestic market, to which they were attracted by the competitiveness gains delivered by IT employees, i.e. complex skills and a high degree of adaptability at comparatively low costs. Against this

background, the share held by the ICT sub-sector in total gross value added moved up from 4.2 percent in 2011 to 6.7 percent in 2015, nearing that of construction.

Chart G. Developments in the Number of Employees and Income in IT



Source: ANIS-PAC, 2015

From 2011 to 2015, the number of employees increased, on average, by almost 10 percent per year. It seems likely that employment in the IT sub-sector rose at an even swifter tempo if self-employed are taken into account as well. In addition, steady productivity gains were reported also as a result of companies' shift from providing outsourced non-core services to setting up software development facilities that can generate higher value added (Chart G).

Looking forward, the uptrend in the IT sub-sector is expected to continue, due to persistently strong external demand, given the larger amount of time required to achieve the objectives set in the Digital Agenda. Nonetheless, the said rise might be dampened by the limited number of future IT

graduates, as around 60 percent of specialised companies<sup>20</sup> currently report a shortage of skilled workers.

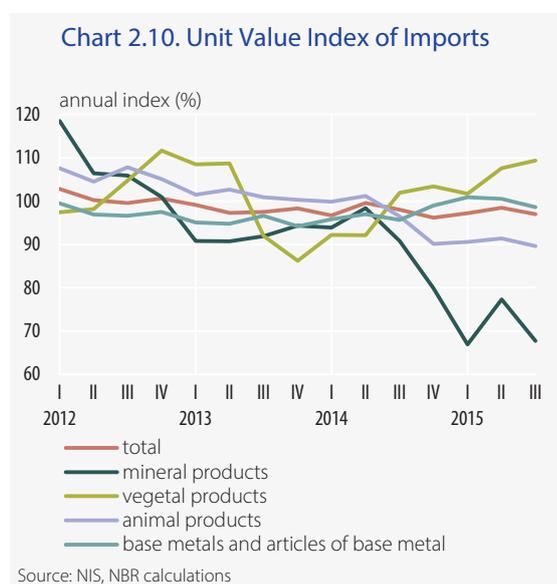
<sup>20</sup> In line with the NBR survey on the firms' behaviour on the labour market.

## 2. Import prices and producer prices

In 2015 Q3, import prices and industrial producer prices fell deeper into negative territory in annual terms, amid the persistent downtrend in prices of main commodities, whereas agricultural producer prices witnessed a significant slowdown in their annual rate of decline, following hikes in vegetal production prices due to the 2015 below-average harvest. For the period ahead, import prices and producer prices are expected to post negative annual rates of change, given the sharp drop in international oil prices, as well as the slower growth in vegetal produce prices under the impact of their relatively rapid adjustment to external developments driven by the improved world agricultural output.

### 2.1. Import prices

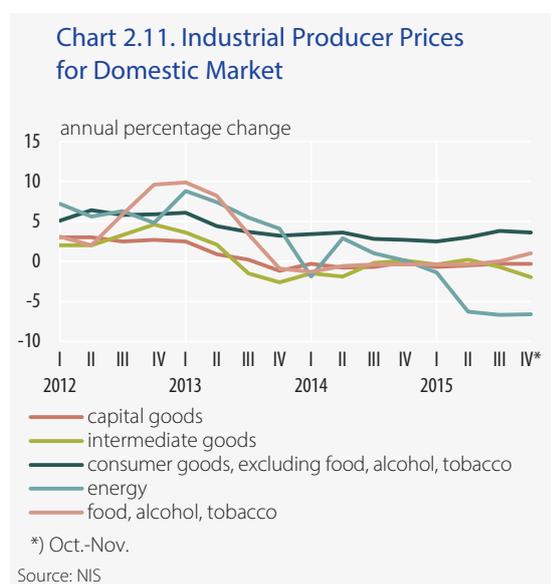
Under the joint impact of large supply and further fragile global demand, energy and metal prices shrank at a faster tempo in 2015 Q3. Thus, the unit value index of imports fell to 97 percent (down 1.5 percentage points from the Q2 average). The pass-through of this influence to domestic prices was facilitated by the relatively stable evolution of the leu against the euro, as well as the former's slower pace of depreciation versus the US dollar (Chart 2.10).



The strongest declines were seen for mineral products, their UVI dropping 9.6 percentage points below the Q2 level to 67.7 percent. Moreover, the UVI of base metals and that of machinery and mechanical appliances also followed downward paths, the former even falling below one (99.0 percent). Food industry witnessed divergent developments, with vegetal products and fats reporting higher unit value indices than in the preceding quarter, owing to the lower production of some crops across Europe (potatoes, sunflower) or worldwide (citrus fruits, amid adverse weather conditions in countries like Turkey and Spain or in the US, where output was hit by pest insects). By contrast, the UVI of animal products stepped up its decline, given that Russia's import ban further generated a plentiful supply in Europe.

### 2.2. Producer prices

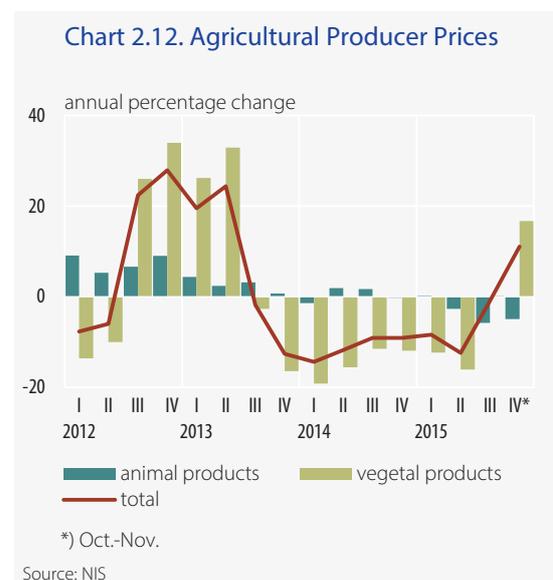
Under the impact of the downtrend in commodity prices, the annual dynamics of industrial producer prices on the domestic market remained in negative territory also during 2015 Q3 (-2.3 percent against -2.1 percent in the preceding quarter). Looking at industrial groups, lower annual rates were reported in the energy sector, down 0.3 percentage points to -6.7 percent, and in the intermediate goods sector, down 0.9 percentage points to -0.7 percent (Chart 2.11).



A major contribution to the negative annual rate of change of energy prices came from the hydrocarbon processing sub-sector, where producer prices stepped up their pace of decrease (-9.8 percentage points to -29.7 percent), as a direct result of movements in crude oil prices, which fell to a six-and-a-half year low in August 2015. The annual price dynamics of intermediate goods re-entered negative territory owing to developments in metallurgy, the chemical industry and the construction materials industry, amid lower metal and energy prices. Capital goods prices remained relatively flat on the back of mixed developments by sub-sector – the hikes seen in transport equipment industry were offset by drops in the fabricated metal products, machinery and equipment sub-sectors.

Producer prices for consumer goods followed a divergent path compared with the other groups of industrial goods, as their annual growth rate rose by another 0.4 percentage points to reach 1.0 percent; behind this may have stood the build-up of wage pressures (food industry, light industry and manufacture of furniture) and the quick recovery of consumer demand, allowing a swifter pass-through to prices. Moreover, prices of pharmaceuticals continued to increase, as producers shifted further towards manufacturing more expensive goods. This move was driven by some drugs becoming unprofitable as of 1 July 2015, when prices were compulsorily adjusted to levels at most equal to the smallest price for the same medicine in 12 EU Member States.

Agricultural producer prices witnessed a slacker annual pace of decrease in 2015 Q3 (from -12.4 percent to -0.9 percent), owing solely to prices for vegetal products (+16.3 percentage points to 0.2 percent), against the background of a significantly poorer agricultural output compared to that of 2014. The annual rate of change of animal product prices fell deeper into negative territory (-5.8 percent), on the backdrop of stronger competition pressures on the domestic market exerted by cheap imports from EU countries (Chart 2.12).

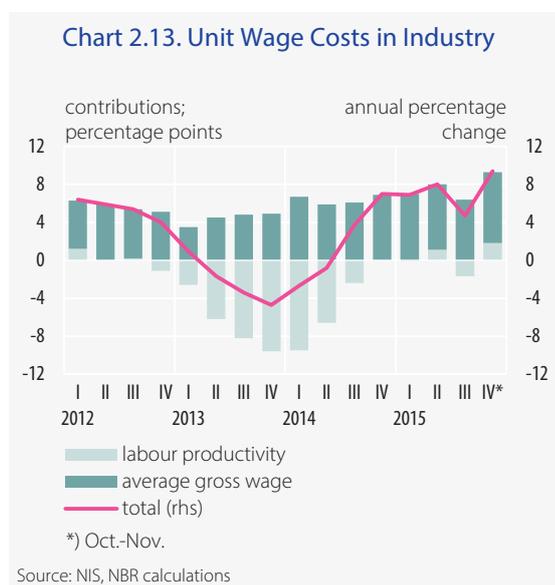


The available data for October-November point to the annual dynamics of industrial producer prices on the domestic market remaining in negative territory in 2015 Q4 as well, given the persistent downtrend in main commodity prices – particularly crude oil prices hit a new all-time low in January 2016 following OPEC's decision to set aside its output target, as well as the strengthening of the US dollar – and the signals on developments in the Chinese economy, hinting at a further slowdown. In addition, agri-food commodity prices are likely to witness slower rates of increase or even declines, under the impact of good world output despite the worse-than-expected harvest across Europe.

### Unit wage costs

In 2015 Q3, the annual growth rate of unit wage costs in industry (+4.7 percent) further revealed labour cost pressures that were however weaker than in 2015 H1, on the back of favourable developments in labour productivity (Chart 2.13). Yet, the first two months of Q4 saw markedly faster dynamics of unit wage costs, amid a step-up in the wage growth rate and the adverse impact of one-off factors on labour productivity (the technical overhaul of a leading refinery, the reorganisation of several chemical plants). The breakdown by sub-sector points to further high paces of increase in unit wage costs in light industry, manufacture of wood, machinery and equipment and of computers and electronics respectively. Moreover, the temporary output contraction in certain refineries and chemical

plants generated increased unit wage costs in crude oil processing and the chemical industry.



The persistence of a significant differential between wage and labour productivity growth rates creates the conditions for the build-up of inflationary pressures, even though, for the time being, the impact on producer prices is largely offset by the decline in commodity prices. However, the latter developments cannot counterbalance the adverse impact on external competitiveness, given that the same favourable influence is perceived by competitors too. The concern is all the more relevant as relatively high wage growth rates are likely to be seen on the medium term, also on account of the demonstration effects exerted by decisions regarding the public sector wage policy on the private sector (for further details see Box 2. The demonstration effect – to what extent do public sector wage increases influence wage dynamics in industry?).

### Box 2. The demonstration effect – to what extent do public sector wage increases influence wage dynamics in industry?

The wage setting process may show an interplay between the private and public sectors in that (current or potential) employees may use, as an argument in wage bargaining, the level of compensation in the competing sector, with employers incurring the risk of potential cross-sector labour shifts. Thus, public sector wage growth may have a demonstration effect on the private sector, contributing to a weaker link between wages and labour productivity, which can lead to the build-up of inflationary pressures. This is all the more relevant for the tradable sector, which may be negatively affected in terms of external competitiveness. It is for this reason that the literature typically looks at the above-mentioned link from the perspective of industry. As far as Romania is concerned, the significant part played by industry is highlighted by both its share in total GVA economy-wide (approximately 25 percent) and that in the total number of employees (roughly 30 percent). In addition, the key driver of economic recovery in Romania in 2011-2014 was the robust performance of exports of goods, with the external market accounting for around 40 percent of the turnover volume in industry.

The methodological approach put forward by the European Commission<sup>21</sup> was employed to test the aforementioned interlink in Romania, focusing on the relationship between the level of gross earnings in industry and that in the public sector<sup>22</sup>.

<sup>21</sup> The European Commission, *Government wages and labour market outcomes*, Occasional Papers 190, April 2014.

<sup>22</sup> The public sector wage is estimated by aggregating wages in public administration, defence, education, human health and social work activities, as well as in arts, entertainment and recreation.

First, the existence of a long-run relationship between the average wage in industry and that in the public sector was tested for. According to cointegration tests<sup>23</sup>, there is a (long-term) equilibrium relationship between the level of compensation in industry and labour productivity, the consumer price index and the level of public sector wages. The short-term equation also points to the contemporaneous response of private sector wages, about 8 percent of the change in the public sector gross wage being passed through to the private sector in the first quarter. *Ceteris paribus*, a 10 percent increase in public sector wages will lead to a roughly 3.5 percentage point faster pace of growth of the average wage in industry over a year.

The results of the aforementioned study (conducted by the European Commission for several EU Member States<sup>24</sup> and covering the period from 1980 to 2013) suggest that the adjustment toward equilibrium is swifter in Romania's economy, whereas the long- and short-run elasticities of wages in industry with respect to public sector wages are lower than those at the EU level, i.e. 0.43 and 0.25. The weaker elasticities could be explained by the smaller share held by public sector employees in the total number of employees in Romania as compared with the EU average. In fact, the EC's study itself points to a lower long-run elasticity (0.2) in the case of countries with a below-average share of public sector employees.

The wage increases driven by the changes in public sector wages may lead to inflationary pressures, given that labour costs account for about one third of the total costs incurred by the companies operating in Romania and are the second most important determinant of their decision to raise prices, the major driver being the hike in costs of raw materials<sup>25</sup>. Inflationary pressures are naturally more likely to emerge through this channel in labour-intensive sub-sectors such as the light industry, where, according to the above-mentioned survey, the ranking of key factors changes, with price adjustments depending chiefly on the developments in labour costs.

Table A. Estimated Coefficients of the Model

Dependent variable	Equation 1 – long-term relation –	Equation 2 – error correction model –
	Wages in industry <sub>t</sub>	ΔWages in industry <sub>t</sub>
Public sector wages <sub>t</sub>	0.35***	
Labour productivity <sub>t</sub>	0.49***	
CPI <sub>t</sub>	0.75***	
ΔPublic sector wages <sub>t</sub>		0.08**
ΔPublic sector wages <sub>t-2</sub>		0.06**
ΔCPI <sub>t</sub>		0.75***
ΔWages in industry <sub>t-1</sub>		0.14*
ΔWages in industry <sub>t-2</sub>		0.16*
ΔLabour productivity <sub>t</sub>		0.13**
Dummy 2008 Q2		0.04***
Error correction term		-0.33***
Constant	-0.78***	
Half-life		2.12
No. of observations	63	61
R <sup>2</sup>		0.85

\*, \*\* and \*\*\*) the coefficient is statistically significant for a confidence level of 90%, 95% and 99%. All variables are expressed in logarithms.

Note: The estimate was made for the 2000-2015 period based on quarterly data.

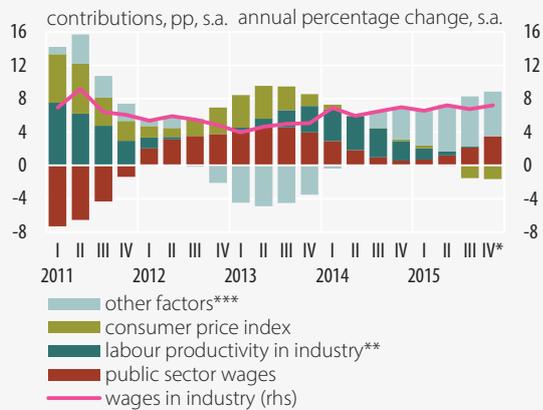
Source: NBR estimates

<sup>23</sup> Tests for stationarity have previously shown that the variables are integrated of order 1.

<sup>24</sup> Except for Austria, Bulgaria, Croatia, Cyprus, Germany, Greece, Latvia, Lithuania, Malta, Romania, and Slovenia.

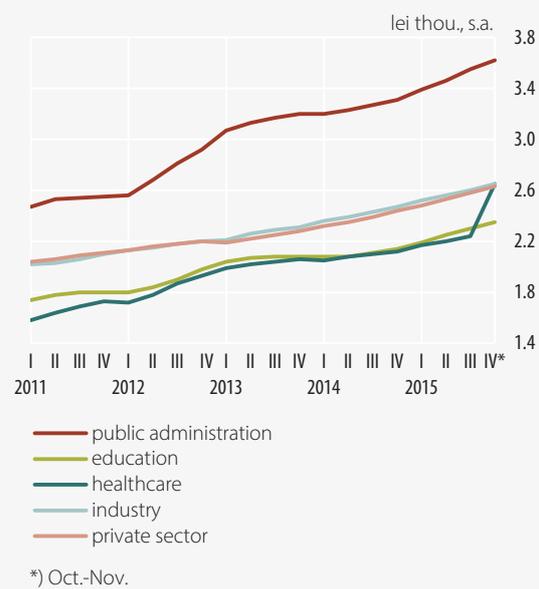
<sup>25</sup> Iordache, S., Pandioniu, L., *The Price-setting Behaviour of Romanian firms*, National Bank of Romania, Occasional Papers No. 10, January 2015.

**Chart A. Contributions to the Annual Dynamics of Gross Wages in Industry**



\*) Oct.-Nov., except CPI  
 \*\*) contribution calculated based on the monthly released NIS data series  
 \*\*\*) influences associated with the (tight or loose) labour market conditions and frictions in the wage-setting proces (downward wage rigidity, minimum wage policy, skill mismatch)  
 Source: NIS, NBR estimates

**Chart B. Developments in Gross Wage Earnings**



\*) Oct.-Nov.  
 Source: NIS, NBR calculations

As shown in Chart A, the identified size of the demonstration effect in industry rose steadily over 2015, amid a series of large public sector wage increases. This appears to be more related to the developments in wages in public administration, as wages in education are further below private sector wages and those in health have only recently reached the average (Chart B), these last two sectors being in fact less accessible in terms of cross-sector mobility, given the specific skill requirements.

# 3. MONETARY POLICY AND FINANCIAL DEVELOPMENTS

## 1. Monetary policy

In its meetings of November 2015 and January 2016, the NBR Board kept unchanged the monetary policy rate at the historical low of 1.75 percent per annum. Moreover, during 2015 Q4, the Board maintained the existing levels of minimum reserve requirement ratios on both leu- and foreign currency-denominated liabilities of credit institutions<sup>26</sup> and further pursued adequate liquidity management in the banking system. The measures were aimed at ensuring price stability over the medium term, in line with the flat target of 2.5 percent  $\pm$  1 percentage point, in a manner conducive to achieving sustainable economic growth.

Behind the NBR Board's decision of November 2015 to maintain the monetary policy rate at 1.75 percent stood the still significant divergence of the forecasted path of the annual inflation rate, as indicated by the updated forecast on medium-term macroeconomic developments<sup>27</sup>, stemming from the nature of fiscal easing measures to be implemented at the onset of 2016, according to the revised version of the Tax Code<sup>28</sup>. Thus, amid the overlapping of the substantial transitory disinflationary effects anticipated to arise from the

new cuts in indirect taxes (especially the reduction in the VAT rate to 20 percent from 24 percent) with the already manifest impact of the decrease in the VAT rate on food items and the new decline in fuel prices, the annual inflation rate was seen going deeper into negative territory and remaining there January through May 2016<sup>29</sup>. However, it was forecasted to shift back into the upper half of the variation band of the flat target<sup>30</sup> at the beginning of 2017, given that opposite influences were expected to become manifest after the fading out of the one-off impact of fiscal measures. Specifically, these opposite effects were anticipated to be exerted by aggregate demand<sup>31</sup>, owing to fiscal and income policy easing in 2016, as well as by the high unit wage cost dynamics. The inflation outlook was surrounded by heightened uncertainty stemming from both the domestic political context, particularly as the drafting of the 2016 budget was still pending, and the external environment.

Subsequently-released statistical data confirmed the outlook for gradually less negative readings of the annual inflation rate<sup>32</sup> in 2015 Q4, primarily as a result of the faster annual dynamics of volatile

<sup>26</sup> 8 percent and 14 percent respectively.

<sup>27</sup> November 2015 Inflation Report.

<sup>28</sup> The revised version of the new Tax Code, adopted by the Parliament of Romania on 3 September 2015, set forth: (i) the cut in the standard VAT rate from 24 percent to 20 percent as of 1 January 2016 and to 19 percent as of 1 January 2017; (ii) the removal of the special excise duty on fuels as of 1 January 2017; (iii) the lifting of the tax on special constructions and the cut in the tax on dividends from 16 percent to 5 percent as of 1 January 2017; (iv) other adjustments in the excise duties on tobacco products. The Code was, however, subsequently amended via Government Emergency Ordinance No. 50/2015, which approved the implementation, as of 1 January 2016, of the following measures: the cut in the tax on dividends, the broadening of the scope of the reduced 9 percent VAT rate to potable water delivery services and the reduction of the income tax for micro-enterprises with hired workers.

<sup>29</sup> The annual inflation rate was expected to drop to -3.0 percent at the end of 2016 Q1 (versus a forecasted level of -0.7 percent in December 2015).

<sup>30</sup> The annual inflation rate was seen reaching 2.8 percent at the end of the projection horizon (2.9 percent in the previous projection) from 1.0 percent in December 2016 (0.7 percent in the previous forecast).

<sup>31</sup> With the current projection pointing to a reversal in the cyclical position of the economy at mid-2016 and a subsequent widening of the positive output gap.

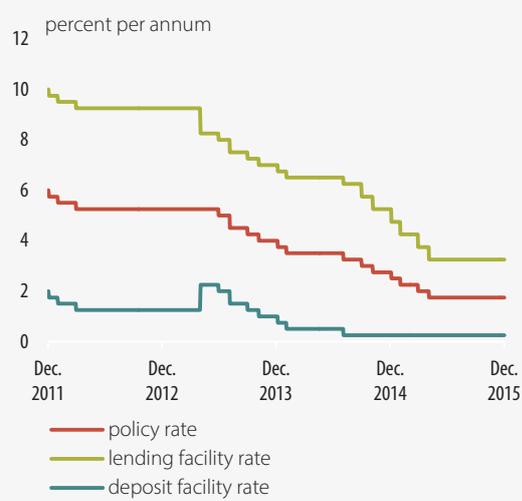
<sup>32</sup> It came in at -1.14 percent in November, against -1.73 percent in the closing month of Q3. Moreover, the annual inflation rate recalculated by excluding the influence of the VAT rate cut on all food items advanced to 1.68 percent in November 2015, from 1.08 percent in September, thus re-entering the variation band of the flat target.

prices, also due to base effects. The data also showed a pick-up in economic growth in 2015 Q3 (3.6 percent year on year from 3.4 percent a quarter earlier) – despite the relative worsening of agricultural sector performance<sup>33</sup> –, driven by the rise in private consumption, conducive to a faster narrowing of the negative output gap. At the same time, the new assessments reconfirmed the prospects for the annual inflation rate to temporarily go again deeper into negative territory in the early months of 2016, following the new round of indirect tax cuts, as well as the highly likely persistence over the short term of robust growth of private consumption, and hence of economic growth, on the back of: (i) the rise in household incomes underpinned by lower indirect taxation, (ii) the very fast growth of budget spending at end-2016, (iii) the confidence improvement trend, as well as (iv) the reduction in interest rates to historical lows and the rebound, also attributable to this factor, in leu-denominated lending, implying the expansion of liquidity across the economy. These developments were in line with the coordinates of the NBR's latest medium-term forecast, which pointed to a return of the annual inflation rate into positive territory after the effects of the first VAT rate cut<sup>34</sup> have faded out, amid the effects of fiscal policy easing and of higher unit labour costs becoming manifest. Against this background, the NBR Board decided in its meeting of 7 January 2016 to keep unchanged the monetary policy rate at 1.75 percent per annum (Chart 3.1). Furthermore, given the lasting slowdown in forex loan dynamics and in order to continue the harmonisation of the reserve requirements mechanism with ECB standards and practices in the field, the NBR Board decided to cut the minimum reserve requirement ratio on foreign exchange-denominated liabilities of credit institutions to 12 percent from 14 percent starting with the 24 January – 23 February 2016 maintenance period.

<sup>33</sup> Excluding the impact of agriculture, GDP annual growth stood at a post-crisis high of more than 5 percent.

<sup>34</sup> Broadening of the scope of the reduced VAT rate to all food items, non-alcoholic beverages and food service activities as of 1 June 2015.

Chart 3.1. NBR Rates



The rise in the volume of new leu-denominated loans to households and non-financial corporations stepped up October through November 2015, fostered by the downtrend in interest rates, as well as by economic agents' somewhat improved expectations on the outlook for their activity/income<sup>35</sup>. Hence, the annual growth rate<sup>36</sup> of the outstanding leu-denominated credit to the private sector<sup>37</sup> advanced to 19.4 percent, from 17.1 percent in Q3. The same as in the previous months, this was the only driver behind the faster dynamics of private sector credit (2.7 percent versus 1.8 percent July through September), as the annual rate of change of the foreign currency component (based on EUR-expressed values) contracted further to -11.9 percent from -11.4 percent in the earlier three-month period. Developments across customer categories were correlated only to a certain extent with the results of the November 2015 Bank Lending Survey conducted by the NBR, which highlighted expectations of an increase in corporate demand for loans in 2015 Q4, along with a standstill/reduction in terms of real estate and consumer loans respectively. To these added a mixed outlook for lending standards: easing in the case of real estate loans, tightening for consumer credit and a

<sup>35</sup> In addition, these developments further reflected, albeit to a relatively lower extent, the impact exerted by the conversion into lei of loans previously extended in foreign currencies.

<sup>36</sup> Unless otherwise specified, indicators are calculated as average annual changes expressed in real terms.

<sup>37</sup> Concurrently, the share of loans in domestic currency in total private sector credit continued to widen after exceeding in September 2015 that of forex loans for the first time in eight years.

status-quo in the case of corporate credit. In fact, the annual pace of increase of household credit continued to gain momentum to 6.3 percent from 5.4 percent in Q3, prompted by the faster advance of leu-denominated consumer credit and other loans, to which added the further swift growth rate of housing loans in domestic currency (also associated with the ongoing “First Home” programme). Concurrently, the annual rate of decline of loans to non-financial corporations decelerated to -1.1 percent against -1.8 percent in the previous three months, amid the stepped-up growth in short-term leu-denominated loans (most likely on account of factoring) and longer-term ones.

In turn, the pace of increase of narrow money went up slightly October through November 2015, to 25.9 percent from 25.6 percent in Q3, given the performance of currency in circulation, while the annual dynamics of overnight deposits remained unchanged at a relatively fast 29.4 percent. These developments occurred on the back of stepped-up economic activity, to which added a possibly keener appetite for liquidity in an environment of steadily decreasing bank rates. The latter factor weighed, to a certain extent, on the rate of change of the other major broad money component, i.e. time deposits with a maturity of up to two years, which contracted at a faster annual rate (-2.7 percent October through November from -1.7 percent in Q3), due to a decline in the annual dynamics of both household and corporate deposits. Against this backdrop, the annual growth rate of broad money slowed marginally<sup>38</sup> to 9.8 percent versus 10.1 percent in Q3.

During 2015 Q4, the NBR continued to pursue adequate liquidity management in the banking system. With banks’ net liquidity surplus persisting into the reported period, this implied mopping up excess liquidity via the NBR’s deposit facility. The volume of funds thus parked at the central bank expanded markedly towards year-end, reflecting the impact of the rise in Treasury injections amid the wider asymmetry of the intra-annual budget execution pattern and of the maturity profile of leu-denominated benchmark securities.

<sup>38</sup> Reflecting exclusively the statistical influence of the less negative annual inflation rate; in nominal terms, M3 dynamics remained almost unchanged.

## 2. Financial markets and monetary developments

The average interbank money market rate fell to a historical low in 2015 Q4, while the EUR/RON exchange rate re-embarked on a slightly upward trend, which steepened towards the end of the year. The annual dynamics of credit to the private sector consolidated in positive territory September through November 2015 and the annual growth rate of broad money remained almost as fast as in the previous months.

### 2.1. Interest rates

Liquidity conditions eased markedly during Q4, so that the daily average interbank money market rate returned onto a downward path and neared the deposit facility rate in November and December 2015, thus reaching new historical lows<sup>39</sup> (Chart 3.2). During the quarter under review, the average interbank deposit rate came in at 0.44 percent, down 0.31 percentage points from a quarter earlier.

Following the resumption in the MPF’s liquidity injections at the onset of the reported quarter, interbank rates at the shorter end of the maturity spectrum trended gradually downwards, nearing the lower bound of the corridor defined by interest rates on the central bank’s standing facilities around the policy rate<sup>40</sup>. They remained very low in November and December, amid the sizeable increase in excess liquidity, prompted by reserve injections associated with Treasury operations in domestic and foreign currencies, reflecting the considerable rise in budget spending towards year-end<sup>41</sup>.

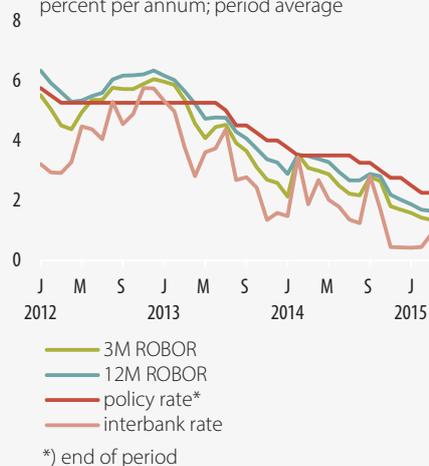
<sup>39</sup> Data series since 1993.

<sup>40</sup> At the same time, the rise in overnight rates in the early days of the 24 October – 23 November reserve maintenance period was lower than in the previous months, given that the repayment of a significant volume of maturing government securities offset the contractionary impact traditionally exerted by the larger seasonal payments to the general government budget.

<sup>41</sup> November through December 2015, the budget execution generated a deficit of lei 19.4 billion (2.8 percent of GDP), after the general government budget had ended the first ten months of the year on a surplus of around lei 9 billion (1.3 percent of GDP).

Chart 3.2. Policy Rate and ROBOR Rates

percent per annum; period average



In turn, 3M-12M ROBOR rates came increasingly under the influence of credit institutions' expectations of a further easing of liquidity conditions, embarking on a downtrend – slightly steeper for the three-month maturity – that extended into the second 10-day period of November. December saw further declines, albeit less frequent and of a relatively lower magnitude, which brought ROBOR rates to historical lows<sup>42</sup>. Consequently, in December the average 3M ROBOR stood 0.44 percentage points lower than in September 2015, at 1.03 percent, while 6M and 12M rates shed 0.32 percentage points (to 1.34 percent) and 0.22 percentage points (to 1.52 percent) respectively.

Developments on the government securities market reflected primarily the influences exerted by fluctuations in investor expectations regarding the divergence of ECB and Fed monetary policy stances, as well as by changes in liquidity conditions on the interbank money market. Under the circumstances, investor appetite for government securities (as shown by the demand-to-supply ratio) diminished slightly, even though – similarly to the previous quarter – the value of issued bonds<sup>43</sup> was close to the announced volume. Maximum accepted bid rates resumed their decline in October, although

<sup>42</sup> Data series available since August 1995.

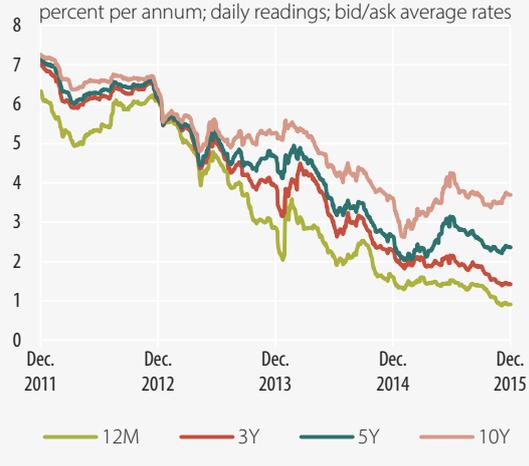
<sup>43</sup> In October, the MPF also tapped the external market via two bond issues with a maturity of 10 years and 20 years respectively totalling EUR 2 billion.

rates on long-term securities re-embarked afterwards on a slight uptrend. During the last auctions in December, maximum accepted bid rates came in at 1.02 percent for one-year certificates (0.44 percentage points below the September reading) and at 1.94 percent and 3.73 percent on bonds with a residual maturity of around three and nine years respectively (down 0.31 percentage points and 0.04 percentage points respectively against end-Q3).

Benchmark rates<sup>44</sup> on the secondary market for government securities witnessed a downward adjustment October through November (more visible for the shorter maturities), which was however followed in December by an upswing on the medium- and long-term segments of the yield curve (Chart 3.3). Nevertheless, the average monthly rates on all securities in the closing month of the year stood 0.05 percentage points to 0.5 percentage points lower than in September, whereas the slope of the yield curve steepened slightly versus end-Q3.

Chart 3.3. Reference Rates on the Secondary Market for Government Securities

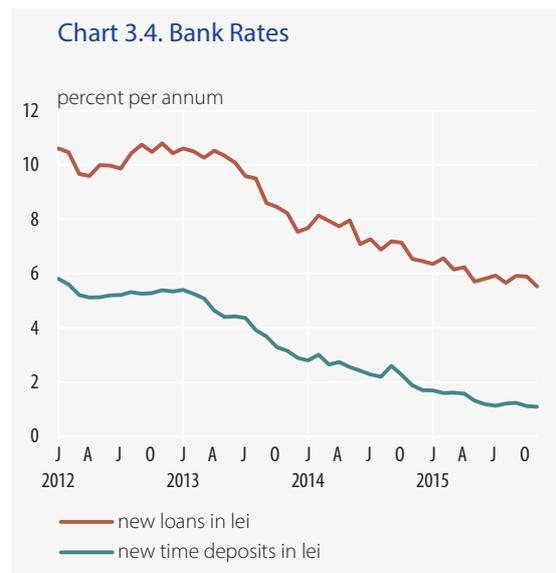
percent per annum; daily readings; bid/ask average rates



September through November 2015, credit institutions' average interest rates on new time deposits and new loans remained on a downward path (down 0.11 percentage points, to 1.10 percent, and 0.13 percentage points, to 5.53 percent in November, respectively), although the monthly

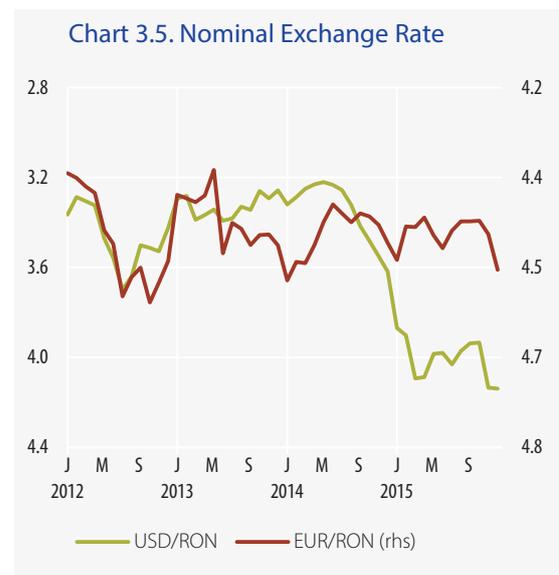
<sup>44</sup> Bid/ask average.

adjustments were not homogenous (Chart 3.4). The average remuneration of new time deposits fell for both non-financial corporations and households, reaching in November post-1990 lows of 0.77 percent (down 0.14 percentage points) and 1.58 percent (down 0.06 percentage points) respectively. The average lending rate on new business to non-financial corporations went down 0.09 percentage points, to a post-1990 low of 4.37 percent in November, mainly due to developments in large-value loans (above EUR 1 million equivalent) – also influenced by a significant volume of factoring. In turn, the average interest rate on new loans to households shrank by 0.23 percentage points (to 6.62 percent in November), primarily as a result of the lower interest rate on new housing loans and the larger share held by this type of loans in total household credit.



## 2.2. Exchange rate and capital flows

The EUR/RON re-embarked on a slightly upward path in October, before posting a significant rise towards the end of Q4 (Chart 3.5), mainly as a result of a shift in investor sentiment towards markets in the region in the wake of the ECB's monetary policy decisions and in anticipation of the Fed's decision in December.



**Table 3.1. Key Financial Account Items (BPM6 methodology)**

	EUR million					
	11 mos. 2014			11 mos. 2015		
	Net acquisition of financial assets*	Net incurrence of liabilities*	Net	Net acquisition of financial assets*	Net incurrence of liabilities*	Net
Financial account	953	-2,336	3,290	1,357	-1,799	3,156
Direct investment	265	3,007	-2,742	602	3,273	-2,671
Portfolio investment	69	2,961	-2,892	321	-232	553
Financial derivatives	-15	0	-15	-577	0	-577
Other investment	2,436	-8,305	10,741	1,991	-4,841	6,832
– currency and deposits	1,842	-2,787	4,629	1,369	-1,532	2,900
– loans	387	-5,385	5,772	228	-3,464	3,692
– other	207	-133	340	394	155	240
NBR's reserve assets, net	-1,802	0	-1,802	-980	0	-980

\*) "+" increase / "-" decrease

The EUR/RON exchange rate remained quasi-stable until mid-October, amid the consolidation of investor expectations on the Fed postponing the start of the rate hiking cycle<sup>45</sup> for 2015 Q4 or even 2016 Q1, conducive to a further positive global financial market sentiment. The MPF capitalised on the favourable environment to raise EUR 2 billion

<sup>45</sup> Given the underperformance of some economic indicators in the US, as well as the Fed's increased concern about the high foreign exchange value of the dollar, as revealed by the minutes of the September meeting.

on the external market via two Eurobond issues (Table 3.1) with a maturity of 10 years and 20 years respectively. The issues were oversubscribed, with total bids exceeding EUR 5 billion.

Prompted by the subsequent increased likelihood of the Fed conducting the first policy rate hike in December 2015, currencies in the region – the leu included – embarked on a depreciation trend versus the euro, which was however significantly alleviated or even brought to a temporary halt in mid-November by the ECB's forward guidance on the forthcoming rise in the degree of euro area monetary accommodation. At the same time, the domestic currency weakened more visibly in relation to the US dollar, given the sharp drop in the EUR/USD ahead of the expected relatively symmetrical widening in December of the divergence between the monetary policy stances of the two central banks<sup>46</sup>.

In the context of heightened volatility on global financial markets following the release of the decisions taken by the ECB in December, which invalidated investor expectations regarding the magnitude of the additional monetary stimulus in the euro area, the exchange rates of the currencies in the region – including that of the leu – witnessed an abrupt rise (Chart 3.6). However, unlike the exchange rates of the Polish zloty and the Hungarian forint, which posted a downward correction afterwards, the EUR/RON continued to increase until towards the end of the year<sup>47</sup>, probably also on the back of the sizeable fiscal policy easing in December, fostering the growth of excess demand on the interbank forex market. However, exchange rate developments were tamed by the Fed's announcement on the gradual nature of future policy rate adjustments, following the 0.25 percentage point rate hike decided at the December meeting, as well as by Moody's decision to change the outlook on Romania's sovereign rating from stable to positive.

<sup>46</sup> Several Fed officials stated at the time that conditions were in place to initiate the normalisation of US monetary policy by the end of 2015.

<sup>47</sup> The depreciation witnessed by the domestic currency in relation to the euro was 1.8 percent October through December, close to that of the Polish zloty (1.7 percent), but higher than that of the Hungarian forint (0.4 percent).

Chart 3.6. Exchange Rate Developments on Emerging Markets in the Region



During the quarter under review, the domestic currency weakened against the euro by 1.8 percent in nominal terms and 1.1 percent in real terms. In relation to the US dollar, the leu depreciated by 4.9 percent in nominal terms and 4.2 percent in real terms, given the former's considerable strengthening versus the single currency<sup>48</sup>. Looking at the average annual exchange rate dynamics in 2015 Q4, the leu saw its nominal depreciation widen against the euro and diminish versus the US dollar.

## 2.3. Money and credit

### Money

September through November 2015, broad money (M3) dynamics<sup>49</sup> remained high by the standards of the past six and a half years, although posting a marginal slowdown<sup>50</sup> to 10.0 percent from 10.2 percent June through August 2015, after having gained significant momentum in the earlier period. These developments reflected primarily the opposite effects exerted by the relative reduction in disbursements to recipients of EU structural funds<sup>51</sup> and the slower increase in several types of budget

<sup>48</sup> In November, the average EUR/USD hit the lowest reading (1.0736) since February 2003 (according to ECB data).

<sup>49</sup> Unless otherwise indicated, percentage changes refer to the average annual growth rates in real terms for September–November 2015.

<sup>50</sup> In nominal terms, the growth rate of M3 remained unchanged.

<sup>51</sup> In line with calculations based on data available on the website of the Ministry of European Funds.

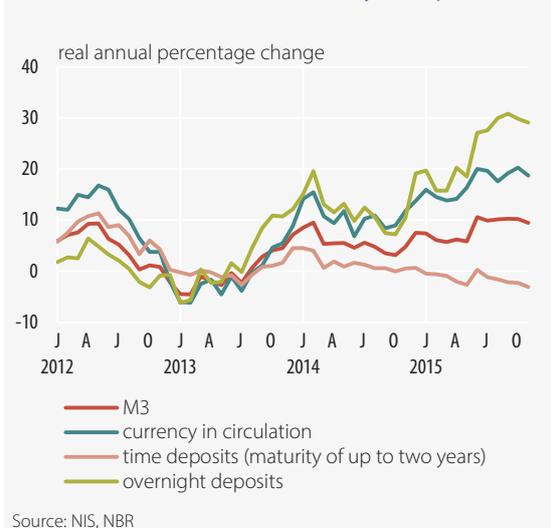
expenditures<sup>52</sup>, on the one hand, and by the rise in the wage earnings of some budgetary sector staff<sup>53</sup>, on the other hand.

**Table 3.2. Annual Growth Rates of M3 and Its Components**

	real percentage change						
	2014	2015				Oct.	Nov.
	quarterly average growth						
IV	I	II	III				
M3	5.2	6.4	7.5	10.1	10.2	9.5	
M1	12.0	16.3	20.1	25.6	26.4	25.4	
Currency in circulation	11.5	14.8	16.8	18.8	20.3	18.7	
Overnight deposits	12.3	17.1	22.0	29.4	29.8	29.0	
Time deposits (maturity of up to two years)	0.4	-0.6	-1.5	-1.7	-2.3	-3.1	

Source: NIS, NBR

**Chart 3.7. Main Broad Money Components**



Source: NIS, NBR

However, the growth rate of narrow money (M1) stuck to an upward path, driven by the performance of currency in circulation and especially of overnight

deposits from both households and companies (Table 3.2; Chart 3.7). At the same time, the annual rate of change of time deposits with a maturity of up to two years went deeper into negative territory, owing to the reduction in the dynamics of both household and corporate deposits. Given the increased divergence between the growth rate trajectories of the major M3 components, M1 held the prevailing average share in broad money for the first time in six and a half years.

In turn, the dynamics of total M3 deposits contracted slightly (after having picked up markedly in the previous period), mirroring developments across both customer categories. In the case of household deposits, the contraction most likely reflected the slower growth of remittances from abroad<sup>54</sup>, only partly offset by the influence of faster-paced wage earnings<sup>55</sup>. The performance of corporate deposits was impacted by lower disbursements from EU funds and/or the state budget (mainly VAT repayments), as well as by the payment of the second instalment of the tax on special constructions.

From the perspective of M3 counterparts, broad money developments reflected the opposite effects of the decline in the dynamics of net credit to the central government and the faster growth rate of long-term financial liabilities<sup>56</sup>, on the one hand, and by the swifter rise in private sector credit and in banks' net foreign assets, on the other hand.

### Credit to the private sector

September through November 2015, the dynamics of credit to the private sector<sup>57</sup> advanced further into positive territory and peaked at a 3½-year high of 2.6 percent (against 1.5 percent in the period from June to August 2015), exclusively on account of the step-up in the growth rate of the

<sup>52</sup> According to budget execution data and press releases from the National Agency for Fiscal Administration, the average annual growth rate of goods and services-related monthly expenditures and of VAT repayments decelerated.

<sup>53</sup> The increase in base wages, benefits, allowances and other pecuniary rights of the non-teaching staff in the education sector (Government Emergency Ordinance No. 27/2015), higher allowances for publicly appointed office-holders (Government Ordinance No. 14/2015), payment of the second instalment of the increase in the base wages of teaching and auxiliary staff in the education sector (Government Emergency Ordinance No. 83/2014), higher wages in the healthcare system (Government Emergency Ordinance No. 35/2015), as well as the payment of amounts established by enforceable court rulings (Government Decisions Nos. 785, 766 and 803 of 2015).

<sup>54</sup> According to balance-of-payments data, the change in the average monthly volume of workers' remittances from abroad saw a reduction in the period from September to November 2015.

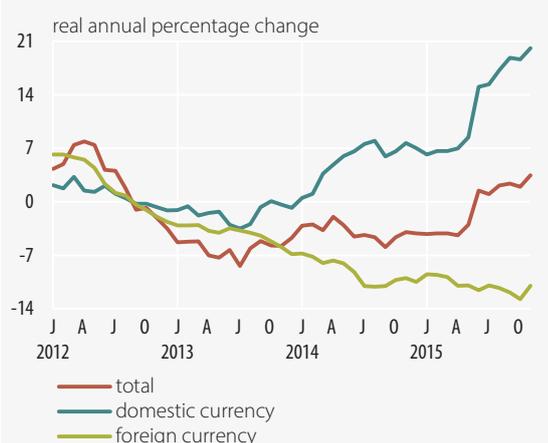
<sup>55</sup> The real average annual growth rate of the net wage economy-wide September through November 2015 peaked at a post-crisis high.

<sup>56</sup> Capital accounts included.

<sup>57</sup> Unless otherwise indicated, percentage changes refer to the average annual growth rates in real terms for September-November 2015.

leu-denominated component (Chart 3.8). Against this background, the average share of the domestic currency-denominated component in total credit to the private sector (50.6 percent) exceeded that of forex loans for the first time in the past eight years. Behind the developments in private sector credit stood mainly (i) the larger volume of new business in domestic currency<sup>58</sup>, (ii) the slowdown in the operations to remove leu-denominated non-performing loans from credit institutions' balance sheets, as well as (iii) the rise in the volume of forex loans bought by banks; their impact more than offset the influence stemming from the cancellation of some loans in foreign currencies.

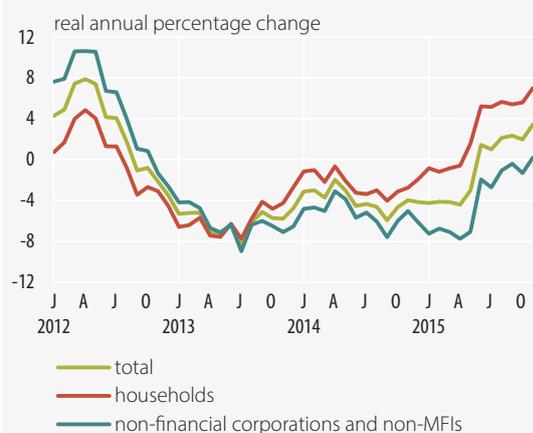
**Chart 3.8. Credit to the Private Sector by Currency**



Source: NIS, NBR

Both major institutional sectors contributed to the pick-up in the pace of increase of credit to the private sector (Chart 3.9). Specifically, the faster

**Chart 3.9. Credit to the Private Sector by Institutional Sector**



Source: NIS, NBR

growth rate of household credit was attributable solely to the swifter dynamics of the leu-denominated component, which peaked at a 7½-year high. This resulted from the step-up in the rate of change of consumer credit and other loans<sup>59</sup> – largely due to the ongoing decline in interest rates and, possibly, to the simplified procedure for checking applicants' income<sup>60</sup> –, to which added the further high pace of increase of housing loans. At the same time, the dynamics of foreign currency-denominated household credit (expressed in euro) went deeper into negative territory, banks' purchases of forex loans notwithstanding. Looking at loans to non-financial corporations, the faster rate of change was further driven by the domestic currency component (irrespective of maturity), whereas the dynamics of forex credit (expressed in euro) remained relatively stable.

<sup>58</sup> Data on new business have been taken from interest rate reports.

<sup>59</sup> Consumer credit, other loans and business development loans have been analysed as a single indicator with a view to eliminating the effect of statistical methodological changes introduced in January 2015.

<sup>60</sup> Pursuant to the protocol signed by the Romanian Banking Association and the National Agency for Fiscal Administration with a view to checking loan applicants' income, whose objective is – according to a press release issued by the former – “more efficient lending and the drop of bank fraud based on forged documents”.

# 4. INFLATION OUTLOOK

The 12-month CPI inflation rate is projected at 1.4 percent at end-2016 and 3.4 percent at end-2017, its path being largely shaped by the fiscal easing measures. Leaving these measures aside, the annual inflation rate would return inside the variation band of the target (1.5-3.5 percent) starting mid-2016 and would slightly exceed its upper bound at the end of 2017. Behind the positioning of these indicators near the upper bound of the variation band of the inflation target at the forecast horizon stands mainly the gradual build-up of underlying inflationary pressures, as reflected by the adjusted CORE2 index. Once the first-round effect of the January 2016 change in the standard VAT rate has faded out and amid the progressive opening of a positive output gap since 2016 Q2, the annual adjusted CORE2 inflation rate will rise markedly at the beginning of 2017. Given the recent numerous and quite large changes in both domestic and external economic conditions, the balance of risks is assessed as being tilted to the upside against the inflation path in the baseline scenario.

## 1. Baseline scenario

### 1.1. External assumptions

The scenario for external demand, as proxied by the effective EU GDP (EU-28 excluding Romania), envisages the persistence of an environment conducive to its recovery. Considering the less favourable prospects for some emerging economies, the annual growth rates were revised marginally downwards in the first part of the projection interval, as compared with the November 2015 Inflation Report (Table 4.1). Euro area economic growth will be underpinned by the ECB's standard and non-standard monetary policy measures, the decline in factors containing the private sector's

debt financing and the slight fiscal easing. Moreover, domestic demand in these economies will be fuelled by lower energy prices, an improvement in labour market conditions and enhanced confidence in the economy. Compared with the November 2015 Inflation Report, the effective EU GDP gap<sup>61</sup> was also marginally revised downwards for the first part of the forecast interval, thus being projected to have a slightly more restrictive impact on economic activity in Romania at this horizon. Over the second part of the forecast interval however, this factor is expected to have more supportive effects.

Table 4.1. Expectations on the Developments in External Variables

	annual averages	
	2016	2017
Effective EU economic growth (%)	1.85	2.09
Annual inflation rate in the euro area (%)	1.00	1.51
Annual CPI inflation rate in the USA (%)	1.65	2.34
3M EURIBOR interest rate (% per annum)	-0.21	-0.12
EUR/USD exchange rate	1.07	1.08
Brent oil price (USD/barrel)	37.4	44.4

Source: NBR assumptions based on data provided by the European Commission, Consensus Economics and futures prices.

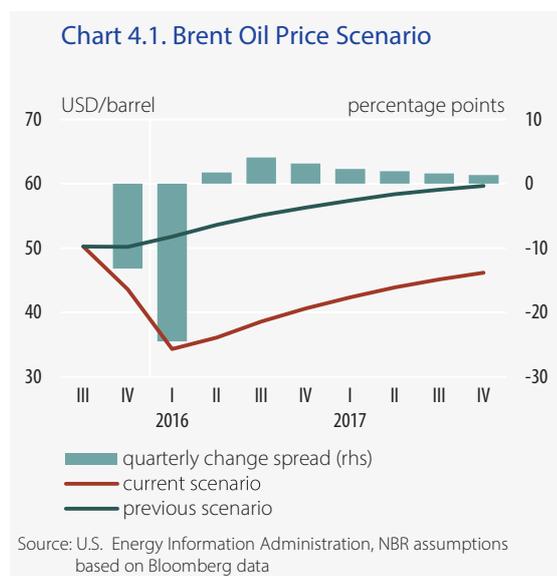
Under the influence of lower energy prices, the annual HICP inflation in the euro area was revised marginally downwards almost throughout the forecast interval, being anticipated to follow a slight uptrend, yet remaining below the ECB-defined 2 percent price stability benchmark. Annual inflation rate in the USA is foreseen recording marginally lower levels than in the previous projection, albeit higher than those expected in the euro area.

Against the background of the ECB's persistently accommodative monetary policy, the nominal 3M EURIBOR rate is anticipated to further post

<sup>61</sup> A relevant measure to approximate the external demand impact on Romania's exports within the NBR model.

marginally negative readings until the end of the projection interval, when it is seen registering a slightly positive value. The path of the EUR/USD exchange rate envisages the euro softening further to around USD 1.06 per euro, before strengthening in the latter half of the projection interval.

The scenario on the international Brent oil price is based on futures prices and foresees an upward trend starting 2016 Q2. Against the backdrop of weak oil demand driven basically by slower economic activity in China and plentiful supply (from Saudi Arabia and the USA in particular), oil prices were revised downwards compared with the previous Inflation Report, but post higher quarter-on-quarter dynamics starting 2016 Q2 (Chart 4.1). Given the recent numerous changes in the global oil market, the baseline scenario of the oil price over the next eight quarters is marked by heightened uncertainty.



## 1.2. Inflation outlook

The baseline scenario of the macroeconomic projection places the annual CPI inflation rate at 1.4 percent at end-2016 and 3.4 percent at end-2017, values below the lower bound and inside the upper half of the  $\pm 1$  percentage point variation band of the 2.5 percent flat target, respectively (Table 4.2).

**Table 4.2. The Annual Inflation Rate in the Baseline Scenario**

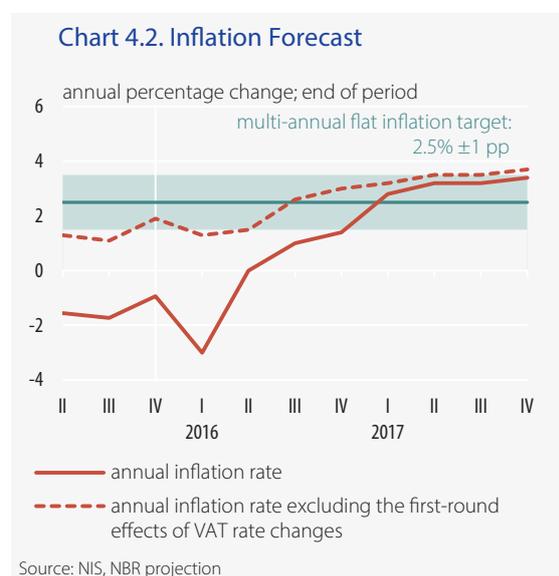
	annual percentage change; end of period							
	2016				2017			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Central target	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
CPI projection	-3.0	0.0	1.0	1.4	2.8	3.2	3.2	3.4
CPI projection*	1.3	1.5	2.6	3.0	3.2	3.5	3.5	3.7

\*) excluding the first-round effects of VAT rate changes

The developments in the projected annual inflation rate are markedly affected by the fiscal easing measures, especially those concerning the successive indirect tax cuts<sup>62</sup>. Therefore, the current projection sees the annual CPI inflation rate at historical lows of below -2.5 percent until May 2016, given the overlapping of the measures on VAT rate cuts implemented in June 2015 and January 2016. Once the first-round effect of the fiscal measure on broadening the scope of the reduced VAT rate for food items has faded in June 2016, annual inflation rate will come in at 0 percent and subsequently resume positive levels. After the direct effect of lowering the standard VAT rate to 20 percent from 24 percent has ceased, inflation rate is seen returning inside the variation band of the target starting January 2017 and reaching its upper half at the end of next year. At that point, the combined influence of implementing a new one percentage point cut in the standard VAT rate and lowering the fuel excise duty is expected to be more than offset by the impact of a build-up of aggregate demand pressures, also as a result of fast-paced wage earnings growth. In the absence of first-round effects triggered by VAT rate cuts, the annual inflation rate would return inside the variation band of the target at mid-2016, reaching 3 percent at end-2016 and 3.7 percent at end-2017, i.e. inside and above the upper bound of the variation band. The annual CPI inflation rate

<sup>62</sup> Among these measures, significant effects on the annual CPI inflation rate stem from the broadening of the scope of the 9 percent reduced VAT rate to all food items, non-alcoholic beverages and food service activities in June 2015 and to potable water delivery services in January 2016, the two-step cut in the standard VAT rate – by 4 percentage points in January 2016 and by one percentage point in January 2017, as well as scrapping the special excise duty on fuels in January 2017. For further details regarding the first-round effects of these fiscal measures on the prices of various consumer basket items, see August 2015 and November 2015 Inflation Reports.

excluding the transitory, first-round effects of the VAT rate cuts highlights more accurately the underlying inflationary pressures (Chart 4.2).

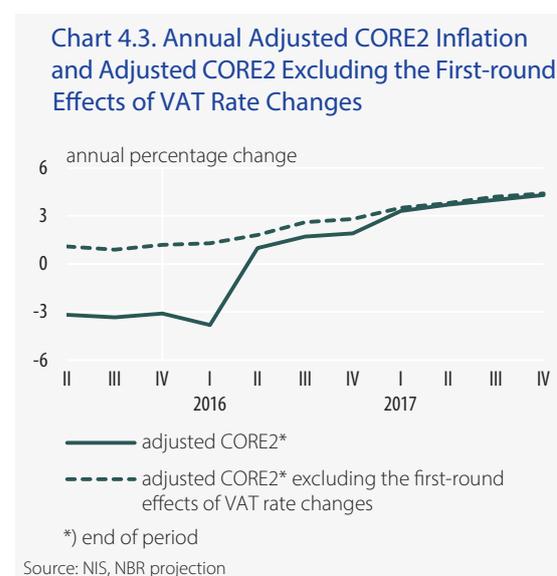


In terms of assessing the fulfilment of criteria stipulated in the Maastricht Treaty, the average annual inflation rate is the relevant measure. Based on the nationwide consumer price index (CPI), it is expected to re-enter the variation band of the central target starting May 2017 and remain there until the end of 2017.

Against the assessments in the previous report, the projected annual CPI inflation rate is 0.3 percentage point higher at the end of this year, due mainly to larger expected contributions from the adjusted CORE2 index and volatile food (VFE) prices.

Annual adjusted CORE2 inflation rate will see negative levels until May 2016, before returning to positive territory and thereafter embarking on a gradual uptrend, marked only by a jump in January 2017. Thus, the annual core inflation rate is anticipated to run at 1.9 percent and 4.3 percent at end-2016 and end-2017 respectively (Chart 4.3). Its projected path is shaped by the successive VAT rate cuts and the subsequent fading-out of first-round statistical effects from these cuts<sup>63</sup> (in June 2016,

January 2017 and January 2018), on the one hand, and stronger underlying inflationary pressures, on the other hand. The latter factors reflect persistent influences on annual core inflation stemming from an expected rise in excess demand after the reversal of the cyclical position of the economy in the first part of the projection interval, along with the swifter increase in unit wage costs<sup>64</sup>; the pattern of inflation expectations whereby second-round effects of VAT rate cuts feed through to prices; and the influence of import prices, amid the movements foreseen in external prices. Under the impact of these factors, the core inflation rate which excludes the direct effects of VAT rate cuts will come in at 2.8 percent and 4.4 percent at end-2016 and end-2017 respectively (Table 4.3).



**Table 4.3. Annual Adjusted CORE2 Inflation Rate in the Baseline Scenario**

annual percentage change; end of period

	2016				2017			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Adjusted CORE2	-3.8	1.0	1.7	1.9	3.3	3.7	4.0	4.3
Adjusted CORE2*	1.3	1.8	2.6	2.8	3.5	3.8	4.2	4.4

\*) excluding the first-round effects of VAT rate changes

<sup>63</sup> Broadening the scope of the 9 percent reduced VAT rate for food items in June 2015 and the 4 percentage point cut in the standard VAT rate in January 2016. The base effect due to the last specified measure is foreseen to more than offset the minor impact of the disinflationary shock stemming from the additional one percentage point cut in the standard VAT rate as of January 2017 on the annual rate.

<sup>64</sup> Given the public sector pay rises implemented late last year and increases in the economy-wide gross minimum wage.

Compared with the November 2015 Inflation Report, the projected path of the annual adjusted CORE2 inflation rate was revised upwards by 0.6 percentage points for the end of this year. This owes much to the build-up of stronger aggregate demand pressures, on the back of the reassessment of the wage-productivity differential<sup>65</sup>, and the weaker leu versus both the euro and the US dollar in 2015 Q4 than the levels projected in the previous report, feeding through to the dynamics of import prices.

The cumulative contribution of components exogenous to the monetary policy influence, namely administered prices, volatile food (VFE) prices, fuel prices and tobacco product and alcohol prices, to the annual CPI inflation rate amounts to 0.2 percentage points at the end of 2016, i.e. 0.1 percentage points below the previously-forecasted level. It is anticipated to reach 0.9 percentage points at the end of next year (Table 4.4).

**Table 4.4. Components' Contribution to Annual Inflation Rate\***

	percentage points	
	2016	2017
Administered prices	0.1	0.6
Fuels	-0.4	-0.2
VFE prices	0.5	0.4
Adjusted CORE2	1.2	2.5
Tobacco and alcohol	0.0	0.0

\*) end of period; values have been rounded off to one decimal place

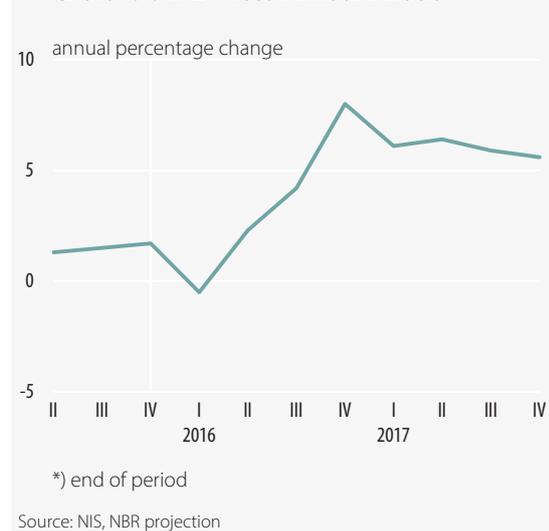
Volatile food (VFE) prices are projected to rise at an annual pace of 8.0 percent at the end of 2016, following an upward revision against the previous report, and 5.6 percent at end-2017 (Chart 4.4). Under the assumption of normal agricultural years<sup>66</sup>, their path is marked primarily by the fading out of

<sup>65</sup> The reassessment took into account the lei 200 increase in the economy-wide gross minimum wage in May 2016 (against the previously-projected lei 150 increase in January 2016), the end-2015 public sector pay rises (except public healthcare and education wages, the hikes of which had been included in the previous baseline scenario) and their demonstration effects on private sector wages.

<sup>66</sup> The standard assumption in the absence of other relevant information takes into account normal crops (close to the multi-annual average of farm output) in both years of the projection interval.

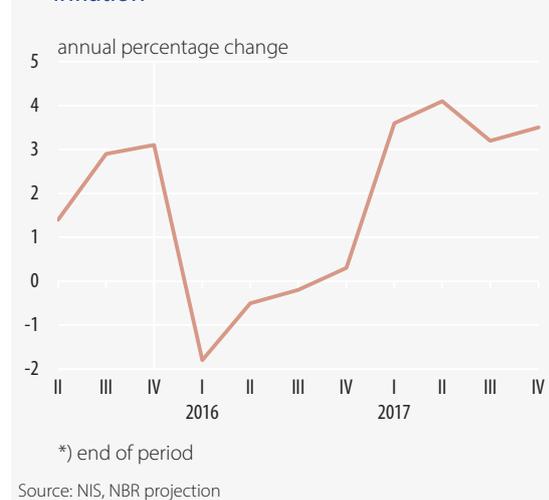
the first-round effect of broadening the scope of the reduced VAT rate on food items in June 2016.

**Chart 4.4. VFE Prices Annual Inflation\***

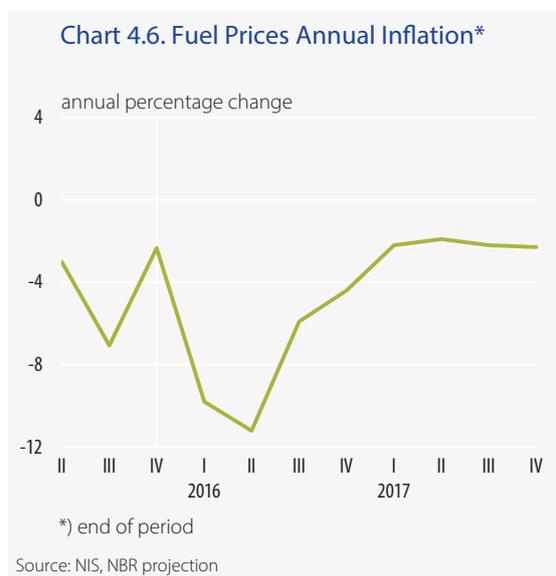


The scenario for administered price developments incorporates information from the relevant Romanian authorities and the latest developments in these types of prices. The group's annual dynamics are projected to come in at 0.3 percent at end-2016 and 3.5 percent in December 2017 (Chart 4.5). The 2016 forecast was revised downwards by 0.4 percentage points, amid the slower-than-previously-forecasted rise in the electricity price, given the reduction in distribution tariffs in January 2016, and the recent developments in the heating price.

**Chart 4.5. Administered Prices Annual Inflation\***



The path of the annual inflation rate projected for tobacco products and alcoholic beverages is shaped by the pieces of legislation setting the levels of excise duties on such products, i.e. readjustment of excise duties on alcohol and alcoholic beverages and a 4.5 percent increase in the total excise per 1,000 cigarettes versus 2015, in January 2016. For the latter, a further 1.1 percent hike is envisaged for 2017. The group's annual dynamics are, in turn, influenced by the standard VAT rate cuts in 2016 and 2017. For 2016, the projected level is only slightly higher than the figure specified in the November 2015 Inflation Report.



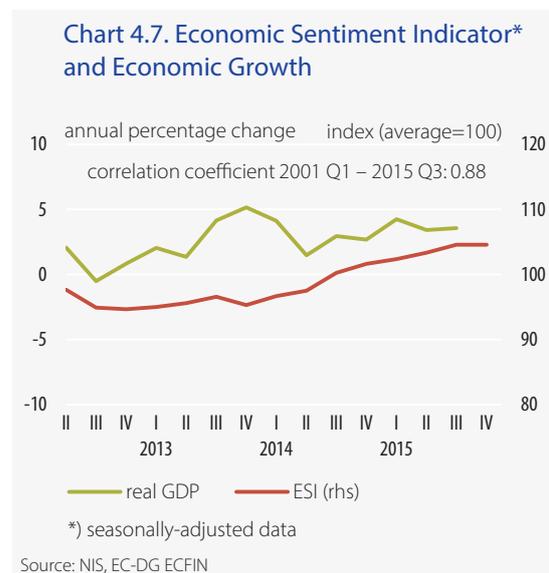
The annual dynamics of fuel prices are projected to stay in negative territory throughout the projection interval, reaching -4.4 percent at the end of 2016, a level revised downwards by 2.1 percentage points against the previous projection, and -2.3 percent at end-2017 (Chart 4.6). Behind the downward pressures on fuel prices stand the two-step cut in the standard VAT rate, the scrapping of the special excise duty on fuels (as from 1 January 2017), and the negative annual dynamics of the oil price in the first part of the projection interval. During 2016, in the opposite direction is expected to act the forecasted path of slightly weakening EUR/USD exchange rate, entailing detrimental effects on the exchange rate of the leu versus the US dollar and, in turn, on the leu-denominated prices of such goods. Positive contributions to the change in fuel price

next year come from expectations of positive annual oil price dynamics and inflation expectations reverting to the upward path.

### 1.3. Demand pressures in the current period and over the projection interval<sup>67</sup>

#### Output gap

According to the NIS<sup>68</sup>, seasonally-adjusted real GDP in 2015 Q3 saw a 1.4 percent rise compared to the previous quarter, the year-over-year economic growth standing at 3.6 percent. The analysis of high-frequency macroeconomic indicators points to the quarter-on-quarter real GDP growth remaining in positive territory in 2015 Q4, i.e. retail trade turnover (excluding motor vehicles) and industrial production increased by 4.7 percent and 0.2 percent, respectively, October through November 2015 as compared to the preceding quarter average, while the economic sentiment indicator further reported the highest post-crisis values in 2015 Q4 (Chart 4.7). The dynamics of agricultural production are estimated to stand below the long-term average in 2015 and have a negative impact on the real GDP growth rate in 2015 Q3 and Q4.

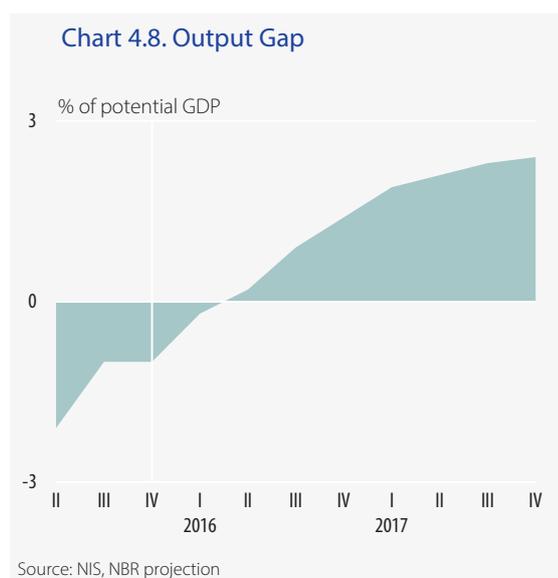


The developments in the capital stock and labour for this year and the next are projected to include

<sup>67</sup> Unless otherwise indicated, percentage changes are calculated based on seasonally-adjusted data series. Source: NBR, MPF, NIS, Eurostat, EC-DG ECFIN and Bloomberg.

<sup>68</sup> NIS Press Release No. 21 of 15 January 2016.

both recent and expected increases in investment and employment, respectively, with favourable effects on potential GDP. Total factor productivity growth is seen to incorporate, on the one hand, the modest results of agriculture in 2015 (with a carry-over effect also in 2016) and, on the other hand, the positive effects of staff training programmes and technological investments, which are expected to benefit from favourable financing conditions and a further increase in the absorption rate of structural and cohesion funds. This scenario is fraught with persisting uncertainty surrounding the external environment and, thus, the volatility of capital flows to the emerging economies, in general, and the economies in the region, in particular, carrying the potential to shape different paths for the dynamics of production factors.



The negative output gap in 2015 Q3 is assessed to have been smaller than that estimated in the previous forecasting round, implying, *ceteris paribus*, weaker disinflationary pressures. The output gap was revised based on the higher-than-expected GDP growth in 2015 Q3 and the revision by the NIS of historical data series for seasonally-adjusted real GDP. In 2015 Q4, the negative output gap is assessed at a similar level to that in the previous quarter (Chart 4.8), amid further stimulative effects of discretionary component of the fiscal policy (the fiscal impulse) and of real broad monetary conditions. External demand is estimated to have a marginally smaller restrictive

impact on the negative output gap. The narrowing demand deficit in 2015 H2 is also underpinned by the favourable developments in the current level of capacity utilisation in industry, which rose in both Q3 and Q4.

The current forecast envisages a progressive closing of the negative output gap and the build-up, in the course of 2016, of excess demand seen to rise gradually until the projection horizon. This is largely due to the expansionary fiscal policy stance and, to a lesser extent, to the gradual recovery in external demand and to a stimulative set of real monetary conditions. In this context, the developments in the output gap imply waning disinflationary pressures during 2015 and upward pressures on consumer prices starting with 2016. Compared with the November 2015 Inflation Report, the revision of the projected output gap illustrates the more stimulative effect of the discretionary fiscal and income policies, the relatively more favourable cyclical position of effective external demand in the latter half of the projection interval (underpinned by the ECB's monetary policy stance), as well as the impact of reassessing the output gap in recent periods and the slightly more stimulating influence of real monetary conditions.

The baseline scenario envisages a consolidation of economic growth in 2015, despite an agricultural output below the long-term average, and a pick-up in growth in 2016 and 2017, driven by swift growth in domestic demand, on the back of sustained increase in consumption and the expected favourable dynamics in investment. Given the significant advance in domestic demand, imports of goods and services are expected to rise faster than exports, with the contribution of net exports to GDP growth being foreseen to remain negative over the projection interval.

#### Aggregate demand components

The positive developments recorded by the actual individual consumption of households in the preceding quarters are expected to continue in 2015 Q4 as well. Consumption dynamics are supported by the rise in real disposable income, under the impact of recent wage hikes (nominal increase of

3.2 percent in the average net wage economy-wide in October to November versus the third quarter average). The estimated growth of household consumption in 2015 Q4 is corroborated with a series of indicators, such as retail trade (except for motor vehicles and motorcycles) and market services to households, which picked up 4.7 percent and 0.8 percent respectively October through November 2015 as compared with the previous quarter's average. The consumer confidence indicator remained at levels close to the post-crisis high, despite the slight reduction seen in 2015 Q4 as against Q3. In this context, the negative gap of this aggregate demand component is assessed to narrow in 2015 Q4 versus Q3.

Over the forecast interval, the actual individual consumption of households is anticipated to grow at a fast pace, on the back of the rise in the real disposable income. This will be bolstered by the fiscal easing measures implemented and planned in the new Tax Code, by the minimum wage increase, as well as by the wage hikes scheduled in the public sector or entailed by the expected favourable economic developments in the private sector. In addition, the consumption path is foreseen to be also underpinned by the persistence of favourable lending conditions.

The actual collective consumption of general government is expected to stand in the final quarter of 2015 at a higher level than in Q3, yet its rate of increase is assessed to be further consistent with keeping the budget deficit within the target set at the beginning of the year. The dynamics of the actual collective consumption of general government are anticipated to be further positive throughout the forecast interval.

In 2015 Q4, gross fixed capital formation is forecasted to resume positive growth over the previous quarter, as hinted by the increase in indicators such as the volume of construction works (2.1 percent) and the stock of loans to non-financial corporations (up by 0.4 in real terms) in October to November as compared with the previous quarter. The rise in gross fixed capital formation is also supported by the confidence indicator in

construction (up 3.7 points in 2015 Q4), as well as by favourable developments in construction orders (the balance of answers standing 2.6 points higher in the fourth quarter of the year). As a result, the negative gap of gross fixed capital formation is assessed to narrow in 2015 Q4.

Over the forecast interval, gross fixed capital formation is expected to see positive growth rates, due to a strengthening of private investment, in parallel with the anticipated rise in domestic lending. The gradual pick-up of economic activity in Romania's trading partners will also have a favourable contribution. To these add the stimulative effects of the fiscal measures scheduled throughout the forecast interval (e.g. the cut in dividend tax and the removal of the tax on special constructions). The projection of favourable investment dynamics is however conditional on the assumption of adequate financing, also via structural and cohesion funds absorption. The persistence of factors exerting a negative impact on the average annual dynamics of investment in the past years<sup>69</sup> is, however, indicative of the uncertainty surrounding the projection on gross fixed capital formation.

The quarter-on-quarter dynamics of exports of goods and services are estimated to re-enter positive territory in 2015 Q4. This assessment relies on the EU economic sentiment indicator standing 0.9 points higher than in Q3 and on the positive prospects for the economic growth of Romania's trading partners, under the influence of factors such as the low oil price and the implementation of the ECB's quantitative easing measures. These prospects occur, however, in an international environment plagued by uncertainties surrounding the magnitude of the slowdown in the growth of emerging economies (with possible spillover effects on the euro area developed economies). Imports of goods and services are estimated to resume growth in 2015 Q4, under the influence of the faster

<sup>69</sup> Among the likely factors with a negative bearing on the average annual dynamics of investment in 2013-2014 were the low quality infrastructure (see, for instance, the IMF opinions included in Country Report No. 15/80 – March 2015) and the uncertainties surrounding some external developments, which hampered foreign direct investment.

increase in domestic demand and of the upward effect generated by the anticipated favourable export developments (given their import content). Against this background, the deviation from the medium-term trend is assessed to be further negative for exports and see marginally positive values for imports.

The annual growth rate of exports of goods and services is projected to stay positive over the forecast interval, assuming the persistence of structural gains recorded in recent years<sup>70</sup>. The forecasted annual dynamics of exports reflect the gradual recovery of external demand and, in the medium run, the possibility that domestic production reaches full capacity. Given developments by the cut-off date of this Report, the slower growth pace of emerging economies (China, in particular) and the global geopolitical tensions are not deemed likely to pose major risks to Romania's future dynamics of exports, considering the low direct exposure of our country via the trade channel. Conversely, indirect spillover effects on the external demand of Romania's trading partners (of some euro area countries, in particular) could have an unfavourable impact on export dynamics. Over the forecast interval, the annual growth rate of imports of goods and services is projected to outpace that of exports, on the back of the swift increase in domestic demand.

In 2014, the balance-of-payments current account deficit held a 0.5 percent share of nominal GDP, down from 2013, amid the narrower deficit in trade in goods and services, as well as the lower income deficit. In 2015 and over the forecast interval, the current account deficit is anticipated to see a reversal in the post-crisis closing trend. The main determinant of the current account deficit opening is the fast-paced dynamics of households' actual individual final consumption, supported by the fiscal easing measures. In this context, the current account deficit-to-GDP ratio is forecasted to stand at around

<sup>70</sup> The share of machinery, apparatus, equipment and transport means in Romania's total FOB exports stayed at levels of at least 40 percent in the post-crisis period. In the medium run, the performance of this sector is conditional upon factors such as the expansion of productive capacity, the improvement in infrastructure and external demand developments.

2 percent over the medium term. In the short run, international reserves and, in general, the envisaged sources for current account deficit financing are deemed to be adequate and favourably distributed in terms of the shares of debt-creating versus non-debt-creating flows. However, the reopening of the negative current account balance owing to a wider fiscal deficit and the speed-up in consumption could augment Romania's vulnerabilities to a potential rise in the volatility of capital flows to the emerging economies, thus jeopardising domestic macroeconomic equilibria.

### Broad monetary conditions

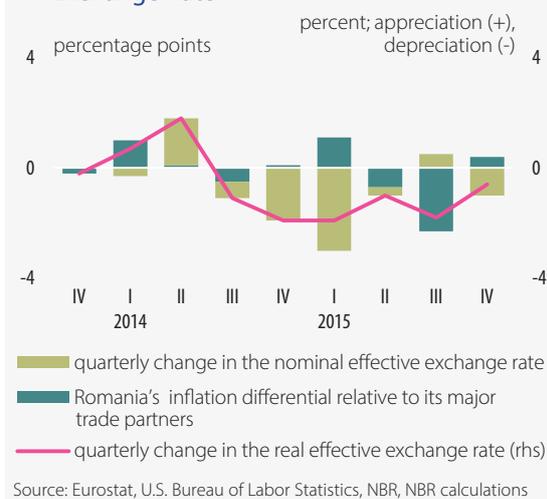
Broad monetary conditions capture the impact exerted on future developments in aggregate demand by the dynamics of real interest rates in lei applied by credit institutions to their non-bank clients and by the real effective exchange rate of the leu. The exchange rate exerts its influence via the net export channel, as well as via the effects on wealth and balance sheets of economic agents.

The average interest rates applied by credit institutions to non-bank clients' leu-denominated new time deposits and new loans decreased further in nominal terms in 2015 Q4, also as a result of the time-propagated impulse sent by the monetary policy rate cuts, which favoured a drop in real interest rates as well. Thus, the cumulative impact on economic activity in 2016 Q1 generated by deviations of real interest rates from their trends is assessed to be stimulative.

In quarter-on-quarter comparison, in 2015 Q4 the domestic currency depreciated in nominal effective terms, as a result of developments versus both the euro and the US dollar (Chart 4.9). In real terms, the effective exchange rate<sup>71</sup> is assessed to have weakened as well amid a relatively low quarterly inflation differential in Romania versus trading partner countries. Therefore, the impact of the real effective exchange rate on aggregate demand (via the export price competitiveness) in 2016 Q1 is assessed to remain stimulative.

<sup>71</sup> The relevant exchange rate for the NBR's quarterly projection model implies EUR/RON and USD/RON exchange rates, according to the weights of the two currencies in Romania's foreign trade.

**Chart 4.9. Quarterly Change in the Effective Exchange Rate**



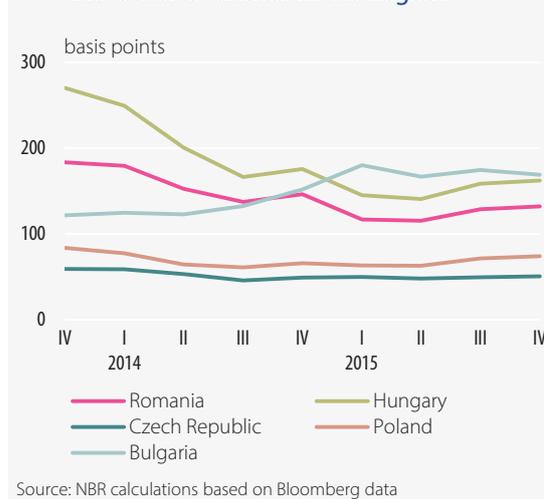
The uncertainties related to the size of China's economic adjustment, the Fed's<sup>72</sup> monetary policy normalisation and the slowdown of emerging economies pushed the CDS (Credit Default Swap) spreads slightly higher in the region in the fourth quarter of 2015 (Chart 4.10). Standard&Poor's, Moody's and Fitch have recently reaffirmed Romania's investment grade sovereign rating, due to the strengthening of national economic fundamentals, while highlighting, at the same time, the vulnerabilities stemming from the macroeconomic policy mix generated, particularly, by the fiscal policy. In this context, the sovereign risk premium (determined based on Option Adjusted Spread) is assessed to stay slightly below the medium-term trend, in parallel with the real foreign interest rate standing below the equilibrium level. In terms of the wealth and balance sheet effect, in 2015 Q4 the stimulative influences on future aggregate demand of the aforementioned dynamics are only partly offset by the anticipated real effective exchange rate developments.

Overall, real broad monetary conditions in 2015 Q4 are assessed to exert a stimulative impact on economic activity in the following quarter, thus leading to the mitigation of disinflationary pressure generated by the negative output gap. Looking at their structure, the stimulative impact stemming

<sup>72</sup> Fed's decision of 16 December 2015 to raise the federal funds rate, due mainly to the improvement in labour market conditions and the prospects for higher inflation in the US.

from the real effective exchange rate (via export price competitiveness) is prevalent. To this add the smaller contributions from the wealth and balance sheet effect and the deviations of real interest rates on leu-denominated loans and deposits.

**Chart 4.10. 5-year CDS Spreads for Romania and Other Countries in the Region**

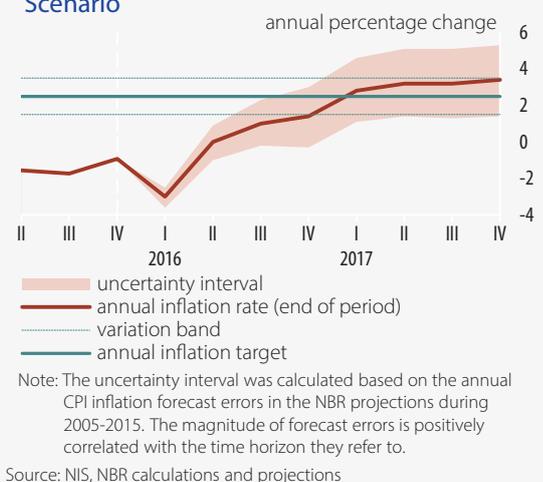


Real broad monetary conditions are forecasted to continue having a stimulative effect on economic activity over the projection interval. The real effective exchange rate, via the export price competitiveness, will be the main contributor, albeit on the wane, to shaping real broad monetary conditions. An additional contribution in the same direction will make the wealth and balance sheet effect, given the low foreign interest rate levels amid the persistence of the quantitative easing programme implemented by the ECB. The projected path of the monetary policy rate aims to ensure price stability over the medium term, thereby helping pave the way for sustainable economic growth and keep a stable macroeconomic framework in place.

#### 1.4. Risks associated with the projection

The balance of risks to the annual inflation rate projection is assessed as being tilted to the upside compared to the path in the baseline scenario (Chart 4.11). The risks specific to the current round stem primarily from the domestic environment, with external factors remaining as relevant as in the previous forecasting rounds.

**Chart 4.11. Uncertainty Interval Associated with Inflation Projection in the Baseline Scenario**



Thus, on the domestic front, the uncertainties about the consistent implementation of an adequate macroeconomic policy mix and the acceleration of structural reforms remain a reason for concern, given the elections scheduled to take place during the projection interval. Among the components of this mix, the fiscal policy stance is deemed to be the most relevant source of potential deviations from the baseline scenario, with the financing of the general government deficit – which is expected to increase significantly in 2016 compared to 2015 – being also a cause for concern. Other risks may be posed by the implications that the already implemented wage hikes and other possible future pay rises in the public sector – likely to amplify the already elevated fiscal easing generated by the entry into force of some of the new Tax Code measures – might have on the future configuration of the parameters assumed by Romania under the European treaties on fiscal governance. Furthermore, considering the potential demonstration effects on the private sector wage dynamics, the risk emerges that the recent mismatch between pay rises economy-wide and labour productivity gains may widen and generate additional inflationary pressures. Such risks could become even more relevant, should structural reforms and public investment be postponed, or should EU funds be insufficiently capitalised upon, triggering unfavourable effects on the growth potential and competitiveness of the Romanian economy.

The distribution of risks to administered prices is assessed to be relatively balanced, considering the

recent corrections to these categories of prices. Domestic food price developments are surrounded by inherent uncertainties arising from weather conditions which carry the potential to influence the agricultural produce supply in both ways. A new source of risks to the annual inflation rate is the impact that the approved measure<sup>73</sup> on packaging and packaging waste management may have on CPI component prices.

On the external front, despite a recent moderation of global tensions, the following factors remain relevant: the uncertainty surrounding the effects generated by the diverging monetary policy stances of the world's major central banks; the economic prospects for euro area countries and major emerging economies, especially China, considering its economic slowdown that may become more pronounced in the future; the management of the Greek sovereign debt over the long term.

Should some of these risks materialise, the Romanian economy could be (negatively) affected mostly via indirect channels, through the impact on external demand from the EU, Romania's main trading partner. Moreover, the adverse consequences on investor confidence might lead to portfolio shifts regionally and/or globally and, implicitly, to significant fluctuations in the leu exchange rate, which would reshape the inflation path compared to that in the baseline scenario. For these reasons, in the context of the expiry of the agreements Romania concluded with the European Commission and the IMF, it is necessary to maintain and strengthen the progress achieved over the last years in rooting out major macroeconomic imbalances and improving the domestic economy's resilience, by adequately implementing consistent macroeconomic policies.

The balance of risks stemming from the international commodity prices is assessed as being slightly tilted to the downside in the short term, given the recent developments indicating a possibly persistent downtrend in the international oil price in the context of a significant output growth<sup>74</sup> and

<sup>73</sup> Law No. 249/2015 on packaging and packaging waste management.

<sup>74</sup> Among the factors which can heighten the global oil glut are: the possible persistent effects generated by lifting economic sanctions against Iran – ranking fourth globally in terms of oil reserves – as well as the economic prospects for emerging economies, especially China.

sluggish global demand. At the same time, the future monetary policy stances of the world's major central banks, depending on the direction and magnitude of their reconfiguration, may influence

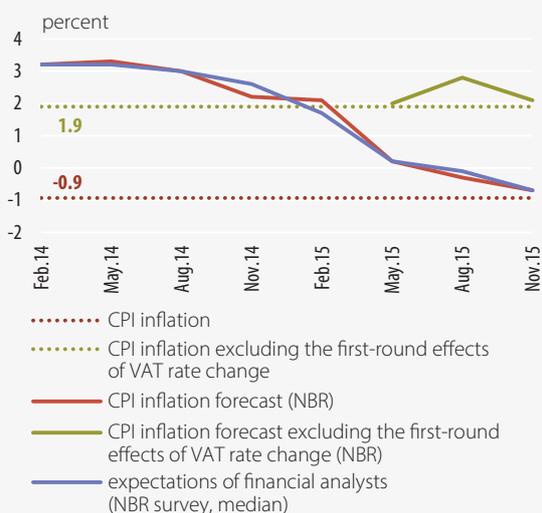
the EUR/USD exchange rate developments, which may have unforeseen effects on the USD/RON exchange rate and, hence, on the oil price expressed in domestic currency.

### Box 3. Assessment of forecast errors for the December 2015 annual CPI inflation

Given the inherent time lags in central bank's decisions working their way through to the economy, the macroeconomic forecasts play a pivotal part in the inflation targeting strategy. This box assesses the accuracy of the forecasts that the NBR made in successive rounds that contain a projection on the end-2015 annual CPI inflation rate. Thus, eight forecasting rounds were considered, corresponding to the Inflation Reports published February 2014 through November 2015.

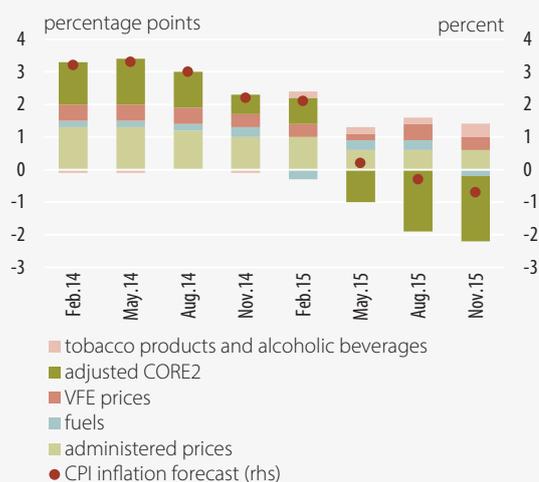
The annual CPI inflation rate for December 2015 (-0.9 percent<sup>75</sup>) was overestimated<sup>76</sup> in all eight rounds under review, with forecast errors ranging between a +0.2 percentage point low (in the November 2015 forecasting round) and a +4.2 percentage point high (in the May 2014 forecasting round). The significant errors in the Inflation Reports published in February 2014 to February 2015 owe to the absence of information on the measure aimed at broadening the scope of the reduced VAT rate to all food items, non-alcoholic beverages and food service activities<sup>77</sup>, which impacted also the path of inflation expectations through which the second-round effects of the measure are fed through. In terms of accuracy, the size of errors is similar to the median of those arising from financial analysts' forecasts (taken from the NBR survey on inflation expectations carried out in the months when Inflation Reports were published) – Chart A.

Chart A. Successive Forecasts of the Annual CPI Inflation Rate for December 2015



Source: NIS, NBR projections, NBR survey

Chart B. Contributions of Components to the Forecasted Annual CPI Inflation for December 2015 in Successive Projection Rounds



Source: NBR calculations

<sup>75</sup> According to NIS Press Release No. 14 of 13 January 2016.

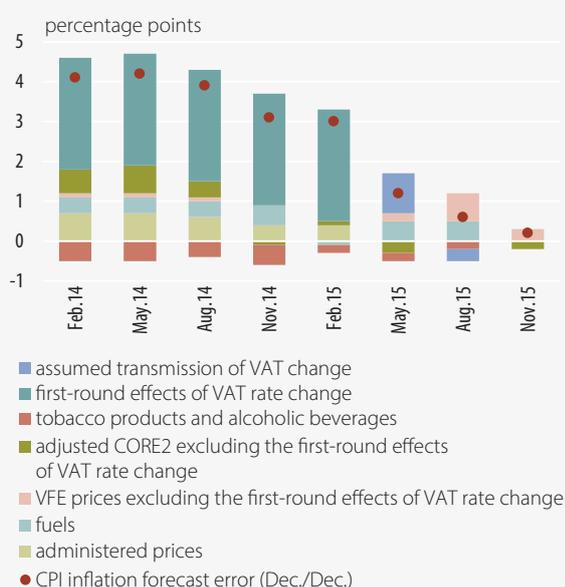
<sup>76</sup> The forecast error is calculated as the difference between the forecasted value and the actual one. A negative difference implies that the projection underestimated the actual CPI inflation rate, while a positive difference implies its overestimation.

<sup>77</sup> On 7 April 2015, the Government adopted the Emergency Ordinance amending and supplementing Law No. 571/2003 on the Tax Code providing for the broadening of the reduced VAT rate (9 percent) to all food items, non-alcoholic beverages and food service activities, except for alcoholic beverages, starting in June 2015.

A significant revision of the NBR’s projection on end-2015 CPI inflation occurred during the May 2015 round, when the information on broadening the reduced VAT rate became available, with an impact on some sub-components of the adjusted CORE2 index<sup>78</sup> and on volatile food prices (VFE) – Chart B.

Chart C shows the differences between the forecasted contributions of CPI components to headline inflation and those actually reported in December 2015. The influence of broadening the reduced VAT rate prevails over the other contributions. The first-round impact of this measure (estimated at 2.8 percentage points) was initially underestimated in the May 2015 forecasting round and marginally overestimated in the August 2015 round.

**Chart C. Forecast Errors in Successive Rounds, by Contribution of CPI Components**



**Chart D. Forecast Errors in Successive Rounds, by Contribution of Factors Included in the Model for Analysis and Medium-Term Forecasting**

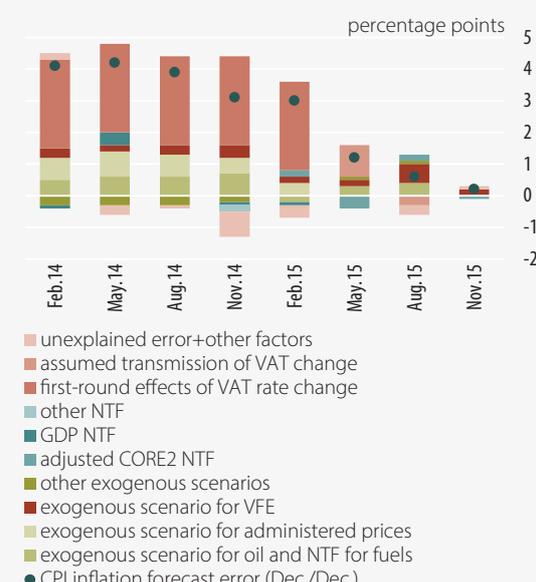


Chart D shows the breakdown of the forecast errors for the annual CPI inflation rate by specific determinants included in the NBR’s Model for Analysis and Medium-Term Forecasting (MAMTF). Specifically, this assumes counterfactual simulations in which projection input data (also called specific factors) are supposed to be exactly known (being assigned the actual historical values). The difference between the inflation projections released in the eight Inflation Reports (February 2014 – November 2015) and those resulting from the counterfactual simulations allows for determining the contribution made by each of the specific factors to the total forecast error. Thus, excluding the first-round statistical effect of the VAT rate cut as well as that associated with estimating its pass-through coefficient into prices, the exogenous scenarios<sup>79</sup> were the major contributors to the overestimation of the December 2015 CPI inflation. The errors caused by short-term forecasts<sup>80</sup>, especially those for inflation and its sub-components, are visible primarily in the recent forecasting rounds, considering their associated forecasting horizon (1-2 quarters). “Other factors” include various assumptions adopted in the forecasting process (for instance, the risk premium, the economic agents’ inflation expectations, the estimates on deviations from medium-term trends of the main macroeconomic variables etc.), with a lower contribution to errors.

<sup>78</sup> The fiscal measure affected 42 percent of the adjusted CORE2 basket.

<sup>79</sup> Exogenous scenarios built for the 8-quarter projection interval: VFE, administered prices, external variables (external inflation, effective EU GDP, 3M EURIBOR rate, EUR/USD exchange rate, oil price).

<sup>80</sup> Near-term forecasts (NTF): inflation, GDP, exchange rate, interest rates.

The difference between the total forecast error in Chart A and the sum of the contributions made by specific factors is referred to as “unexplained error” having as determinants various (unanticipated) shocks which affected the economy, the structure of the model (representing only a simplification/stylisation of reality), as well as the uncertainty concerning the estimated/calibrated values of the impact coefficients of various variables, as they are modelled within the MAMTF.

## 2. Policy assessment

In line with the NBR’s forecasts, in 2015 Q4, the annual inflation rate remained in negative territory, although on an upward path, coming in at -0.93 percent in December<sup>81</sup>. Its positioning at a slightly lower-than-anticipated level<sup>82</sup> was entirely ascribable to supply-side factors, with the most significant influence coming from the weaker-than-expected increase in volatile food prices and administered prices. However, this influence was to a large extent offset by the opposite impact exerted by the developments in the adjusted CORE2 inflation, which, despite the persistence of low inflation in the euro area/the EU and of subdued inflation expectations, posted a slower negative annual dynamics over this period, given the faster narrowing of the negative output gap and the relative weakening of the leu against the main currencies. Consequently, amid the temporary effects of broadening the scope of the reduced VAT rate to all food items as of June, the average annual inflation rate went down to -0.59 percent in 2015, i.e. the lowest reading in 26 years.

In this context, the updated forecast on the medium-term macroeconomic developments, based on the latest available data and information, shows a new increase in the divergent nature of the future path of the annual inflation rate, given its anticipated positioning at values similar to those in the previous projection<sup>83</sup> for the first part of 2016 and at levels higher than previously forecasted for the following segment of the projection horizon.

<sup>81</sup> At the end of the previous quarter, the annual inflation rate stood at -1.73 percent.

<sup>82</sup> According to the latest forecast, the annual inflation rate was expected to stand at -0.7 percent in December 2015.

<sup>83</sup> November 2015 Inflation Report.

Thus, in 2016 Q1, the forecasted annual inflation rate is seen moving deeper into negative territory to fall in March to the same level as in the previous projection (-3 percent). The upward trend expected for H2, after its return to positive territory, is, however, slightly more pronounced than that highlighted in the previous projection, the annual CPI inflation rate nearing the lower bound of the variation band of the flat target in December (1.4 percent). Implicitly, the level it rises to in 2017 Q1, owing to a base effect, is higher than that previously forecasted, its slowly increasing path staying within the upper half of the band of the flat target throughout the year<sup>84</sup>. In line with these developments, the average annual inflation rate forecasted for 2016 comes in at -0.7 percent – a level similar to that in the preceding projection –, while that for 2017 stands at 3.1 percent.

Behind the increasing divergence in the forecasted inflation pattern stand two major drivers. The first driver refers to the disinflationary impact (similar in terms of size to that in the previous projection) anticipated to be exerted by the cut applied this year to the standard VAT rate and other indirect taxes<sup>85</sup>, overlapping in the course of the first months the still manifest effects arising from broadening

<sup>84</sup> The projected annual inflation rate recalculated by excluding the anticipated one-off impact of the cut in the standard VAT rate to 19 percent exceeds slightly the upper bound of the band of the flat target at the end of the forecast horizon (3.7 percent).

<sup>85</sup> The revised version of the new Tax Code adopted by the Parliament of Romania on 3 September 2015 set forth: (i) the cut in the standard VAT rate from 24 percent to 20 percent as of 1 January 2016 and to 19 percent as of 1 January 2017; (ii) the removal of the special excise duty on fuels as of 1 January 2017; (iii) the lifting of the tax on special constructions and the cut in the tax on dividends from 16 percent to 5 percent as of 1 January 2017; (iv) other adjustments in the excise duties on tobacco products. This Code was, however, subsequently amended via Government Emergency Ordinance No. 50 of 27 October 2015, which approved the implementation, as of 1 January 2016, of the following measures: the cut in the tax on dividends, the broadening of the scope of the reduced 9 percent VAT rate to potable water delivery services and the reduction of the income tax for micro-enterprises with hired workers.

the scope of the reduced VAT rate cut to all food items and from the recent decline in the fuel price. The second driver – reflecting at least partly the materialisation of some risks to the inflation outlook identified during the previous forecasting exercise<sup>86</sup> – consists in the relatively stronger opposite pressures anticipated to emerge from the action of fundamental factors on the forecast horizon; however, they will become visible gradually, in line with the fading out of the transitory impact of the cuts in indirect taxes implemented during 2015 and 2016. These pressures stem mainly from the perspective of a markedly faster advance in excess demand than in the previous forecast, especially in the second part of the projection horizon – as the anticipated reversal of the cyclical position of the economy in 2016 H1 is reconfirmed –, as well as from inflation expectations reaching higher levels; to these add the influences coming from the relative acceleration of the expected dynamics of import prices, as well as from the protracted steady increase in unit wage costs.

The major premises and assumptions underlying this outlook are: (i) the relatively more pronounced easing of fiscal and income policies; (ii) the larger hike in the economy-wide gross minimum wage in 2016; (iii) the preservation of the stimulative real monetary conditions and the consolidation of the lending process; and (iv) the slight improvement in the medium-term prospects for economic growth in the euro area/the EU. Against this background, after falling to a -3.8 percent low in 2016 Q1, under the impact caused by the pass-through of the standard VAT rate cut to 20 percent, the forecasted annual adjusted CORE2 inflation rate enters a fast uptrend, reaching 4.3 percent at the end of the projection horizon.

The characteristics of the new macroeconomic forecast, as well as the need to preserve the consistency of the macroeconomic policy mix, call for a prudent tailoring of the monetary policy stance with a view to ensuring price stability over the medium term in a manner conducive to achieving sustainable economic growth, consistent also

with the monetary policy cycles of central banks in the region and the euro area. Such approach is also warranted by the heightened uncertainty surrounding the current inflation forecast and the significant two-way risks to the inflation outlook induced by fundamentals, also in the context of the election year and of the absence of firm commitments in the economic policy area usually implied by the agreements with the international financial institutions, and amid higher uncertainties about the global economic growth.

From this standpoint, a cause for concern for the central bank are the risks stemming from the possible configuration of the income policy this year and especially from the still uncertain reading and implementation of the future wage law for the public sector that could augment the fiscal policy easing and generate demonstration effects on private sector wages through the potential size of public sector wage hikes. The relevance of these risks could be increased by a potential protracted delay of public investments, especially in infrastructure, and the necessary structural reforms, as well as by a considerably weaker absorption of EU funds at the start of the new multiannual financial framework that could lastingly affect the growth potential and competitiveness of the Romanian economy.

The inflationary potential of such a context would primarily stem from a relative widening over the medium term of the positive output gap, as well as of the mismatch between pay rises and labour productivity gains, implying a faster increase in companies' costs; these developments could be accompanied by a relative deepening of the current account deficit, also due to imports of consumer goods likely gaining relative momentum, as well as by a potential worsening of foreign investor perception of the Romanian economy and financial market, with unfavourable consequences on the sovereign risk premium, external financing costs and the behaviour of the leu exchange rate.

However, the probability of such risks to materialise is expected to be considerably diminished by the present EU fiscal governance framework, as well

<sup>86</sup> November 2015 Inflation Report.

as by Romania's commitments to comply, over the medium-term, with the requirements of the Stability and Growth Pact and of other fiscal rules, together with the significant easing already reported by the public deficit target for this year.

The external environment has instead become a source of mostly disinflationary risks to domestic developments, especially owing to the enhanced uncertainties about the global economic growth and international trade generated by the weakening trend in China's economy and other major emerging economies, as well as by the existing geopolitical tensions. Their persistence could affect the behaviour of domestic inflation primarily through import prices, as well as through the effects exerted on the cyclical position of the economy<sup>87</sup> by the likely slackening, against this background, of the economic growth in the euro area/the EU and, possibly, worldwide. At the same time, however, through their influences on the global risk appetite and relative attractiveness of investments on various financial markets, the worsening developments in the major emerging economies, as well as the increasing divergence between the monetary policy stances of the world's major central banks might trigger, in the short term or occasionally, considerable portfolio shifts worldwide/across the region and implicitly fluctuations in the leu exchange rate with an inflationary impact, particularly in case of a deterioration in domestic fundamentals.

The future evolution of the international oil price, which can generate significant diverging effects on the national economy and inflation, especially on different time horizons, remains also highly uncertain. From the perspective of the

current forecast of medium-term macroeconomic developments, the scenario assuming a lower-than-anticipated oil price trajectory is, however, more likely to materialise. Such an evolution, alongside a possibly weaker-than-expected appreciation of the US dollar against the euro, could amplify the direct and indirect disinflationary influence of fuel price and other imports in the short run, as well as spur in the longer run both domestic demand – through the increase in household real disposable income and the corporate profit – and external demand for Romanian products. A higher-than-expected rise in the external component of aggregate demand could also stem from a more vigorous recovery of the European economies amid the monetary policy measures implemented by the ECB and the depreciation of the euro against the US dollar.

Considering the divergence in the projected trajectory of the annual inflation rate and its major determinants, as well as the accompanying risks induced by the potential fiscal and wage policy stance in the context of this year's elections and by the uncertainty about global economic growth and the recovery of the euro area economy stemming from the developments in China's economy and other major emerging economies, the Board of the National Bank of Romania decided, in its 5 February 2016 meeting, to keep unchanged the monetary policy rate at 1.75 percent per annum. Moreover, the Board decided to further pursue adequate liquidity management in the banking system and to maintain the existing levels of minimum reserve requirement ratios on both leu- and foreign currency-denominated liabilities of credit institutions.

<sup>87</sup> Mainly through the foreign trade, financial and confidence channels.

# Abbreviations

CPI	consumer price index
DG ECFIN	Directorate General for Economic and Financial Affairs
EC	European Commission
ECB	European Central Bank
ESI	Economic Sentiment Indicator
EU	European Union
Eurostat	Statistical Office of the European Union
GDP	gross domestic product
HICP	harmonised index of consumer prices
ILO	International Labour Office
IMF	International Monetary Fund
MPF	Ministry of Public Finance
NBR	National Bank of Romania
NEA	National Employment Agency
NIS	National Institute of Statistics
ROBOR	Romanian Interbank Offer Rate
UVI	unit value index
VAT	value added tax
VFE	vegetables, fruit, eggs
1W	1 week
3M	3 months
6M	6 months
12M	12 months
3Y	3 years
5Y	5 years
10Y	10 years

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