Inflation Report

February 2018

Year XIV, No. 51

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 7 February 2018 and the cut-off date for the data underlying the macroeconomic projection was 1 February 2018.

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

The annual CPI inflation rate strengthened its upward trend in the course of 2017 Q4, standing at 3.32 percent in December, i.e. inside the ±1 percentage point variation band around the 2.5 percent flat target. The inflation bout (+1.55 percentage points from September) was mostly triggered by the rapid sequence of supply-side shocks on the competitive market component of the electricity price, on motor fuel prices and on the prices of some agri-food products. Furthermore, the rapid widening of the positive output gap in the economy created a favourable environment for such pressures to pass through to consumer prices, to which added the pressures from further increasing producer costs incurred by firms. Given that part of these developments were not anticipated, in December, the annual CPI inflation rate stood 0.6 percentage points above the November 2017 *Inflation Report* forecast. The average annual HICP inflation rate saw a strong advance to 1.1 percent in December 2017, which reflected the drop-out of the annual changes affected by the VAT rate cut in January 2016 from the calculation of the indicator.

The annual CPI inflation rate calculated at constant taxes[1] also accelerated in the course of Q4, from 2.7 percent in September to 4.1 percent in December, i.e. above the upper bound of the variation band of the target. The upward movement was broad-based across the CPI basket items, as the prices of most groups of goods and services posted faster positive dynamics in the period under review.

In December 2017, the annual adjusted CORE2 inflation rate rose by 0.6 percentage points versus September, coming in at 2.5 percent (2.6 percent net of the VAT rate cut effect). Core inflation stood 0.5 percentage points above the forecast in the November 2017 *Inflation Report*. This was favoured by the increase in excess aggregate demand in the economy, which eased the transmission of accumulated cost pressures to both non-food and processed food prices. At the same time, behind the swifter dynamics of the food component in the adjusted CORE2 index stood also some supply-side shocks that were manifest at European level in 2017 Q4, yet their influence is expected to diminish in the period ahead.

In 2017 Q3, the positive growth rate of economy-wide unit labour costs slowed down to 10.6 percent (-3.8 percentage points compared to the previous quarter), while further remaining substantial; the main contributor was the advance in labour productivity, attributable to both the cyclical component (visible particularly in trade and construction) and the structural component, with productivity gains triggered by recent investments in the economy benefiting not only industry, but also agriculture, where the most widely grown grain and industrial crops recorded higher yields. Albeit

[1] It excludes the estimated impact of changes in the VAT rate, excise duties and some non-tax fees and charges.

declining, the pressure exerted via this channel on producer costs remains present, the relevance of this evolution to consumer price dynamics being emphasised by the fading out of the offsetting influence of other cost components of firms (costs of raw materials, utilities expenses, transportation costs).

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

In its meeting of 7 November 2017, the NBR Board decided to keep the monetary policy rate at 1.75 percent per annum and to further narrow the symmetrical corridor of interest rates on the NBR's standing facilities around the policy rate to ±1 percentage points from ±1.25 percentage points. In September 2017, the annual inflation rate rose slightly above the forecast, returning inside the variation band of the flat target, in line with the previous assessments. At the same time, the baseline scenario of the forecast, surrounded by risks and uncertainties, highlighted the prospects for inflation to pick up significantly in the short run and subsequently to slow down starting with 2018 Q4. Compared to the previous *Report*, the path of the forecasted annual inflation rate was revised considerably upwards for the short-term horizon, owing almost entirely to the recent and anticipated effects of some supply-side shocks, and slightly downwards for the second part of the projection interval.

The uncertainties and risks associated with the projection stemmed from both the domestic and the external environment. On the domestic front, they were enhanced by the fiscal and income policy conduct, also in the context of uncertainties about the construction of the 2018 public budget, as well as by the outlook on administered prices (natural gas, electricity) and on volatile food prices. On the external front, the uncertainties and risks posed by the economic growth and inflation developments in the euro area and worldwide, the escalation of geopolitical tensions and by the monetary policy stances of major central banks (ECB, Fed) and their implications on the regional and local financial markets remained relevant.

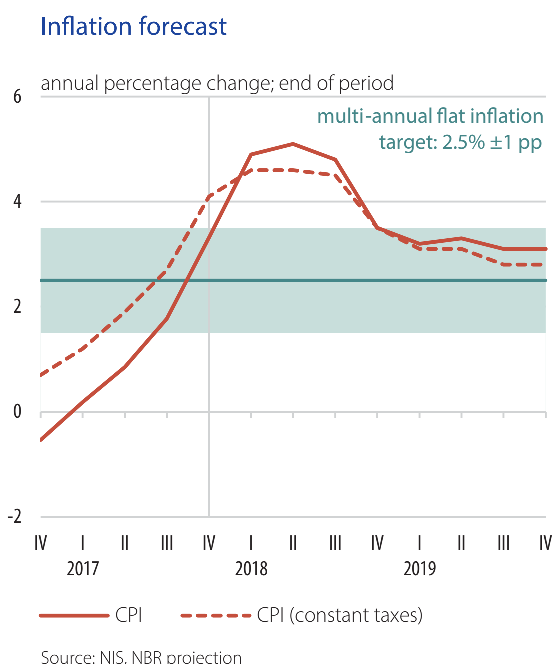
Subsequently, the statistical data confirmed the further increase in the annual inflation rate in the first two months of 2017 Q4 to 3.23 percent in November, below the upper bound of the variation band of the target, but higher than the previous forecast. Almost all CPI basket items contributed to the step-up in inflation. Behind the dynamics stood primarily supply-side factors, the largest contributions being made by administered prices, as a result of the hike in the electricity price, as well as by the fuel price, given the rise in the excise duty on motor fuels and the advance in international oil prices. Core inflation also had an important contribution, its annual rate climbing to 2.3 percent in November. The dynamics reflected, apart from the external influences visible on the processed food segment, the inflationary pressures associated with excess demand, the pace of increase of unit wage costs, as well as the effects produced by the developments in the exchange rate of the national currency. The economic growth saw a new, faster-than-expected acceleration to 8.8 percent in 2017 Q3. Household consumption continued to be the main driver, with gross fixed capital formation making a significant positive contribution for the first time in six quarters.

In the Board meeting of 8 January 2018, the latest assessments reconfirmed the prospects for the annual inflation rate to continue to pick up in the coming months. The main determinants of the dynamics were supply-side factors, as well as the rising pressures from fundamentals, overlapping in the early months of 2018 with the inflationary base effects associated with the indirect tax cuts, the scrapping of a number of non-tax fees and charges and with the decline in administered prices in 2017. That outlook was further surrounded by heightened risks and uncertainties, stemming primarily from the fiscal and income policy stance, the volatility of the international oil price and from the economic growth rate in the euro area and globally, *inter alia* amid a slow normalisation of the monetary policy stances of the major central banks.

Based on the data available and in the context of the identified risks and uncertainties, the NBR Board decided to raise the monetary policy rate to 2 percent per annum, from 1.75 percent per annum. Moreover, the NBR Board decided to raise the deposit facility rate to 1 percent per annum and the lending (Lombard) facility rate to 3 percent per annum.

Inflation outlook

The annual CPI inflation rate is projected to reach 3.5 percent at the end of 2018 and 3.1 percent at the end of 2019. Compared to the November 2017 *Inflation Report*, the end-2018 projected figure was revised upwards by 0.3 percentage points. The annual inflation rate will temporarily hover above the upper bound of the variation band of the target, nearing 5 percent during the first three quarters of this year and standing higher than the levels projected last November. At this horizon, the revision owes primarily to larger projected contributions from the exogenous components of the consumer basket, namely administered prices, fuel prices and volatile food prices, but also to stronger pressures that have been building up at the level of core inflation already since end-2017. The annual CPI inflation rate at constant taxes exceeded the upper bound of the variation band of the target as early as the end of 2017, when it came in at 4.1 percent, being envisaged to slow down to the upper bound of the band at the end of 2018 (3.5 percent) and stand inside the band at the end of 2019 (2.8 percent).



In 2017, economic growth is estimated to have gathered significant momentum to around 7 percent against 2016. The upward revision compared to the previous projection mainly reflects the unexpected contribution from the agricultural sector, which also impacted the developments in the final consumption component correlated with this sector's performance. Throughout the forecast interval, private consumption dynamics are anticipated to slow down in both 2018

and 2019, mirroring the developments in the real disposable income of households. At the same time, the annual rate of increase of gross fixed capital formation will strengthen at positive levels starting already in 2017, fluctuating somewhat in 2018 and 2019, depending also on the pace of absorption of EU structural and investment funds. Given the significant contribution of the agricultural sector to GDP performance in 2017 and the projected dynamics of production factors, the domestic output gap is forecasted to reach levels similar to those in the previous round for 2017 and 2018, but narrower for 2019, amid the reconfiguration of the real broad monetary conditions to close-to-neutral values at this horizon.

In line with the developments in domestic demand, the dynamics of imports of goods and services are seen decelerating gradually, while still outpacing those of exports thereof over the entire projection interval. Against this background, net exports will have a negative contribution to GDP growth, causing the current account deficit to stand in the medium term at values slightly higher than 3.5 percent of GDP. External deficit financing is envisaged to further be covered by stable, non-debt-creating capital inflows, whose share in nominal GDP is, however, seen decreasing against historical values as early as 2017. To this will contribute mainly the weaker absorption anticipated for EU structural and investment funds, given the new 2014-2020 multiannual financial framework. Under the circumstances, the projected reopening of the current account deficit, largely on the back of swifter consumption, carries the potential to jeopardise macroeconomic equilibria, especially as the developments in Romania's current account balance are still divergent from those in the other emerging economies across the region.

The annual adjusted CORE2 inflation rate is forecasted to reach 3.3 percent at the end of 2018 and 3.6 percent at the end of next year. After the pick-up seen at the end of 2017, the indicator will further post an upward path over the following quarters, reaching levels higher than those envisaged in the previous *Inflation Report* for the first three quarters of this year; subsequently, assuming the softening of supply-side shocks that impacted agri-food prices at the end of 2017, the annual rate of adjusted CORE2 index will stand at a lower value at the end of 2018. Although during 2019 the annual core inflation will post levels similar to those in the previous forecast, they will exceed the upper bound of the variation band of the target staying close to 3.7 percent. The path of the annual core inflation rate will mirror both the rise in economic agents' inflation expectations and the persistently high excess aggregate demand. As inflation rates in Romania's main trading partners remain well below 2 percent and the expansion in consumption is accommodated more by imports rather than by domestically-produced goods, the external environment will continue to put downward pressure on the dynamics of domestic core inflation.

The cumulative contribution of inflation components beyond the scope of monetary policy to the annual CPI inflation rate is seen at 1.6 percentage points for the end of 2018, a value revised markedly upwards (by 0.6 percentage points versus the previous *Inflation Report*). The breakdown shows that the rate of increase of fuel prices was revised upwards, more significantly in 2018, mirroring chiefly the dynamics of the international oil price. As for administered prices, their path largely reflects the

unexpected hikes in natural gas prices for households in early 2018, being currently marked by uncertainties related to the developments in electricity prices after the liberalisation of this market was completed at the end of 2017.

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

The balance of risks to the annual inflation rate projection is assessed as being tilted to the upside compared to its path in the baseline scenario. Relevant specific risks come from the fiscal and income policy stance, the evolution of the wage-productivity gap in the private sector amid ongoing labour market tightness, as well as from administered price dynamics. The current external environment is deemed to have a neutral impact on this balance.

Given the need to implement an adequate macroeconomic policy mix, the fiscal and income policy stance remains a matter of concern amid uncertainties regarding possible reconfigurations of public budget coordinates over the projection interval. Under these conditions, both a fiscal and income policy stance that is more pro-cyclical than envisaged in the baseline scenario and the possible additional corrective fiscal measures in the course of 2018 so as to meet the deficit target could trigger deviations from the baseline scenario coordinates. Looking ahead, the set of measures having the heftiest impact on the inflation outlook would be associated with fiscal stimuli implying the further compression of public investment spending in favour of current expenditure.

Concurrently, the persistence of tight labour market conditions over longer time spans could entail faster growth rates of disposable income than those assumed under the baseline scenario and therefore, stronger inflationary pressures. Against this backdrop, in the absence of comparable productivity gains reported by local firms, these additional consumption resources could fuel imports of goods and services and thus could lead to a wider external imbalance.

On the external front, further relevant are the uncertainties surrounding the impact that the economic policies pursued by the US Administration, the future monetary policy stances of the Fed and the ECB, and the Brexit talks may have on the global macroeconomic coordinates in an environment characterised by resurgent geopolitical tensions. The effects on the global macroeconomic framework could differ over the short term and medium term respectively, as at the latter horizon global financial conditions could tighten amid the gradual monetary policy tightening pursued by the Fed, thereby triggering regional/global portfolio shifts.

Upside risks to the inflation outlook are associated with the administered price dynamics, given the string of recent adjustments thereto and the lack of more precise calendars of the competent authorities regarding future changes in these prices. Turning to volatile food prices, inherent uncertainties persist associated with the impact of weather and specific market conditions on the supply of agricultural produce both domestically and internationally.

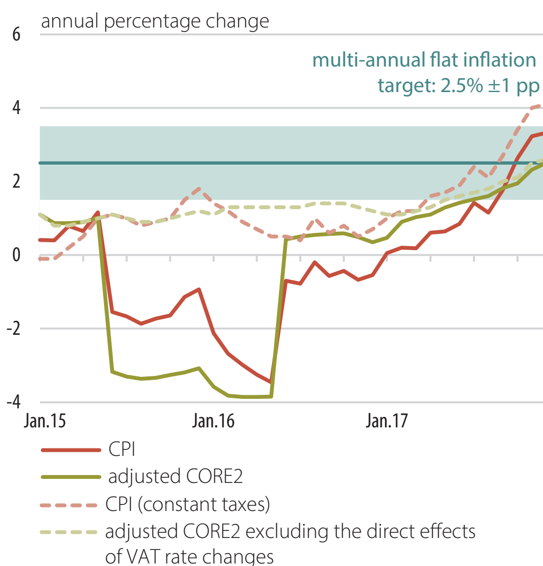
Monetary policy decision

In view of the outlook for the annual inflation rate to rise considerably above the upper bound of the variation band of the target over the following quarters, due mostly to the relative strengthening of inflationary action of supply-side factors and to the pressures from fundamentals, and hence given the risk of de-anchoring the medium-term inflation expectations, the Board of the National Bank of Romania decided in its meeting of 7 February 2018 to increase the monetary policy rate by 0.25 percentage points to 2.25 percent per annum. Moreover, the deposit facility rate was raised by 0.25 percentage points to 1.25 percent per annum and the lending (Lombard) facility rate was added 0.25 percentage points to 3.25 percent per annum. In addition, the NBR Board decided to maintain the existing levels of minimum reserve requirement ratios on both leu- and foreign currency-denominated liabilities of credit institutions.

1. Inflation developments

The annual CPI inflation rate strengthened its upward trend in the course of 2017 Q4, however ending the year inside the ±1 percentage point variation band around the 2.5 percent flat target, i.e. at 3.32 percent. The inflation bout (+1.55 percentage points from September) was triggered by a rapid sequence of supply-side shocks: the increase in electricity price on the local competitive market, the hike in the excise duty on motor fuels, higher crude oil prices, the hefty rise in prices of some agri-food products, amid a (temporary) supply deficit at European level. The fast widening of the positive output gap in the economy created a favourable environment for such pressures to pass through to consumer prices as well as for indirect effects related to higher prices of certain goods (such as energy) to appear. These developments were spurred by the gradual increase in inflation expectations of economic agents in all business sectors. Against this background, the annual adjusted CORE2 inflation rate also rose notably (+0.6 percentage points to 2.5 percent at end-2017), chiefly on the back of the food sub-group, which was more exposed to supply-side shocks (Chart 1.1).

Chart 1.1. Inflation developments



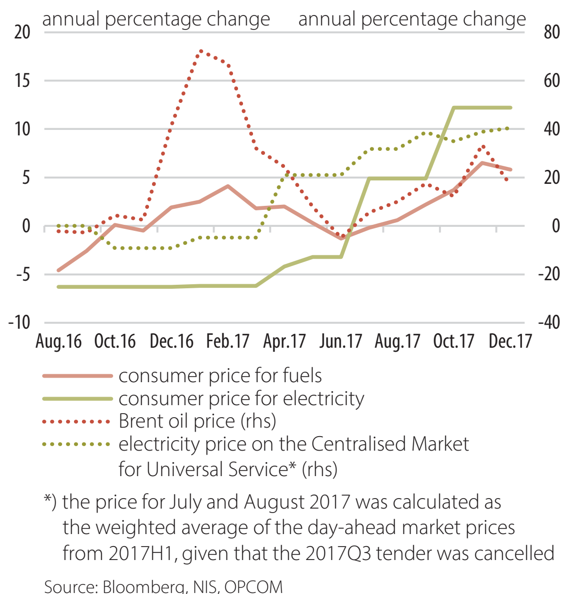
Source: NIS, NBR calculations and estimates

Similarly to the previous quarter, the final part of the year was marked by the upturns in energy prices. The annual growth rate of fuel prices came close to 6 percent in December (from 2.2 percent in September), as the second step of hiking the excise duty on motor fuels at the beginning of October overlapped with the consolidating upward path of the oil price at over USD 60 per barrel – above the forecast in the previous *Inflation Report* –, following the extension of oil output cut agreement and the robust global demand. Moreover, the likewise important non-motor fuels component (firewood, coal) witnessed a notable increase in prices, possibly connected to the smaller timber quantity offered for auction by the authorities. At the same time, electricity prices rose substantially for the second quarter in a row (the annual dynamics reaching 12 percent in December), as a result of the wide fluctuations on the electricity competitive market seen during the year being incorporated in the end-user price (Chart 1.2).

Food prices exerted stronger pressures in 2017 Q4, their annual growth rate standing at around 4 percent in December, up 1.3 percentage points from September. Behind this stood not only volatile prices (vegetables, fruit, eggs),

but also processed food prices included in core inflation (+1 percentage point to 3.3 percent). Faster growing prices reflected, to a large extent, favourable demand conditions, which enabled the pass-through not only of previously built-up pressures related to production costs (labour, some agri-food commodities), but probably also of emerging pressures on prices for several categories of energy goods; to a certain extent, the price movements observed on some market segments may be connected to recent investments that some manufacturers have made in order to raise the product quality. The relevance of the above-mentioned domestic factors to explaining the dynamics of food prices in the last three months of 2017 is also highlighted by the behaviour of external agri-food prices that followed a steady downward path starting with 2017 Q2, amid good crops worldwide. This slowdown was witnessed by milk and meat segments as well, which were an important source of pressure in the first part of the year. An exception were the prices of butter and eggs, the (temporary) supply shortages at European level, mainly in 2017 Q4, leading to a substantial rise in producer prices (also visible in local consumer prices; Box 1).

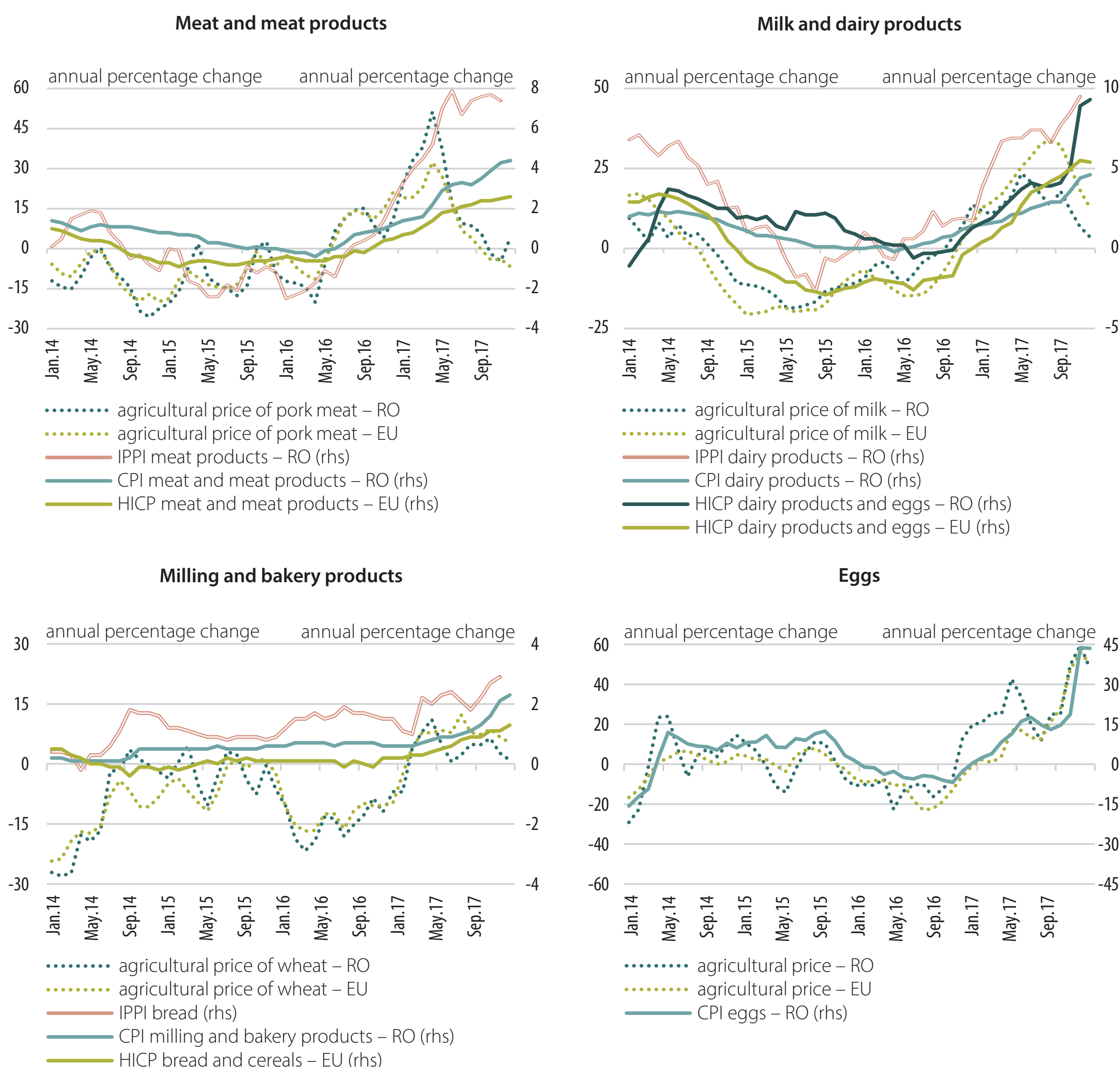
Chart 1.2. Energy



Box 1. Food price dynamics in 2017 Q4

The step-up in the annual growth rate of consumer prices for food items in 2017 Q4 (up 1.3 percentage points from the previous quarter) particularly occurred in four product categories: eggs, milk and dairy products, meat and meat products, and milling and bakery products respectively. Although the evolution may be associated, to a great extent, with domestic conditions (a wider positive output gap, rising costs for labour and utilities), in some cases, the external component played a decisive part. This is mainly driven by manufacturers' and retailers' integration trend into global value chains, which results in an increasingly strong correlation of Romanian prices with EU prices along the production chain (from the farm gate to the end-user; Chart A).

The largest contribution to a faster food price inflation in 2017 Q4 came from developments in the price of eggs (+0.5 percentage points), the annual rate trebling during the analysed period (from 14.7 percent in September to 43.6 percent in December 2017). This shock was common to EU Member States, being determined by the severe contraction in supply at EU level, after a banned pesticide was found in some batches sold in many Member States. As a result, the farm gate price of eggs at EU level peaked in November (annual dynamics of almost 60 percent), yet a correction is likely in the near future, as the supply is rebalancing.



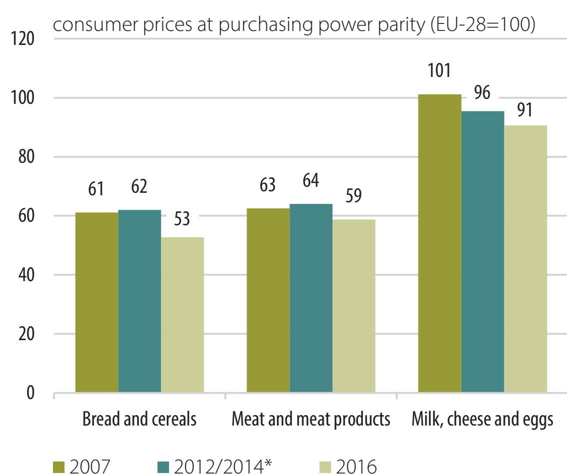
Note: Both Romanian and EU consumer prices are calculated at constant taxes.

Source: EC, Eurostat, NIS, NBR calculations

The price of butter also surged (the annual pace of change went up by 14 percentage points, to 22.8 percent in December), driven by external factors, i.e. rising global demand and lower supply from the main European producers (Germany, France). In fact, milk and dairy product prices have increased continuously starting with 2016 H2, reaching an annual growth rate of 4.6 percent in December 2017. Behind this stood the downtrend in the dairy cow population throughout the EU, as the Russian ban on food imports in 2014 and the removal of milk quotas in 2015 had led to massive price declines, thus reducing the sector's attractiveness. Against this background, 2017 recorded significantly higher agricultural prices in annual terms at EU level (+23 percent), Romania witnessing a more moderate growth (+14 percent). Towards the end of 2017, all product categories (including butter) posted slower

price dynamics, with an increase in milk collection being expected over the next few years amid productivity gains at EU level, driven by the high replacement rate of livestock with superior breeds. Investment was facilitated by the improved financial standing of farmers, who benefited from more advantageous sale prices as well as lower fodder costs over the past few years.

Chart B. Consumer price convergence



*) the year prior to the VAT rate cut (2012 for bread and cereals, 2014 for meat, milk, cheese and eggs)

Source: Eurostat

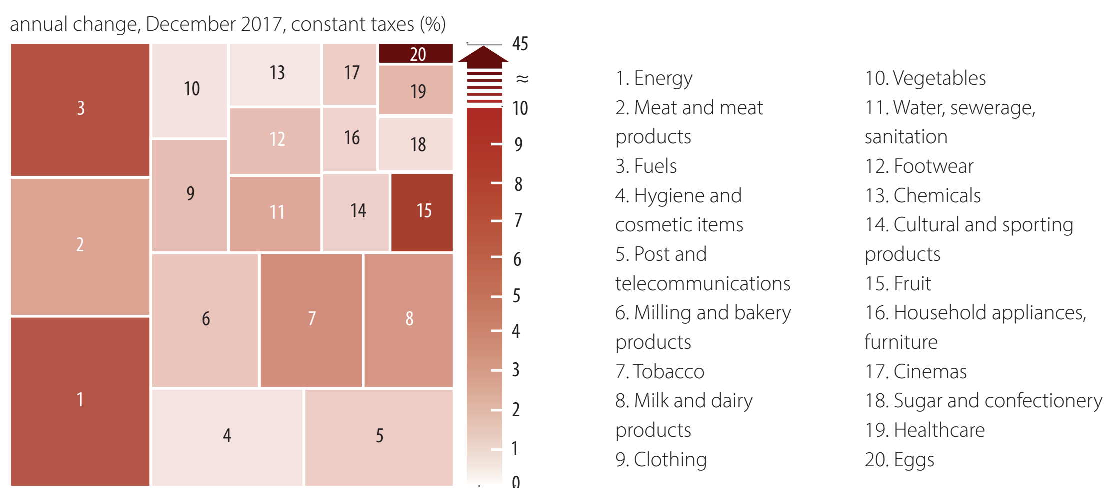
Although locally sourced raw materials prevail on the national milk processing market, domestic consumer price dynamics are more correlated with external developments – the correlation coefficients with agricultural and consumer prices in the EU for the last three years stood at 80 percent and 84 percent respectively, higher than the 70 percent coefficient recorded in relation to domestic agricultural prices. The explanation lies with the integration in global value chains of not only the retail segment, via the presence of large EU retailers, but also the processing segment, which is also dominated by international companies. The latter optimise production at European level, so that certain products of the foreign-owned local brands are manufactured abroad and then imported for sale on the domestic market. The decision to relocate part of the production to other Member States was likely made for cost efficiency reasons, given that structural deficiencies, such as the excessive fragmentation of agricultural land, as well as low(er) tech productive capacities, entail higher production costs locally. In terms of fragmentation, the most conclusive case is probably that of milk producers, as 90 percent of the dairy cow population can be found in individual holdings, the majority of which are small-scaled, with an average of 2 heads/holding. Therefore, in the absence of investment enabling the observance of manufacturers' quality/hygiene and quantity requirements, which are difficult to meet through the farmers' own efforts alone, only a quarter of total production enters processing, the remainder being intended for self-consumption, sale on the agri-food market and unorganised trade. Under these circumstances, beside the additional costs required by the processing of the collected milk, the farmers' bargaining power is very weak, so the consumer price is close to the EU average, while the farm gate price is often the lowest in the EU (Chart B).

2017 Q4 also saw substantial price increases for milling and bakery products, and meat and meat products respectively, yet this was mainly due to domestic factors, associated with demand conditions and rises in certain cost categories (labour, utilities). Turning to the cost of agri-food commodities, no pressures can be cited in the period under review, especially in the former's case, as the agricultural output has been high globally and even exceptional domestically. In the latter's case, worth mentioning is the persistently high annual growth rate of the price of

pork meat (5.5 percent in December), although on a decline from 2017 H1 (after reaching a 6.1 percent peak in June). International agricultural prices for pork meat products rose swiftly in 2017 H1, following the strong rise in global demand, especially coming from China, which generates almost half of consumption worldwide. As a matter of fact, the slowdown in Chinese demand was the factor that led to a trend reversal in the second half of the year.

Apart from the higher increases in energy and food prices, the consumer basket items witnessed broad-based faster annual price dynamics (Chart 1.3), amid the further widening trend of the positive output gap in the economy and the still swift growth rate of unit labour costs. In fact, in the case of adjusted CORE2 inflation, the average pace of increase of prices exceeded the average for the September-December period in the past eight years, while for the non-food component, which best reflects demand-side pressures, it even returned to levels comparable to the pre-crisis values.

Chart 1.3. Developments in the prices of main CPI basket items

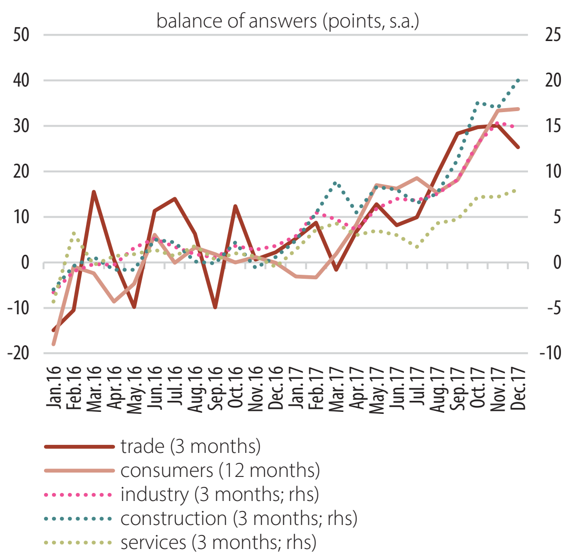


Note: The chart shows items holding about 86 percent of the CPI basket in 2017. A rectangular area is proportional to the item's share in the CPI basket.

Source: NIS, NBR calculations and estimates

2017 Q4 saw a heightening of inflation expectations, regardless of time horizon or type of economic agent (Chart 1.4). Specifically, local companies across the economy (i.e. in retail, services, industry and construction) heavily adjusted their expectations upwards regarding price developments over the following three months, the balance of answers of this indicator exceeding the long-term average for the majority of sectors. Consumers' perception shaped a similar picture, the balance of answers regarding their expectations over the 12-month horizon practically doubling in 2017 Q4 compared with the previous quarter. Financial analysts also pointed to an upward adjustment in their inflation expectations, yet they continued to place the annual inflation rate inside the variation band of the flat target, for both end-2018 and end-2019.

Chart 1.4. Expectations on price developments



Source: EC-DG ECFIN/NIS Survey

The average annual HICP inflation rate rose substantially at end-2017, up to 1.1 percent in December, reflecting, beside the current developments, the dropping out from its calculation of the annual changes impacted by the VAT rate cut in January 2016. Thus, the differential versus the EU average contracted to -0.6 percentage points, given the subdued pick-up in the EU inflation rate.

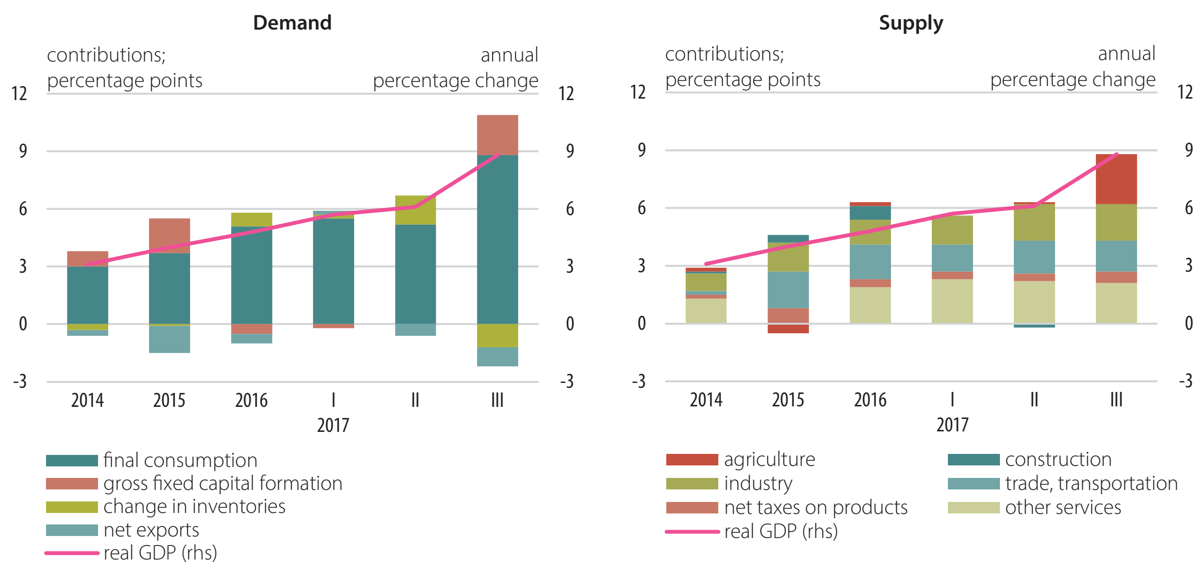
The annual CPI inflation rate surprised to the upside in 2017 Q4 as well, the difference versus the projection in the previous *Inflation Report* standing at 0.6 percentage points. The most significant sources of error were the food price inflation (especially for eggs) as well as the larger-than-expected rise in fuel prices. The considerable (and only partly anticipated) increase in cigarette prices had a similar, albeit lower, contribution.

2. Economic developments

1. Demand and supply

In 2017 Q3, the Romanian economy continued to post one of the fastest annual growth rates across the EU-28 (8.8 percent), the influence of cyclical factors being accompanied by a remarkable agricultural performance. Similarly to the previous quarters, consumer demand made the prevailing contribution to the rise in real GDP, while the rebound in investment is also worth mentioning, with the step-up in equipment purchases adding to the cyclical upturn in housing demand. However, the unsatisfactory developments in infrastructure investment further erode the strengthening of capital intensity, hampering structural investment. Domestic absorption continues to be covered by imports to a significant extent, which offsets the favourable influence of the upward path of exports, supported by the pick-up in foreign direct investment and higher demand from EU countries (Chart 2.1).

Chart 2.1. Contributions to economic growth



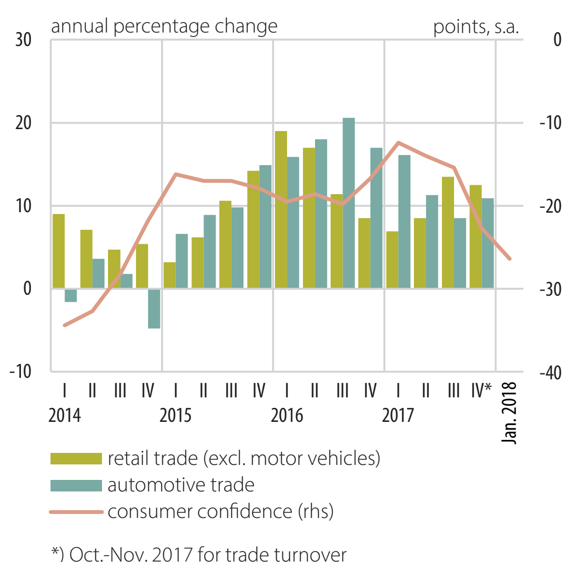
Source: NIS, NBR calculations

Households' consumer demand grew at a faster annual rate (12.5 percent), as the purchasing power remained elevated amid a new set of pro-cyclical income policy measures implemented as of 1 July 2017, as well as in the context of further stimulative labour market conditions in terms of wages and employment. Apart from the advance in own financial sources, bank loans were more intensely resorted to (up by about 18 percent in terms of volume) for purchases of consumer goods. The larger appetite for consumption reflected also in the retail

trade turnover volume, the annual dynamics of which (circa 13 percent) stood significantly above the average for the previous period.

The annual growth rate of household consumption will likely remain fast in 2017 Q4 as well, but a new step-up is uncertain. This outlook is suggested by the recent developments in the turnover volume of trade and services (a slightly slower advance in October-November compared to the Q3 average) and by the consumer confidence indicator. The latter saw a gradual worsening over the last months of the year amid certain concerns about the effects of the Tax Code amendments on household incomes and about the path of interest rates and exchange rate (Chart 2.2).

Chart 2.2. Trade and household confidence



*) Oct.-Nov. 2017 for trade turnover

Source: NIS, EC-DG ECFIN

Aside from retail purchases, the faster increase in household consumption in Q3 was also bolstered by those components whose trajectory is correlated with the evolution of agricultural production, namely self-consumption, purchases on the agri-food market and home industry, given that the bumper crops of 2017 pushed up this sector's contribution to GDP growth to 2.6 percentage points.

In 2017 Q3, the budget execution resulted in a deficit of only lei 0.5 billion (0.1 percent of GDP[2]) after a lei 7.8 billion deficit (0.9 percent of GDP)[3] in the previous three months. Behind this evolution stood mainly the rise in budget revenues[4], on account of the climb in receipts from non-tax revenues[5], as well as from VAT, excise duties and social security contributions. Moreover, public spending fell slightly[6], mostly under the impact of lower interest expenditure, subsidies and expenditure on projects financed from non-repayable external funds; social security spending exerted an opposite, albeit lower, impact[7].

For the first time in 2017, gross fixed capital formation made a visible contribution to the annual increase in real GDP. However, mention should be made that the 8 percent pick-up in this aggregate demand component is strongly marked by a statistical effect associated with the -7.2 percent quarterly change in July-September 2016[8] dropping

[2] The calculations for 2017 used the GDP released in the context of the budget revision approved in December 2017.

[3] The evolution was broadly similar to that seen in the same year-earlier period, given that, in 2016 Q3, the general government budget execution posted a small surplus (lei 0.2 billion) after a lei 6.9 billion deficit in the preceding quarter.

[4] In annual terms, total revenues reported an 8.6 percent real growth rate, similar to that in Q2.

[5] The annual dynamics of which continued to gain momentum (to reach 27.4 percent from 23.1 percent in real terms), *inter alia*, on account of receipts from dividends.

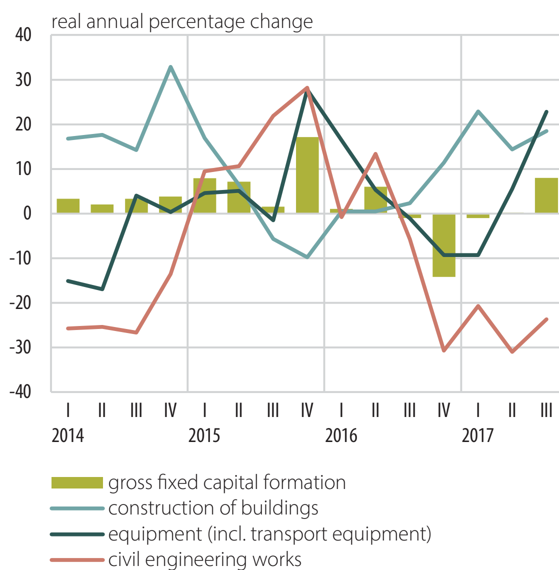
[6] The annual pace of increase of total expenditure rose, however, to 9.8 percent in real terms from 9.0 percent in Q2.

[7] In the context of an advance in its annual real change (to 13.6 percent from 9.2 percent), also amid the 9 percent raise in the pension point starting 1 July 2017 (to lei 1,000).

[8] 2016 Q3 was affected by the completion in H1 of some EU-funded projects under the 2007-2013 financial framework and benefited no longer from the incentive given by June local elections to infrastructure investment.

out of the calculation of the annual dynamics. In the period ahead, investment will probably continue to expand, but a step-up in its dynamics is not expected, considering the diverging signals detected on the main segments – on the one hand, favourable signs from equipment purchases and, on the other hand, a slowdown in housing demand and an ongoing decline in civil engineering works (possibly slower, as a result of the increase towards year-end in EU fund disbursements under the current financial year; Chart 2.3).

Chart 2.3. Investment



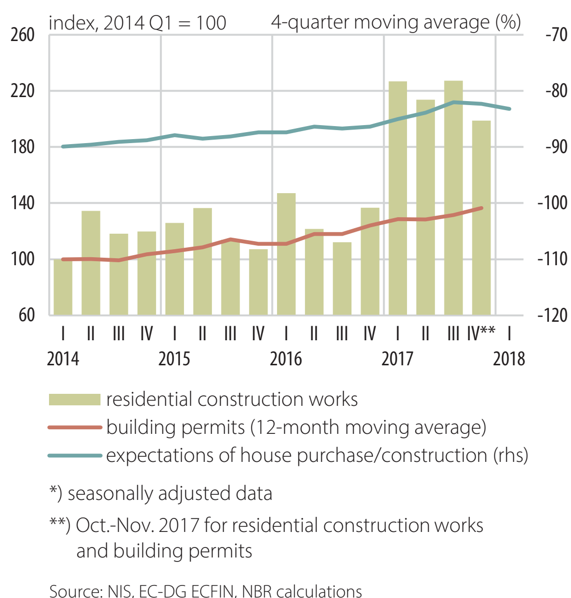
Source: NIS, NBR calculations

The recent upward evolution of the economy enabled the non-financial corporations sector to earmark more substantial resources for capital investment, as shown by the sharp acceleration in the annual dynamics of equipment purchases in 2017 Q3 (4 times to 22.8 percent). The prospects remain favourable given that confidence indicators in industry and services improved October through December compared to the Q3 average and that the volume of orders from local companies placed with capital goods producers July through November recorded a 5 percentage point faster annual growth rate than the H1 average (i.e. 13.4 percent). As for the financing of capital investment, the increasing support from foreign investors is noteworthy, the value of reinvested earnings in the Romanian economy climbing three times in December 2016 – November 2017 compared to 2015. By sub-sector, industries such as the manufacture of parts for motor vehicles, electrical equipment (including household appliances), metallurgical industry, as well as machinery and equipment showed the greatest interest in opening or increasing production capacities. In the latter case, mention should be made of the investment to expand production capacities for agricultural equipment. This was triggered by agricultural producers having stepped up their capital investment over the last years – especially in the large-scale cultivation of cereals and oleaginous plants – by using, *inter alia*, EU funds. In this respect, the agriculture development projects capitalised to a greater extent on the opportunity to use non-repayable assistance than cohesion policy projects, as seen under both the present multiannual financial framework and the previous one (2007-2013).

The construction of residential buildings expanded further (the volume of works actually doubling in Q3) amid the sustained rise in household disposable income, concurrently with a strong appetite for borrowing, spurred by still attractive lending conditions. Housing demand is likely to see its growth pace slowing down in the period ahead, as also suggested by households' declining intention to build/purchase a home in the following 12 months[9], as a result of the gradually lower government

[9] According to the NIS/DG ECFIN Survey.

Chart 2.4. Construction of dwellings*

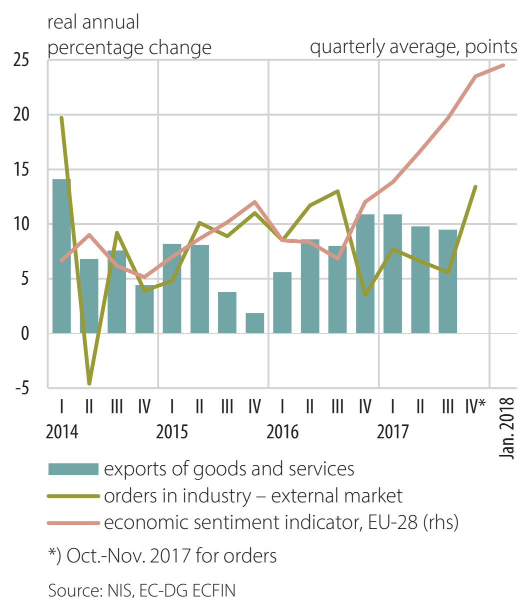


*) seasonally adjusted data

**) Oct.-Nov. 2017 for residential construction works and building permits

Source: NIS, EC-DG ECFIN, NBR calculations

Chart 2.5. Exports of goods and services



*) Oct.-Nov. 2017 for orders

Source: NIS, EC-DG ECFIN

support provided under the "First Home" programme and of the potential rise in funding costs (Chart 2.4).

Public investment continued to make a strongly negative contribution to the annual dynamics of gross fixed capital formation, with the volume of civil engineering works standing further much lower in 2017 Q3 than in the same year-earlier period (-23.7 percent), owing also to the weak absorption of EU structural and investment funds under the 2014-2020 financial framework. Although the disbursements of EU investment funds gained momentum in the final months of the year, the construction works for infrastructure projects will see at most a less sharp downtrend.

Exports of goods and services stayed on an upward path (9.5 percent, annual change). The outlook for external demand remains favourable, as suggested by the latest forecasts on the euro area economic growth, as well as by the progressive improvement in the confidence indicator at EU-28 level during 2017 (it currently stands close to historical highs). The upbeat expectations of main trading partners mirror in the 8.8 percent rise in the portfolio of external orders received by local industrial companies in the period from July to November 2017 (the annual growth pace stands 1.7 percentage points above the H1 average; Chart 2.5).

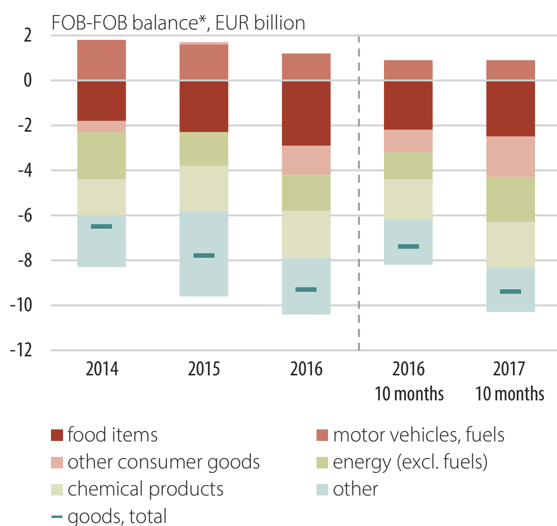
Exports of goods picked up 6.5 percent, the main contribution coming further from the sales made by industries such as the manufacture of transport equipment and the related sub-sectors. The turnover volume dynamics of the automotive industry on the external market remained fast-paced, i.e. 15 percent in annual terms, and the opening of new production facilities in the countries in the region will further translate into high demand for the products of local specialised suppliers in the period ahead as well. Apart from the positive performance of exports of parts and accessories, expectations appear optimistic also for sales of motorcars, considering the start of production of a new Ford model[10] this autumn and the official launch of the new Duster.

[10] The local official launches on the European markets are scheduled for the beginning of 2018.

Exports of metal products also continued to follow an upward trend, benefiting from the improved access on the external markets, in the context of measures adopted by the European Commission to reduce unfair competition from some extra-EU countries. Moreover, considering the investment made to better cover the portfolio of external orders, the sub-sector's performance is seen remaining positive. Contributions to export growth were also made by petroleum products and by some vegetal produce, on account of crops that touched record highs in 2017. At the opposite pole were further the exports of wearing apparel, which were hit by the persistent competitiveness losses facing the manufacturing sector.

Imports of goods and services kept increasing at a swift pace in Q3 (11.8 percent in real terms), spurred by the strong advance in domestic demand and exports. Rising purchases were seen for intermediate goods and capital goods, associated with both the integration of certain industrial segments in global value chains (imports of automotive parts) and the recovery of investment in the industrial sector (machinery, equipment, measurement and control devices).

Chart 2.6. Balance on trade in goods



*) excluding goods produced under processing arrangements

Source: Eurostat, NBR calculations

Consumer demand continued to boost imports, which expanded in terms of volume by about 9 percent on this segment as compared with the same year-earlier period. This evolution, along with the modest increases in exports of consumer goods over the past years, fuels the persistent erosion effect on the trade balance generated by the balance on trade in consumer goods (Chart 2.6). The trade deficit in consumer goods is especially ascribable to food items, a segment posting unconvincing developments, decoupled to a large extent from the upward path of the domestic demand of such products, which is once again indicative of competitiveness issues (Box 2).

The worsening trade balance continues to be partly offset by further significant net receipts from international services. However, their counterbalance was less firm during the year (69 percent in the first 11 months as compared with over 83 percent in 2015 and 2016), mainly on account of households' increased resort to foreign travel and transportation services, due to their higher purchasing power. In addition, there are further negative signals in freight transport by road, which could affect the longer-term development of this sector and, implicitly, the receipts from abroad, given the prevailing position of the international freight activity in the transporters' business. Specifically, in the period from January to November 2017, sales of commercial vehicles weighing more than 3.5 tonnes witnessed a trend reversal[11],

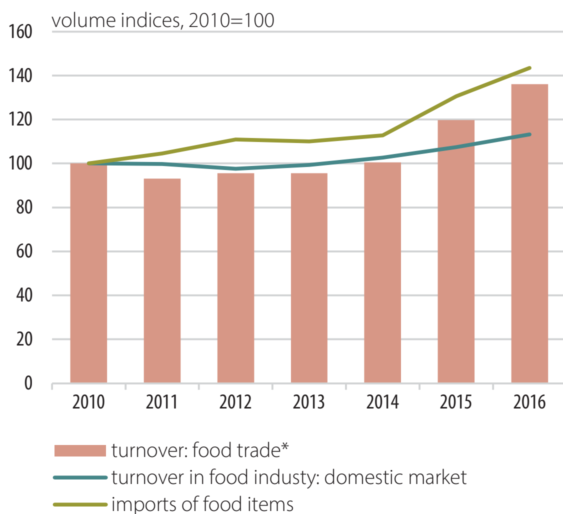
[11] Contraction by 23 percent after the large increases seen in the previous years (Source: Automotive Manufacturers and Importers Association).

the main reasons invoked by the haulage contractors for the significant setback in investment being the skilled labour shortage, the poor local road infrastructure, as well as the legislative amendments in some European countries.

Box 2. Sources of trade deficit in food products

The international trade deficit in food products[12] has widened continuously over the past years to reach EUR 2.8 billion in 2016 and EUR 2.6 billion in the first ten months of 2017, currently accounting for more than one quarter of the total deficit on trade in goods. The recent advance in the domestic consumption of food products, which benefited from both general stimuli (such as income increases) and specific incentives (broadening the scope of the reduced VAT rate to all food items), reflected to a relatively low extent in the activity of food industry, so that the demand surplus was broadly accommodated via imports (Chart A). These developments brought to the fore again the situation in the domestic agri-food sector, which ranks among the least performing sectors among its EU peers (despite Romania's high agricultural potential), as also shown by other competitiveness indicators, i.e. export market share, revealed trade advantage, productivity. Therefore, this box aims to give an account of the sources of competitiveness deficiencies in this sector.

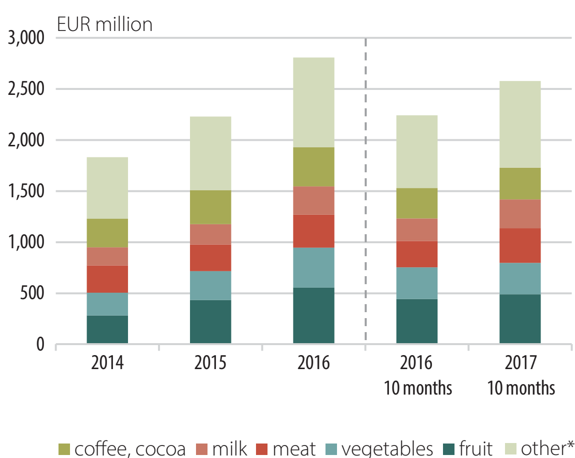
Chart A. Demand and supply of food items



*) including beverages and tobacco products

Source: NIS, Comext, NBR calculations

Chart B. Composition of the food trade deficit



*) bakery products, fish, sweets, etc.

Note: The highlighted categories also include manufactured products.

Source: Comext, NBR calculations

Analysis by product category

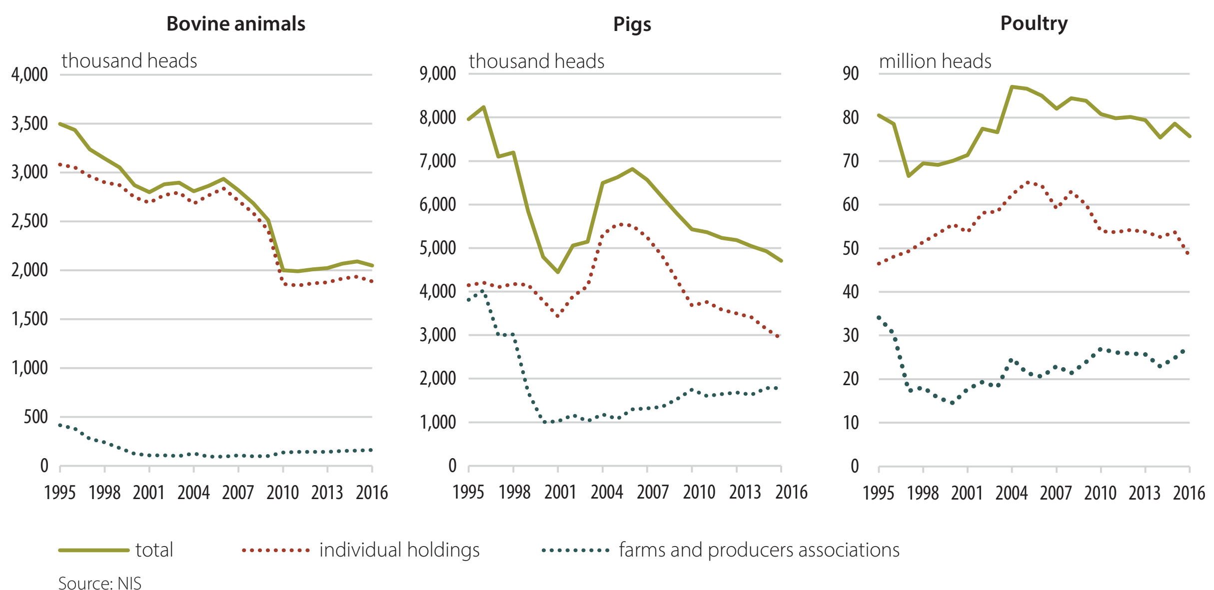
The main imbalances identified refer to four categories of products, i.e. fruit and vegetables, coffee and cocoa, milk and dairy products, and meat and meat products (Chart B). Although there are items (such as tropical fruits, coffee, cocoa) where contributions to the trade deficit may be regarded as normal, on account of weather conditions in Romania, in most cases, shortfalls hide structural competitiveness issues affecting the production chain, particularly the upstream stages.

Specifically, in the case of fruit and vegetables (which make up for one third of the trade deficit generated by food items), it is surprising

[12] The analysis in this box refers to food items, excluding livestock, cereals and oleaginous plants.

to notice the prevailing contribution of traditional local produce, such as apples, grapes, tomatoes, potatoes. Leaving aside the influence of the seasonal factor, the production of these crops stagnated or even went down in the past 10-20 years. This was first of all associated with the absence of yield gains and then with the overall decline in croplands, including the greenhouse surfaces. For instance, no matter how surprising it would be from the standpoint of local potential and tradition, apples are among the main sources of fruit trade deficit, given that, in 2016, Romania held over 10 percent of the total apple tree area in the EU, but accounted for merely 3.6 percent of the total apple production. The difference between the local yields and the EU average yields is even more pronounced for tomatoes, as Romania holds 9.1 percent of the tomato cultivated area and makes up for only 2.4 percent of the total tomato production. In fact, the production of fruit and vegetables is generally well below potential, the farmers' poor investment activity having a negative influence on several areas such as the mechanisation of works, the building of irrigation systems, soil fertilisation, construction of greenhouses, land reconversion, the replacement of old orchards and vineyards with new, high-yielding varieties, the insufficient storage facilities, etc. Consequently, retailers often find it more advantageous to purchase from foreign suppliers that are capable of ensuring steady commodity flows within appropriate quantitative and qualitative parameters.

Chart C. Livestock populations



Source: NIS

As for animal products, comprising mainly meat and meat products and milk and dairy products (with contributions to the total deficit of 13 percent and 11 percent respectively), mention should be made of the excessive fragmentation of livestock farms, in addition to the continued decline in livestock (Chart C). This situation affects farmers' investment capacity and, hence, their yields, the sectoral production being additionally affected by the insufficient collection, storage and transport facilities. Thus, the inability to

supply produce to the upper links of the production chain in compliance with their quantitative and qualitative requirements is a characteristic of both vegetal and livestock segments.

Cattle breeding is the most exposed to fragmentation, the individual agricultural holdings accounting for 90 percent of the dairy cow population, so that farmers manage to supply milk processors with merely a quarter of the local milk production (in 2016), a percentage that lies well below the EU average of around 90 percent. As a result, even if the milk for processing comes mostly from local farmers, the specialised industrial companies need supplemental imports (which account for about half of the purchases of milk and dairy products from abroad), a situation that has actually been persisting for years. At the same time, the segment of milk processors is highly concentrated (the top five players holding about half of the market share), with international companies ranking among the most important. These companies operate in several countries, throughout the production chain, and the decisions on what, where and how much to produce rely exclusively on the cost-efficiency criterion.

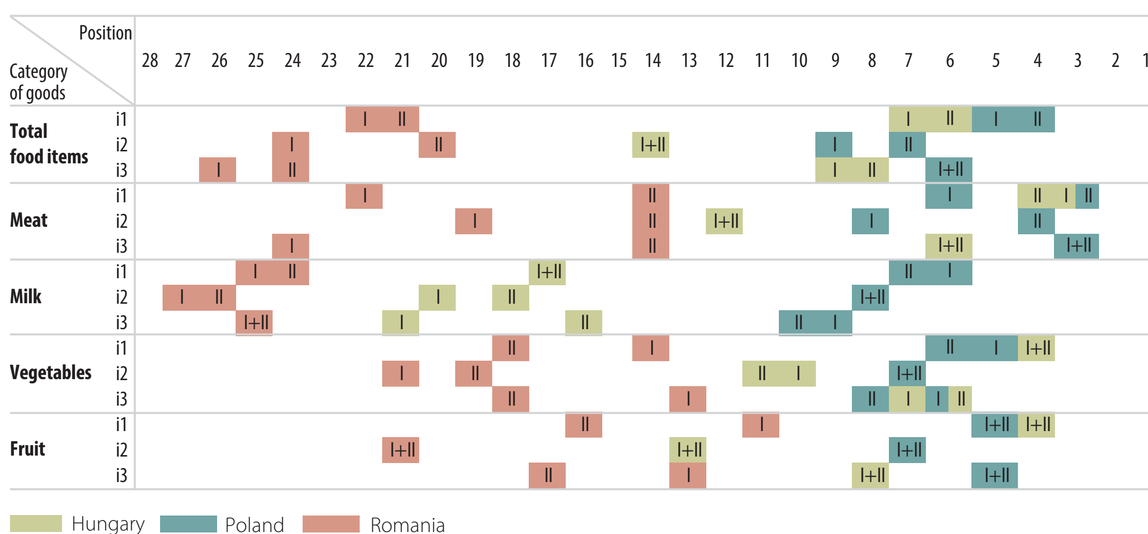
Thus, the expansion of international networks in Romania refers not only to the retail segment dominated by large retailers, but also to processors to some extent, whereas the phenomenon is still at an early stage at the beginning of the production chain. Although the presence of these undertakings is an opportunity for the domestic agri-food sector, considering the related benefits (stable demand, access to know-how), the highlighted structural deficiencies and, generally, the current poor situation of productive capital (in terms of technology) erode the attractiveness of the local economy for new investment. Hence, the low competitiveness determined many companies (retailers and processors alike) to supply foreign-made products for final consumption purposes, these imports virtually explaining the worsening trade balance on the food segment over the past years, given that the progress in exports, albeit visible, is still very modest.

As for the production of meat and meat products, although the livestock segments that are relevant in terms of the structure of consumption – breeding pigs and poultry – are affected by lower fragmentation (the share of livestock bred in individual holdings going down to around 60 percent), the challenges are broadly similar to those specific to the milk production sector. Therefore, processors choose, in their turn, to purchase raw materials from abroad in order to supplement the locally sourced meat (imports of specialised industrial companies amount to about 40 percent of total meat imports). Even though local products, particularly meat products, are somewhat better represented than dairy products at the retail level, the atomisation of the processing sector – especially on the pork meat segment – contains the capacity of most processors to gain access to modern stores, which has an impact on the related trade deficit.

The sector's competitiveness – several coordinates

As concerns trading partners, a significant proportion of Romania's food trade deficit is due to its relations with other countries in the group of new EU Member States, i.e. Hungary and Poland[13] (cumulative share of 30 percent in the first 10 months of 2017), these two countries having, in fact, some of the most favourable external positions on the food segment at EU level. The signal given by the size of the negative balance on trade is also strengthened by other competitiveness indicators, such as the export market share and the revealed trade advantage, an indicator of the extent to which specialisation in a certain product category makes exports prevail over the imports in the same category. Specifically, Romania's competitive position at EU level is modest (across all four categories of goods under review), standing well below those of the emerging economies the trade deficit is associated with (Table A). However, a slight improvement has been noticed at aggregate level over the past years, almost solely on the back of "meat and meat products". This was partly ascribable to the gradual easing, as of 2012, of the sanitary and veterinary restrictions on exports of pork meat starting with 2006, subsequent to the outbreaks of swine fever.

Table A. Competitiveness indicators in food industry, relative positioning versus EU countries



i1 – trade balance on each category (% of GDP); i2 – export market share[14]; i3 – revealed trade advantage[15]
I: 2007-2011 period; II: 2012-2016 period

Source: UNCTAD, Eurostat, NBR calculations

Although Romania has an agricultural potential above those of most EU countries, the extent to which it has been turned to good account is still among the smallest. Specifically, the crop yields obtained by local farmers

[13] Trade deficits with Hungary and Poland have been recorded ever since the '90s and have gradually widened also on account of the asymmetrical terms and conditions of trade arrangements signed during that period (the European Union Association Agreement, the Central European Free Trade Agreement – CEFTA), as well as of the lag between the EU accession dates, which gave Western European producers the opportunity to access the domestic market under more favourable conditions, ahead of Romania actually joining the customs union.

[14] Ratio of one country's exports to world exports, for a certain category of goods.

[15] It shows the difference between the share of a category of goods in export composition (normalised based on a similar share, calculated at global level) and an indicator of imports of that category of goods, calculated in a similar manner.

Table B. Production efficiency in food industry

Indicator	Period	RO	PL	HU	EU-28
Average production of a firm (% of EU-28 average)	2012-2015	**30.5**	101.3	57.9	100
Average number of employees in a firm	2012-2015	**20.4**	28.4	19.9	14.5
Labour productivity (production value/number of employees, % of EU-28 average)	2012-2015	**21.7**	51.6	42.1	100
Changes in labour productivity (production volume/number of hours worked, %)	2008-2011, annual average	**2.5**	3.0	3.1	
	2012-2016, annual average	**3.1**	2.5	1.2	

Source: Eurostat, NBR calculations

(calculated as a ratio of harvested production to harvested areas/slaughtered livestock) rank among the lowest in the EU, below those of Poland and Hungary. An explanation lies with the very low level of direct investment in the cultivation of fruit and vegetables and in stock breeding as compared, for instance, with the inflows of investment in the farming of cereals and oleaginous plants, which make, in fact, a positive contribution to the external balance. Furthermore, the food industry, while benefiting from increasing capital flows, further has a productivity level well below the EU average (Table B). This is the result of low-tech productive capacities, so that the option for imports or the relocation of some business activities in other EU countries is likely to prove more profitable in many cases. As such, the expansion of the domestic consumer demand was unusually accompanied by an underutilisation of productive capacities.

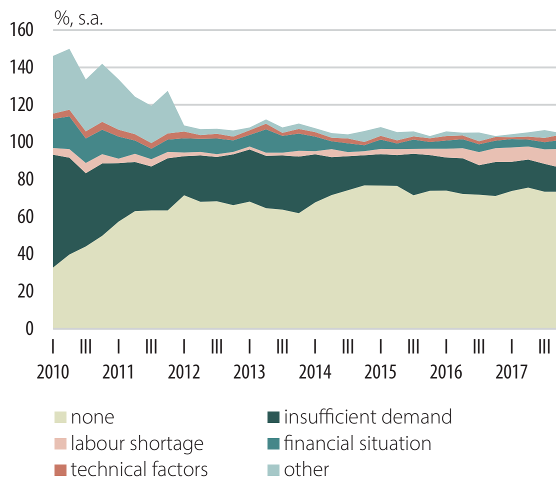
To sum up, the worsening balance on trade in food products reflects, to a large extent, structural deficiencies that share a common denominator – the excessive fragmentation of agricultural holdings. In the absence of farmers' associations, it is difficult to envisage a recovery in investment, which is a *sine qua non* condition for improving yields and product quality. Additional obstacles to the large-scale adoption of a competitive business model that would enable the integration in international networks (not only on the domestic front, but also via exports) along the production chain are the shortage of skilled staff and the lack of a medium- and long-term business vision, compounded by the small size of the average manufacturer. Thus, the constant decline in the market share of locally sourced products on the domestic market indicates, apart from the identified structural issues, that local economic agents refer only to their own businesses and find lower-than-market-average increases acceptable, without being concerned with taking full advantage of the existing potential that would enable the consolidation of their relative competitive position.

Labour productivity

In 2017 Q3, labour productivity economy-wide recovered part of the loss of momentum in Q2 (annual rate of 3.3 percent versus 1 percent), the above-average agricultural production offsetting the fast-pace increase in the number of the employed in this sector, which was conspicuous in the previous quarter. Apart from the incidental influence of weather conditions, the average yields of many crops are estimated to hit record highs in 2017, on the back of farmers' increasingly high investment in technology, equipment and plant protection products, as well as of the gradual rise in the average size of farms (particularly in what concerns the production of cereals and industrial plants). Beside this sector, the favourable cyclical position of the economy further had a visible impact on trade, where productivity growth picked

up under the influence of strong household consumption and the ongoing expansion of modern (more efficient) retail chains, as well as on construction, being boosted by robust demand for residential buildings.

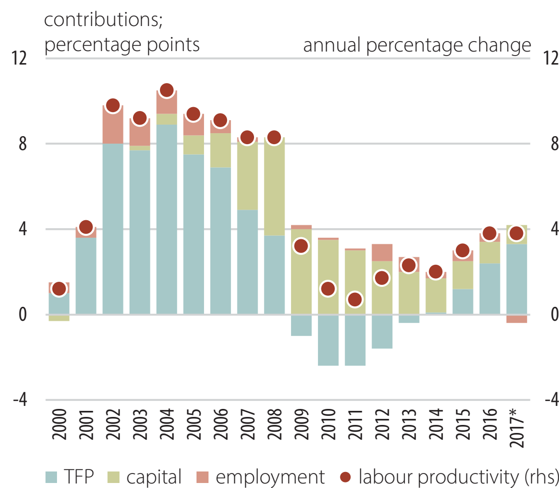
Chart 2.7. Factors limiting the advance in industrial production



Note: The respondents may choose multiple choice answers.

Source: EC-DG ECFIN

Chart 2.8. Decomposition of cyclically-adjusted labour productivity



*) forecast

Source: AMECO, NBR estimates

A favourable trend emerges further in industry, with labour productivity consolidating its robust annual growth pace recorded throughout 2017 (6.7 percent in July-November versus 6.4 percent in 2017 H1), underpinned by both structural factors (solid investment in key sub-sectors) and cyclical factors. In the latter case, the slight deceleration in the dynamics of external orders versus Q2 was offset by the doubling of the pace of domestic orders, entailing an increase in the capacity utilisation rate in all main manufacturing groupings, as well as the drop to a historical low in the percentage of producers considering that insufficient demand limits production (Chart 2.7). However, this factor is still a major impediment to the advance in industrial output for some firms in the economy, which signals their lack of competitiveness in the current context featuring particularly favourable demand conditions. Metallurgy stands out in the breakdown by sub-sector, as nearly half of respondents consider the lack of demand as an inhibiting factor; however, there are signs of a possible recovery in this sub-sector, given the increasingly substantial investment in the recent period, as well as the gradual improvement in export activity. High percentages (almost 20 percent) are also reported by fabricated metal products, manufacture of computers and electronics and even the food industry, which benefited from a strong boost in demand after the VAT rate cut.

From a broader perspective, the decomposition of the cyclically adjusted labour productivity highlights an increasingly important contribution of total factor productivity (TFP) over the past years (Chart 2.8), as many economic sub-sectors have shifted towards a more efficient structure, and the ICT services have consolidated their contribution to GDP formation (share of over 6 percent in GVA, which is higher than those of agriculture and construction). Additionally, the expansion of foreign direct investment led to the emergence of companies with innovative business models and technologies that started to be gradually disseminated among domestic firms as well. However, there are sub-sectors where these productivity shocks are delayed. In industry, mention should be made first of the food and beverage segment, where the high dispersion in terms

of company performance hinders the advance in the aggregate productivity of this sub-sector and erodes the competitiveness of local producers, who fail to capitalise on the significant rise in consumption over the past years.

At the same time, behind the declining contributions of employment and capital dynamics stand persistent structural obstacles. They stem, on the one hand, from the progressive annual decrease in public investment expenditure and the poor absorption and inefficient use of EU funds, which put a break on capital investment and, on the other hand, from an increasingly tight labour market, where an overwhelming number of unemployed persons are medium- or low-skilled, as opposed to the requirements of most employers.

Decomposition of cyclically-adjusted labour productivity

The assessment of the determinants of labour productivity growth employed a Cobb-Douglas production function with constant returns to scale, including the trend variables in order to eliminate the influences of the business cycle. The source of data was the AMECO database and the trends were extracted using a univariate Hodrick-Prescott filter. Labour income share, used as a proxy for the elasticity of output with respect to labour, was calibrated at 0.6 (see Box 4. Labour income share: level, trend, determinants, in the NBR's *Annual Report 2016*). The conventional value of this parameter in the literature, which the European Commission also employs for the EU economies, is 0.65 (Havik *et al.*, 2014). Thus, the contributions to labour productivity growth were calculated based on the rewritten production function below:

$$\ln\frac{Y}{L} = \ln TFP + \alpha \ln K + (-\alpha)\ln L$$

where Y is the GDP trend, K is the trend of the net capital stock in the economy, L is the trend of employment, and α is the elasticity of output with respect to capital.

Labour market developments[16]

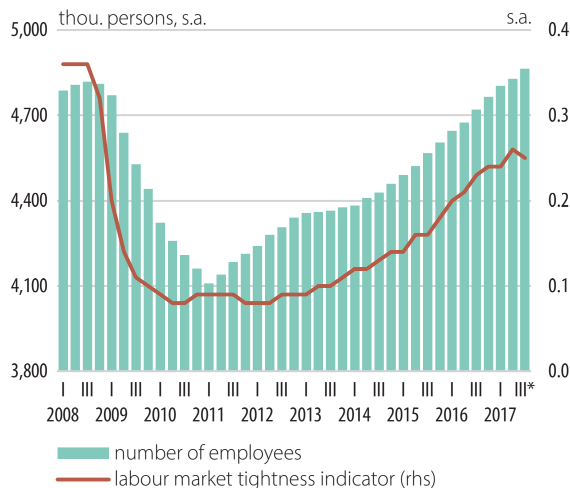
July through November 2017, the number of employees economy-wide further increased to a post-2000 high, yet its annual growth rate decelerated markedly, to 2.7 percent (after approximately two years in which it stood at 3.4 percent; Chart 2.9). This was ascribable to the private sector and may be linked to the difficulties facing companies in staff recruitment, with the skill mismatch index posting the highest level of the historical series in 2017 Q3. Nevertheless, employees continued to be hired in the budgetary sector, particularly in the public healthcare sector and public administration. However, the trend is not expected to persist, given that the draft budget for 2018 includes a rule according to which only one in two job vacancies should be filled as of 1 January 2018.

At the same time, labour demand also witnessed a slowdown, the job vacancy rate falling slightly in 2017 Q3, largely as a result of the decline in the number of openings in public administration. Moreover, excess labour supply further contracted July through November 2017, with both unemployment rates decreasing by around 0.1 percentage points to 0.3 percentage points as compared with 2017 Q2. Specifically, the registered unemployment rate dropped to 4.1 percent and the

[16] The analysis is based on seasonally adjusted data.

ILO unemployment rate went down to 4.9 percent. Consequently, tight labour market conditions further prevailed and are expected to persist, given that the pick-up in euro area growth carries the potential to motivate Romanians' choice to find a job abroad, while on the domestic front, progress towards labour market loosening is rather small. For instance, the "First Rent" programme yielded very poor results, as only 110 unemployed persons (below 0.01 percent of total unemployed) required such support in the first four months after its launch, and the number of foreigners that may be admitted to the labour market in Romania in 2018 is quite low (7,000 persons), albeit on the increase.

Chart 2.9. Number of employees economy-wide and labour market tightness



*) Jul.-Nov. for the number of employees

Source: Eurostat, NIS, NBR calculations

For end-2017 and 2018 Q1, relatively optimistic signals shape the prospects for the number of employees. Specifically, the DG ECFIN Survey anticipates a steady hiring pace in construction and manufacturing, while the Manpower Employment Outlook Survey indicates the highest post-crisis levels of employer optimism. As far as trade and market services are concerned, the managers participating in the former survey expect an increase in payrolls, whereas the results of the Manpower Survey suggest rather moderate optimism.

Chart 2.10. Nominal gross wage earnings

Source: NIS, NBR calculations

July through November 2017, the annual growth rate of average gross wage earnings remained fast-paced (14.5 percent), albeit slightly lower than in 2017 Q2, as a result of a base effect in the budgetary sector (Chart 2.10). The evolution mirrors the wage pressures stemming from labour market tightness, the hike in the gross minimum wage economy-wide in February and the influence of the budgetary sector (with an annual pace of increase of 25 percent) on the private sector via the demonstration effect.

For early 2018, the prevailing sentiment in the private sector is uncertainty, which is associated with the legislative changes regarding the transfer of social contributions payable by the employer to the employee. Thus, given that employers are not legally bound to keep the net wage at its present level, the trends to be followed by the latter and by the gross wage are difficult to anticipate – the net wage remaining unchanged would entail an about 20 percent rise in the gross wage (the calculation takes into account the cut in the personal income tax from 16 percent to 10 percent). However, this uncertainty does not concern minimum wage earners, the gross

minimum wage increasing by 31 percent, to lei 1,900, as of 1 January 2018. In the budgetary sector, the hikes in the gross wage set forth by the unified wage law[17] cover the rise involved by the transfer of social contributions to the employee and even allow for a higher net wage.

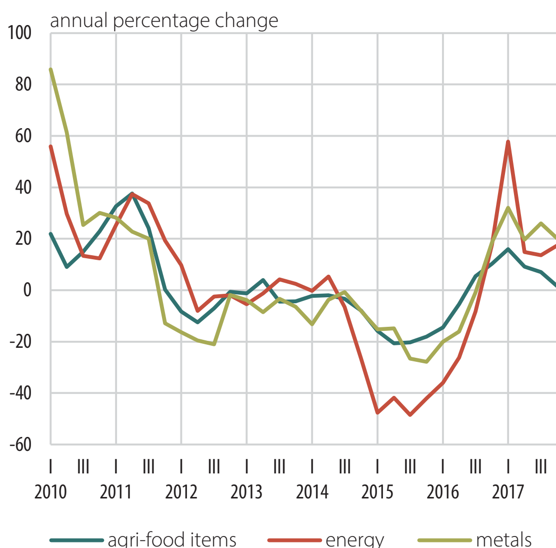
2. Import prices and producer prices on the domestic market

The higher-than-expected rise in oil prices at end-2017 and the further robust pace of increase of metal prices resulted in the fastest annual growth rate of industrial producer prices on the domestic market over the past four years (3.9 percent in November). At the same time, the annual dynamics of producer prices for consumer goods remained high, as the influence of slowing costs of some agri-food commodities was offset by the built-up pressures from other types of costs (labour, utilities, transportation) and those from the rise in excess aggregate demand in the economy.

2.1. Import prices

After losing momentum in 2017 Q2 and Q3, commodity prices embarked on divergent trends in the latter part of 2017 (Chart 2.11). Energy prices posted a faster-than-expected increase (17.4 percent in annual terms versus 13.6 percent in 2017 Q3), chiefly on account of the rebound in global demand. Starting mid-2017, the Brent oil price followed a markedly upward path, rising to almost USD 67 per barrel at end-December, significantly above USD 55 per barrel, the level around which markets expected the medium-term price to hover. Apart from the step-up in global demand, a contributor to these developments was the decision of OPEC members and other oil-producing countries to extend until end-2018 the agreement on capping oil supply. The movements in the oil price were also mirrored by the international gas price (whose annual pace of increase stood at 27 percent in 2017 Q4), the pass-through with some lag between the prices of the two commodities being indicative of the further uptrend in gas prices over the coming months.

Chart 2.11. International commodity prices



Source: World Bank, FAO, NBR calculations

In 2017 Q4, metal prices continued to record robust growth rates (approximately 20.0 percent, similar to the average for the year as a whole), in an environment marked by weaker supply and stronger demand. Nevertheless, metal prices exhibited high

[17] A 25 percent increase in January for all employees, to which add: 20 percent for the staff in education in March, followed by a staggered hike in wages until 2022 for each category of employees except for doctors and nurses, in whose case there will be a one-step raise in March 2018.

volatility throughout 2017, their annual dynamics fluctuating in a range between 14 percent and 35 percent, which reflected mixed signals both from the demand side (the recovery in global economic activity, despite the expected production cuts in metallurgy in China) and particularly from the supply side (the closure of some mining pits in China, amid tougher environmental regulations, counterbalanced by the reopening of certain previously unprofitable mines).

Amid the bumper global harvest, the downtrend in agri-food commodity prices continued, with the annual pace of increase of the FAO aggregate index decelerating to 1.5 percent (down 5.5 percentage points from 2017 Q3). The prices of cereals and oilseeds recorded further declines in annual terms, in line with the record output worldwide (according to USDA data, in 2017 production is estimated to rise by about 15 percent versus the long-term average in the case of maize and oilseeds and by 7 percent for wheat respectively). The annual dynamics of the sugar price remained in negative territory, whereas the prices of dairy and meat products added 7 percent in annual terms, increasing at a more moderate pace than in the first part of 2017 as a result of a more balanced ratio of demand to supply.

The annual growth rate of the unit value of imports was further positive in 2017 Q3 (1.7 percent), albeit slower than in 2017 H1 (-1.7 percentage points). Nonetheless, the impact of the slowdown in external prices on imported inflation was partly offset by the depreciation trend of the domestic currency against the euro.

The strongest pressure continued to be exerted by base metals (whose UVI climbed to 106.7 percent) and especially by mineral products (whose UVI stood at 114.4 percent), even higher values being highly likely towards the end of the year in the latter case. As regards goods holding a relevant share in the CPI basket, the UVIs of food items followed a broad-based deceleration trend, in correlation with the bumper crops, while those of non-food items witnessed mixed developments. Specifically, the UVI of semi-durables remained above one (approximately 103.0 percent), whereas that of motor cars further dropped (to 99.0 percent), mirroring consumers' preference for imported used cars after the removal of the environmental stamp duty at the beginning of 2017.

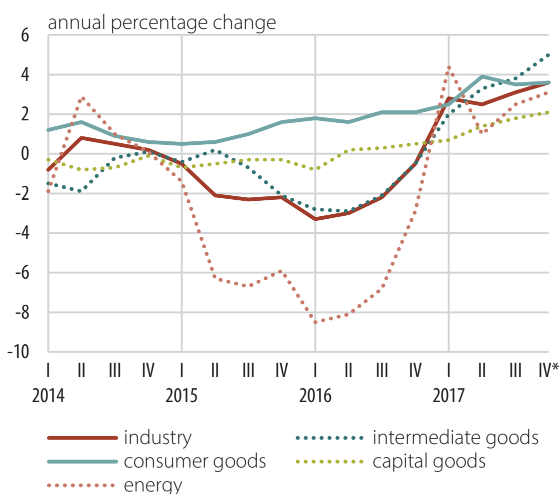
2.2. Producer prices on the domestic market

In October-November 2017, the annual dynamics of industrial producer prices on the domestic market accelerated by 0.5 percentage points as compared with 2017 Q3, to 3.6 percent, in close connection with the increase in international energy and metal prices seen during the year (Chart 2.12). Thus, the annual rate of change of producer prices for intermediate goods reached 5.0 percent (up 1.2 percentage points) and that for energy goods stood at 3.1 percent (up 0.6 percentage points).

The annual growth rate of producer prices for consumer goods remained high, hovering around 3.5 percent over the past months. This trend was ascribable to the developments in the food industry, which has recently seen mixed influences. Specifically, the downward path of international prices of agri-food items acted

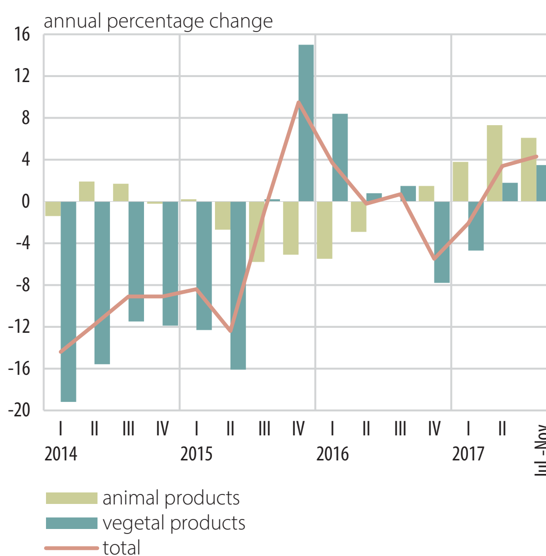
towards a slower pace of increase of food prices, yet, taking into account the built-up pressures from the other production costs (utilities expenses, wage costs, transportation costs) and the excess demand in the economy, it is uncertain whether or to what extent producers will pass on these decelerations to prices.

Chart 2.12. Industrial producer prices on the domestic market



Source: NIS, Eurostat

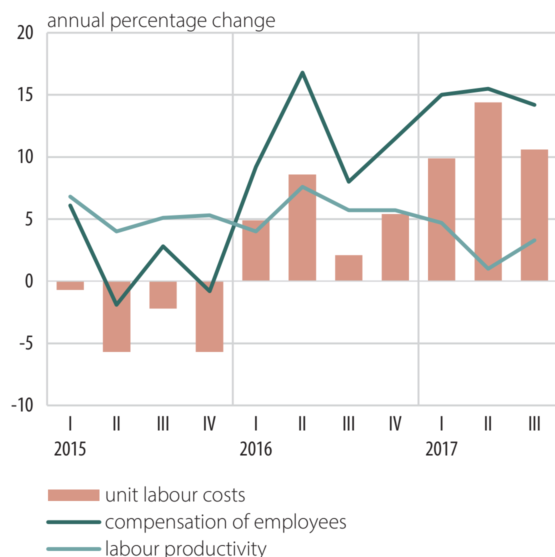
Chart 2.13. Agricultural producer prices



Source: NIS

July through November 2017, the annual dynamics of agricultural producer prices on the domestic market stepped up to 4.3 percent from 3.4 percent in Q2 (Chart 2.13). The developments in the prices of vegetal products were the main driver, with most of them recording faster paces of growth (however, in the case of prices of maize and sunflower seeds, the annual rate of change remained in the negative territory). The trend is probably short-lived, given the record agricultural output in Romania and the strong correlation between external and domestic prices. As for animal products, the annual dynamics of their producer prices slackened from 7.3 percent to 6.1 percent, on the back of the significant slowdown in producer prices for pork meat products, to which added a more sluggish rise in prices for milk as well towards the end of the period.

Chart 2.14. Unit labour costs



Source: Eurostat, NIS

Unit labour costs

In 2017 Q3, the annual growth rate of unit labour costs economy-wide fell to 10.6 percent (down 3.8 percentage points from Q2), as a result of productivity gains (Chart 2.14). Nevertheless, the value of the indicator is further substantial, pointing to the persistent pressures via this channel on production costs. These pressures, which occur

concurrently with the fading out of the offsetting influence of the other costs of firms (costs of raw materials, transportation costs, utilities expenses), already affect consumer prices.

At the same time, the annual pace of increase of unit wage costs in industry kept on declining as compared with early 2017, standing at 4.3 percent in July-November 2017. The breakdown by sub-sector shows that the rise in wage costs continues to be covered by that in productivity in electrical equipment and machinery and equipment, reflecting the investments undertaken in these industries over the past two years. By contrast, wage pressures prevail in consumer goods industries and the manufacture of construction materials, the annual dynamics of unit wage costs further posting two-digit levels (around 15 percent).

3. Monetary policy and financial developments

1. Monetary policy

In November 2017, the NBR Board decided to narrow by another ±0.25 percentage points the corridor of interest rates on the NBR's standing facilities around the policy rate, to the standard width of ±1.00 percentage points, as well as to ensure firm liquidity management in the banking system, while in January 2018 it decided to raise the monetary policy rate to 2.00 percent from 1.75 percent. The minimum reserve requirement ratios on both leu- and foreign currency-denominated liabilities of credit institutions were left unchanged at 8.0 percent. The ongoing adjustment of the monetary policy stance was aimed at ensuring medium-term price stability in line with the 2.5 percent ±1 percentage point inflation target, *inter alia* via the solid anchoring of inflation expectations over the longer time horizon.

The November decisions were taken in a context in which inflation had posted a faster-than-forecasted rise during Q3[18], also on the back of the similar behaviour of core inflation, while the NBR's new medium-term forecast expected the annual inflation rate to increase and remain in the first quarters of 2018 above the upper bound of the variation band of the flat target and higher than the previously-anticipated readings, before reverting and staying in the upper half of the band until the end of the projection horizon[19]. The new path of the projected annual inflation rate reflected the temporary relative heightening of the impact anticipated to be exerted by supply-side factors[20] – overlapping in early 2018 the base effects associated with the previous cuts in/removals of indirect taxes and fees[21] –, as well as the prospects for a gradual pick-up in inflationary pressures stemming from the cyclical position of the economy, wage costs and the uptrend in inflation expectations. Over the short term, the increase in excess aggregate demand was

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[18] The annual inflation rate had leapt to 1.77 percent in September from 1.15 percent in August, returning more deeply than anticipated into the variation band of the flat target.

[19] According to the new forecast, the annual inflation rate was expected to end 2017 at 2.7 percent (1.9 percent in the previous projection, published in the August 2017 *Inflation Report*), to take a leap and exceed during 2018 Q1-Q3 the upper bound of the variation band of the flat target, before decelerating to 3.2 percent at end-2018 (the same level as previously forecasted) and to 3.1 percent at the end of the projection horizon (3.5 percent in the August 2017 projection).

[20] The major influences came from the hike in the fuel excise duty, coupled with an anticipated higher international oil price, and from probably larger increases in some administered prices and in tobacco product prices. Their anticipated inflationary impact was marginally offset by the influences of the slight downward revision of the forecasted growth rate of VFE prices, amid a good agricultural year domestically and globally.

[21] The standard VAT rate cut to 19 percent and the removal of the special excise duty on fuels as from 1 January 2017, as well as the further drop in prices of compulsory motor third party liability insurance policies and the scrapping of non-tax fees and charges in February 2017.

expected to be larger than forecasted earlier[22], given the further step-up in economic growth in 2017 Q2, contrary to expectations, as well as the relatively faster GDP dynamics anticipated for 2017 H2 and for 2018, amid the likely protraction in the expansionary nature of fiscal and income policies, the persistence of accommodative monetary conditions, and more robust euro area/EU economic growth in the short run; at mid-2019, the positive output gap was however expected to resume a slightly downward slope and marginally decrease below the previously forecasted levels[23]. Additional arguments for the decisions were the risk of stronger-than-expected pro-cyclicality of fiscal and income policies in 2018 or that of a more pronounced suboptimal nature of budget expenditure composition should the fiscal deficit have been, however, capped at 3 percent of GDP, yet on the back of further cuts in investment spending, with adverse implications for the economy's growth potential over the medium term, as well as for the external balance.

Subsequently-released statistical data indicated that the annual inflation rate had continued to rise in leaps and significantly above expectations during the first two months of 2017 Q4, going up to 3.23 percent in November[24] – close to the upper bound of the variation band of the flat target –, both as an effect of supply-side factors[25] and under the action of fundamentals[26]. Data also showed that, in Q3, economic growth had witnessed the fourth successive faster-than-expected acceleration, which had also been the most significant one (to 8.8 percent, from 6.1 percent in Q2), implying a new likely increase, markedly above expectations, in excess aggregate demand, moderated by the temporary pick-up in potential GDP under the impact of the positive supply-side shock from bumper crops. Private consumption consolidated its prevailing contribution to economic growth, while gross fixed capital formation also made a significant positive contribution for the first time in six quarters; by contrast, the contribution of net exports to annual GDP dynamics was more negative, given the wider negative differential between the annual growth rates of exports and imports[27]. Moreover, amid the ongoing labour market tightening trend – only temporarily brought to a halt in Q3 –, the annual dynamics of the average gross nominal wage and of the total hourly labour costs further posted two-digit levels (particularly high from a historical perspective, but also compared with those recorded in 2016[28]) in the period from July to September 2017.

22 However, the projected path of the annual adjusted CORE2 rate stood lower than in the previous forecast, given the decline in the sensitivity of core inflation to the action of fundamentals, together with the upward reassessment of the role played by import prices.

23 Also as a result of the upward adjustment of potential GDP growth rate.

24 From 2.63 percent in October and 1.77 percent in September 2017.

25 The main contributions had been made by administered prices, given the increase in the electricity price, as well as by fuel prices, in the context of the hike in the excise duty on motor fuels and of higher oil prices; smaller influences had come from the developments in VFE prices and tobacco product prices.

26 The annual adjusted CORE2 inflation had also increased at a faster rate, including compared to forecasts, reaching 2.33 percent in November 2017 (1.82 percent in September).

27 Against this background, the negative balance on trade in goods and services almost trebled from the same year-earlier period and was the widest in the past 19 quarters.

28 In turn, the annual rate of change of unit wage costs in industry rose in Q3 (after three quarters of gradual decline), against the backdrop of a slower advance in labour productivity, before posting a new, relatively sizeable downward adjustment in October.

At the same time, the nominal annual growth rate of credit to the private sector slowed only marginally in the first two months of 2017 Q4 compared with the September peak (6.7 percent and 6.8 percent respectively versus 7.3 percent[29]). The slowdown was, however, more pronounced in real terms, given the pick-up in the annual inflation rate. The robust increase in credit was further driven almost exclusively by the domestic currency component (up 16.3 percent in the period under review, close to the Q3 reading[30]), whose share in total private sector credit widened to 61.8 percent. Developments in credit to major customer categories were partly correlated with the results of the November 2017 *Bank Lending Survey* conducted by the NBR, which anticipated for 2017 Q4 a further increase in the demand for corporate and housing loans, as well as a standstill in demand for consumer credit (probably also associated with the recent and anticipated relative tightening of applicable credit standards). Thus, the annual growth rate of loans to non-financial corporations remained unchanged in the reported period (5.0 percent)[31], whereas the annual dynamics of household loans picked up slightly, exclusively on account of loans for house purchase.

Broad money annual dynamics stepped up in nominal terms (13.1 percent against 11.5 percent in Q3), while remaining unchanged at 9.9 percent in real terms. Developments were uneven, as the faster growth in October[32] – prompted by EU funds disbursements to recipients in agriculture – was followed by a loss of momentum in November, owing also to some economic agents making payments due in relation to the additional dividend[33]. The upward move was driven by the swifter growth rate of corporate time deposits with a maturity of up to two years – reflecting *inter alia* their higher elasticity vis-à-vis the related interest rates, which in turn are more sensitive to changes in interbank rates –, whereas narrow money posted slacker dynamics.

The assessments conducted in this context indicated the outlook for the annual inflation rate to pick up in the months ahead to significantly higher values than those in the November 2017 medium-term forecast and hence stand considerably above the upper bound of the variation band of the flat target, under the impact of rising pressures from supply-side factors[34], as well as from fundamentals, thereby entailing the risk of de-anchoring inflation expectations over the longer time horizon. Moreover, assessments pointed to a markedly faster-than-previously anticipated pace of economic growth for 2017 Q4 and 2018 Q1, albeit decelerating versus the earlier period, implying a likely larger widening of the positive output gap and hence strengthening of its inflationary pressures during that period as well. Upside risks to the latest medium-term inflation outlook also stemmed from the possibly stronger-than-expected pro-cyclicality of fiscal and income policies in 2018 or from a potential

29 The highest reading since June 2012 to date.

30 In real terms, the average dynamics decelerated from 14.7 percent to 13.0 percent.

31 However, in real terms, it slowed from 3.5 percent to 2.0 percent.

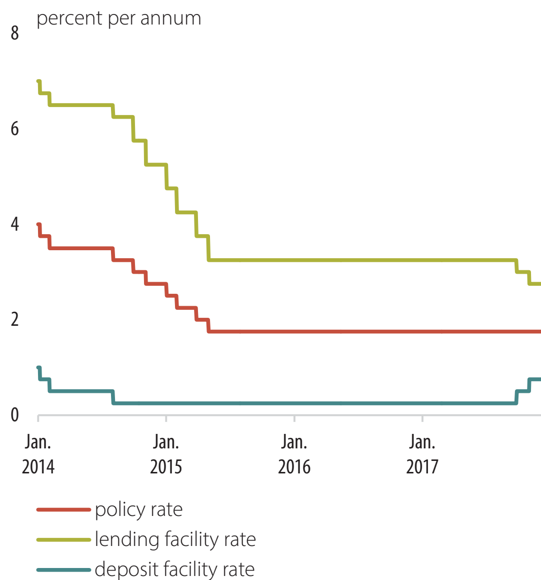
32 A post-March 2009 high of 13.6 percent.

33 In line with the provisions of Government Emergency Ordinance No. 29 of 30 March 2017 amending Article 1 paragraph (1) letter g) of Government Ordinance No. 64/2001 on profit distribution at national companies, national corporations and commercial companies that are either fully or majority state-owned, as well as at *régies autonomes* and amending Article 1 paragraphs (2) and (3) of Government Emergency Ordinance No. 109/2011 on the corporate governance of public enterprises.

34 The evolution of fuel prices, amid the relative rise in oil prices, the recent increases in prices for eggs and tobacco products, as well as the relatively higher dynamics of administered prices.

chronic worsening of budget expenditure composition[35], which would likely impair the economy's growth potential and lead to a larger positive output gap over the medium term, as well as to a wider current account deficit.

Chart 3.1. NBR rates



Under the circumstances, in its meeting of 8 January 2018, the NBR Board decided to increase the monetary policy rate to 2.00 percent from 1.75 percent, as well as to raise the deposit facility rate to 1.00 percent from 0.75 percent and the lending facility rate to 3.00 percent from 2.75 percent (Chart 3.1).

Monetary conditions became slightly less accommodative in 2017 Q4, against the background of a significant rise in longer-term ROBOR rates. The pass-through of this movement to interest rates on new loans and new time deposits in October and November was somewhat slow, especially on the households segment, while the leu witnessed a real appreciation against the major currencies in Q4, in spite of its nominal depreciation tendency versus the euro that was further manifest during most of the interval. In the context of a persistent net liquidity deficit on the money market, as a result of the higher volatility of autonomous factors, the NBR provided liquidity via one-week repo operations with full allotment during the quarter under review. However, these operations were stopped towards the year-end, given the re-emergence of a substantial net reserve surplus in the banking system, following the liquidity injections triggered by the wide easing of budget execution; against this backdrop, credit institutions resorted increasingly to the central bank's deposit facility once again, while long-term ROBOR rates trended slightly downwards.

2. Financial markets and monetary developments

In 2017 Q4, the domestic financial market witnessed a steeper increase in the average interbank money market rate, as well as a further rise in the average EUR/RON exchange rate. Credit to the private sector grew at a slower annual pace September through November 2017, whereas liquidity across the economy expanded at a brisker rate, fuelled by disbursements from EU funds.

2.1. Interest rates

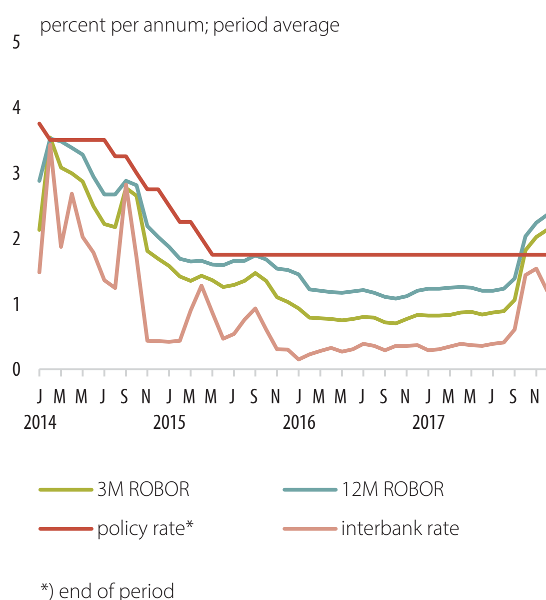
After the upward adjustment at end-Q3, the daily average interbank money market rate tended to stay in the vicinity of the monetary policy rate in the first two months

[35] Through a potential reduction in public investment towards critical values in favour of supporting consumption.

of Q4, before declining in December close to the deposit facility rate; its quarterly average added a sturdy 0.93 percentage points versus July-September, to stand at 1.40 percent.

These developments reflected the joint influences exerted by the sizeable changes in liquidity conditions September through December, as well as by central bank measures on liquidity management in the banking system and narrowing – in two steps of ±0.25 percentage points each – the corridor of interest rates on the NBR's standing facilities around the policy rate, to the standard width of ±1.00 percentage points. Thus, the shift in overnight rates in the vicinity of the monetary policy rate was due to the fact that the steep narrowing trend that the structural liquidity surplus in the banking system had embarked on in the latter part of Q3, under the simultaneous influence of key autonomous liquidity factors, extended into most of Q4, triggering the emergence and subsequent widening of a net liquidity deficit on the money market. In this context, the NBR resumed in October and continued over the following months the supply of liquidity via one-week repos conducted in the form of fixed-rate tenders with full allotment[36]. However, these operations were stopped towards the end of the quarter, given the re-emergence of a sizeable net reserve surplus, following the liquidity injections caused by the substantial increase in budget spending in December, which prompted very short-term interest rates to fall and subsequently remain in the vicinity of the lower bound of the corridor defined by interest rates on the standing facilities.

Chart 3.2. Policy rate and ROBOR rates



The radical change in liquidity conditions in the banking system strongly affected longer-term (3M-12M) ROBOR rates as well, which came close to the monetary policy rate at the onset of October (Chart 3.2). They continued to rise thereafter, albeit at a slower pace, most likely due to: (i) credit institutions' expectations on the protraction, in the forthcoming period, of the more restrictive nature of liquidity conditions; (ii) the NBR's monetary policy decisions[37], and (iii) expectations of an ongoing adjustment of the monetary policy stance in the near run[38]. The upward move of these rates temporarily gained momentum in mid-November, owing to the widening of banks' net liquidity deficit under the action of autonomous factors, as well as to the transitory heightening of uncertainty about the current/prospective state of liquidity. In the closing month of the quarter, however, these rates posted a slight downward adjustment, reflecting – more visibly in the case of short maturities – the influence exerted by the easing of liquidity conditions under the impact of the resumption and pick-up in the Treasury's

[36] During 2017 Q4, the NBR conducted ten such tenders, with credit institutions submitting bids for eight of them. The average monthly stock of operations was lei 3.5 billion in October, lei 3 billion in November, and lei 3.2 billion in December.

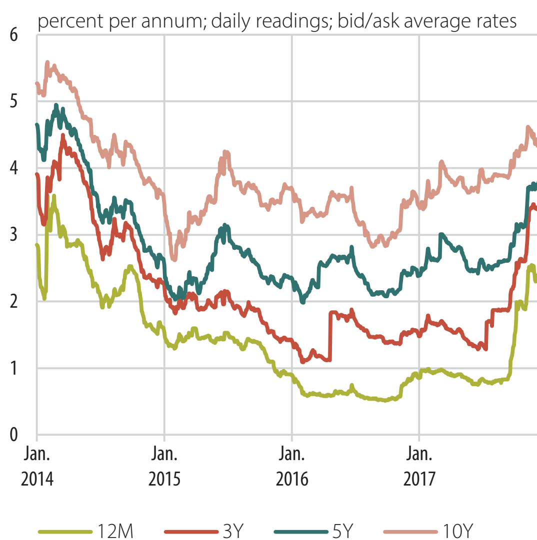
[37] Narrowing the width of the corridor of interest rates on the NBR's standing facilities around the policy rate.

[38] Given that statistical data regarding both the October inflation rate and Q3 economic growth, released in November, significantly exceeded market expectations.

liquidity injections. As a result of these developments, the average 3M ROBOR rate stood in December 1.07 percentage points higher than in September, coming in at 2.13 percent, while the average 6M and 12M rates added 1.09 percentage points (to 2.31 percent) and 0.97 percentage points (to 2.36 percent) respectively.

In turn, government security yields stuck in the first half of October to the upward path they had embarked on towards end-Q3 and remained relatively unchanged until the second 10-day period of November, when they also witnessed a leap and hit record highs for the past three years and a half[39] (Chart 3.3). However, long-term yields (10 years) soon embarked on a downtrend, which consolidated in the closing month of the quarter[40], amid investors' rekindled interest in this type of assets. Starting at the onset of December, the downward adjustment became manifest for the other maturities as well, particularly at the short end of the curve (6-12 months), which was more strongly impacted by the current/anticipated change in liquidity conditions[41]. Against this backdrop, the monthly averages of reference rates on the secondary market[42] stood higher in December than in September, by up to 1.50 percentage points for 6-month and 12-month maturities (to 2.14 percent and 2.34 percent respectively) and 1.10 percentage points (to 3.76 percent) and 0.50 percentage points (to 4.37 percent) for 5-year and 10-year maturities respectively.

Chart 3.3. Reference rates on the secondary market for government securities



On the primary market[43], the bid rates at the auctions conducted in December posted sizeable increases versus end-Q3 readings for shorter maturities (by up to 1.60 percentage points for 1-year[44] and 3-year maturities) and of a lower magnitude in the case of 5- and 10-year residual maturities (up 1.10 percentage points and 0.70 percentage points respectively), *inter alia* amid a renewed decline in investor appetite for government securities; however, this decline was uneven, as the drop in October (when the average demand-to-supply ratio stood below one and the MPF fully rejected credit institutions' bids) was followed by a relative recovery in the next months[45], reflected by the gradual rise of both the average demand-to-supply ratio and the volume of securities issued as a share of the announced volume.

39 The evolution of long-term yields was correlated only in October with that of corresponding yields in advanced economies and other countries in the region, which trended slowly upwards in this period, before remaining generally flat in November.

40 Also linked to developments in similar yields across economies in the region.

41 Nevertheless, 5-year yields continued to rise slightly in December.

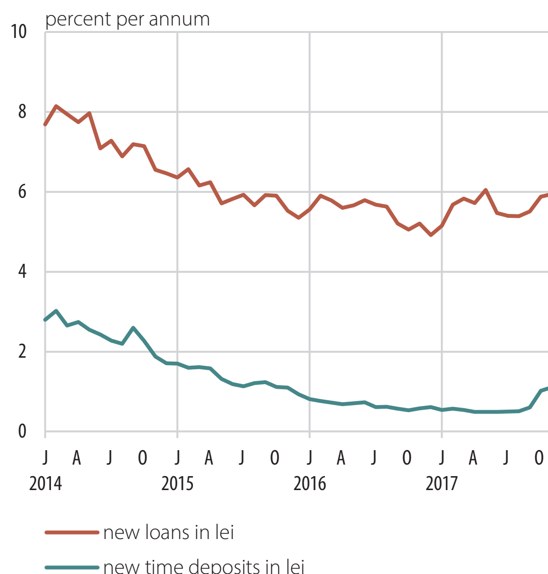
42 Bid/ask average rates.

43 On 11 October, the MPF issued bonds worth EUR 1 billion on the external market, by reopening the books on a series maturing in 2027.

44 The last auction in Q3 for the one-year maturity was held in August.

45 Primarily ascribable to long-term securities (10 years).

Chart 3.4. Bank rates



September through November 2017, credit institutions' average interest rates on new loans and new time deposits of non-bank clients went up 0.55 percentage points (to 5.94 percent) and 0.60 percentage points (to 1.11 percent) respectively, reflecting – partially for the time being, especially in the case of households – the increase in relevant rates on the interbank money market (Chart 3.4). In particular, the average lending rate on new business to non-financial corporations climbed 0.91 percentage points, to 4.69 percent, on account of both categories of loans (below and above EUR 1 million equivalent respectively). The average lending rate on new business to households added 0.41 percentage points, to 7.04 percent, also visible across both main types of credit (consumer and housing loans). At the same time, the average remuneration of new time deposits edged up only marginally for households (+0.03 percentage points, to 0.77 percent), while increasing by 0.87 percentage points (to 1.27 percent) in the case of non-financial corporations – a segment which is more sensitive to changes in interbank rates.

Chart 3.5. Nominal exchange rate

2.2. Exchange rate and capital flows

The generally upward path of the EUR/RON exchange rate steepened in 2017 Q4, thus largely diverging from the trajectory of the exchange rates of the main currencies in the region, chiefly due to developments in some domestic economic fundamentals and to their impact on financial investors' risk perception (Chart 3.5).

Specifically, after a new partial downward correction at the beginning of the quarter[46], the EUR/RON re-embarked on a slightly upward path at the end of the first 10-day period in October, amid a relatively stronger pace of worsening of the trade balance and current account balance, in conjunction with the markedly pro-cyclical stance of the fiscal and income policies, as well as amid the ensuing deterioration in investor sentiment towards the local economy and financial market[47]. By contrast, the exchange rates of the major

[46] Amid the consolidation of interest rates at higher levels on the interbank money market.

[47] To this contributed, *inter alia*, the heightened uncertainty surrounding the outlook for the fiscal and income policy stance, also in the context of the new set of fiscal measures announced by the government.

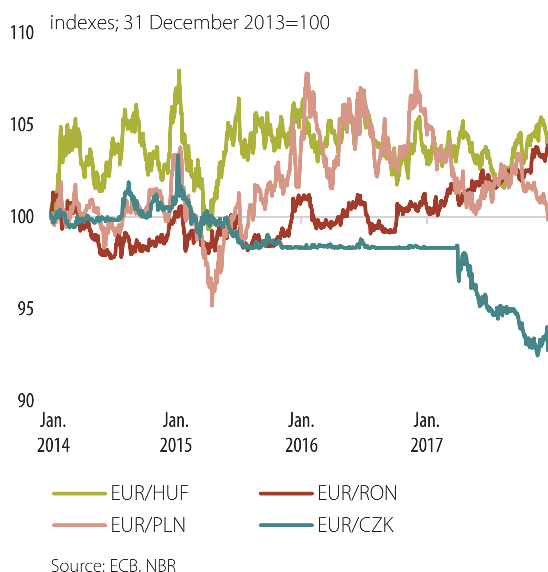
Table 3.1. Key financial account items

EUR million

	11 mos. 2016			11 mos. 2017		
	Net acquisition of financial assets*	Net incurrence of liabilities*	Net	Net acquisition of financial assets*	Net incurrence of liabilities*	Net
Financial account	5,962	3,232	2,731	3,443	6,227	-2,785
Direct investment	988	4,622	-3,630	-179	4,188	-4,369
Portfolio investments	313	901	-593	585	3,081	-2,494
Financial derivatives	x	x	45	x	x	-58
Other investment	2,267	-2,292	4,558	3,232	-1,043	4,275
– currency and deposits	2,017	-2,169	4,187	2,394	-891	3,288
– loans	78	-1,208	1,283	54	-1,179	1,236
– other	172	1,085	-912	784	1,027	-249
NBR's reserve assets, net	2,350	0	2,350	-137	0	-137

*) "+" increase/"-" decrease

Chart 3.6. Exchange rate developments on emerging markets in the region



Source: ECB, NBR

currencies in the region generally trended downwards during this period, due to the consolidation and, afterwards, the confirmation of market expectations on the relative extension of the duration of the ECB's asset purchase programme, alongside the more sizeable reduction in the monthly pace of these purchases, but also to improved IMF forecasts on global economic growth during 2017-2018.

The leu exchange rate witnessed stronger pressures in November, given financial investors' increased concerns about the key macroeconomic equilibria following the new statistical data and information released in this period. These showed: (i) the further widening of the external deficit[48]; (ii) higher uncertainty surrounding the future fiscal and income policy stance and (iii) the faster-than-expected rise in the annual inflation rate in October, for the second month in a row[49].

However, the EUR/RON exchange rate discontinued its rise towards the end of the month, and even tended to decrease slightly during the first two 10-day periods in December. This most likely reflected the effects of the at least partial reversal of previous capital outflows from the local financial market, amid financial investors reconsidering the attractiveness of domestic currency-denominated investments (Table 3.1), and the potential influences of global factors, given the temporary synchronisation with the trajectory of the exchange rates of the main currencies in the region. Nevertheless, in the last 10-day period in December, the EUR/RON exchange rate diverged yet again from the developments in the region, posting a relatively sharp increase.

Against this background, the interbank forex market turnover picked up compared with the previous quarters, and non-residents' transactions witnessed large shifts in trajectory. Specifically, they saw their negative balance posting a drastic decline in October,

[48] January through September 2017, the current account deficit exceeded by 45.3 percent the reading in the same year-ago period (the trade deficit widened by 26 percent), while its coverage by foreign direct investment and capital transfers diminished.

[49] The effect of these factors on market participants' perception/expectations clearly prevailed over the impact of the much stronger-than-anticipated economic growth in 2017 Q3, revealed by statistical data released during this period.

followed by a renewed increase in November, while in December they recorded a surplus. By contrast, residents' net demand for foreign currency increased steadily until almost the end of the period. However, for the period as a whole, the overall market deficit contracted compared with the previous two quarters.

In 2017 Q4, the domestic currency depreciated against the euro by 0.8 percent in nominal terms[50] and appreciated by 1.4 percent in real terms. In relation to the US dollar, the leu weakened by 1.6 percent in nominal terms and strengthened by 0.7 percent in real terms, given the former's appreciation against the euro[51]. Looking at the average annual exchange rate dynamics in 2017 Q4, the domestic currency saw its nominal depreciation versus the euro diminish slightly and posted the largest nominal appreciation against the US dollar in the past four years (Chart 3.6).

2.3. Money and credit

Money

September through November 2017, the growth rate[52] of broad money (M3) picked up compared with the previous three months from 9.1 percent to 10.0 percent (Table 3.2). Nevertheless, developments were uneven, as the advance in October, posted after a month of stagnation and reflecting the impact of disbursements from EU funds for agriculture, was followed by a loss of momentum, also due to economic agents' payments related to the additional dividend.

Table 3.2. Annual growth rates of M3 and its components

real percentage change

	2016	2017				
	IV	I	II	III	Oct.	Nov.
	quarterly average growth					
M3	11.8	10.3	9.7	9.9	10.7	9.0
M1	24.7	21.2	20.0	19.9	18.2	15.0
Currency in circulation	18.3	17.3	16.4	15.7	13.9	12.7
Overnight deposits	27.9	23.1	21.6	21.9	20.1	16.0
Time deposits (maturity of up to two years)	-1.5	-1.6	-2.2	-2.4	1.1	1.3

Source: NIS, NBR

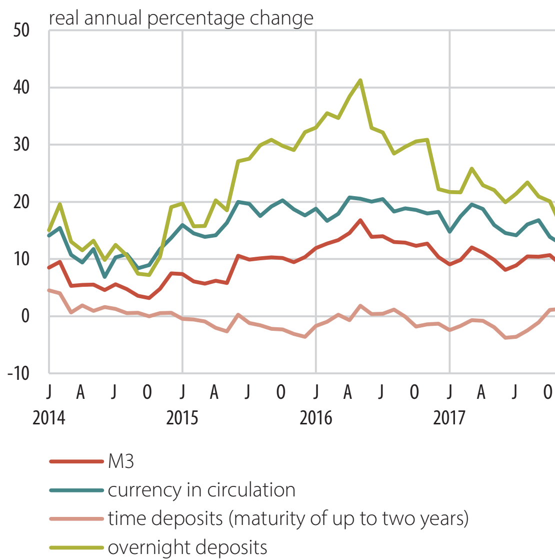
From the perspective of M3 components, its growth was supported by the ongoing recovery trend in the dynamics of time deposits with a maturity of up to two years, which returned to positive territory in October, for the first time in 13 months. This was due to the markedly faster pace of increase of non-financial corporations' time deposits (post-2008 high, recorded in October), which are more receptive to developments in related rates, which, in turn, reflected more quickly the movements of interbank rates. By contrast, narrow money (M1) advance continued to decelerate, amid a more obvious slowdown in the annual growth rate of currency in circulation, as well as a decline in the rates of change of ON deposits of households

50 During the same period, the Hungarian forint depreciated against the single currency by 1.5 percent, while the Polish złoty and the Czech koruna appreciated by 1.6 percent and 1.7 percent respectively.

51 The gold price per ounce in US dollars fell in 2017 Q4 as a whole, given that until the last day in November it remained almost the same as at the end of the previous quarter, decreased temporarily in the first part of December in anticipation of the Fed conducting a further rate hike, before embarking on an upward trend.

52 Unless otherwise indicated, percentage changes refer to the average annual growth rates in real terms for September-November 2017.

Chart 3.7. Main broad money components



Source: NIS, NBR

and especially of non-financial corporations. In this context, the share of M1 in broad money stopped its uptrend, falling, for the first time in the past five months, below 60 percent in November (Chart 3.7).

Similarly to the previous period, September through November 2017, the shifts in direction witnessed by the annual growth rate of M3 stemmed from the behaviour of non-financial corporations' investments. Their annual pace of increase saw a pick-up in October[53], amid relatively higher disbursements to recipients of EU funds for agriculture[54] and a stronger increase in government spending on goods and services, before witnessing a slowdown, also due to some companies paying additional dividends to the government budget[55]. By contrast, household M3 deposits posted steadily softer annual dynamics – despite household income probably maintaining the high growth rates recorded previously[56] – and continued to adjust their structure to the detriment of time deposits. In the period under review, developments suggest a relative rise in propensity for consumption, alongside a faster increase in trade turnover.

From the perspective of M3 counterparts, developments in the pace of increase of broad money reflected the expansionary effect of the slower annual rate of change of central government deposits, the slight pick-up in private sector credit (September), and of the drop in the dynamics of long-term financial liabilities[57] (October and November); an opposite impact had the weaker annual growth rates of banks' net foreign assets and of government credit respectively.

Credit to the private sector

September through November 2017, the dynamics[58] of credit to the private sector stepped up marginally (4.3 percent as opposed to 4.2 percent June through August 2017; Chart 3.8). Looking at monthly developments, its annual rate continued to grow in September – reaching a five-year high of 7.3 percent in nominal terms[59] –,

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53 In September, the annual growth rate of total M3 deposits of non-financial corporations slowed down, solely due to the statistical effect exerted by the rise in the annual inflation rate.

54 According to press releases from the Agency for Payments and Interventions in Agriculture, disbursements were made for advance subsidies in the 2017 Campaign, subsidies for the reduction of the excise duty on diesel used in agriculture in 2017 Q2, funds for bee-keepers, vineyards restructuring and the agricultural annuity. However, the breakdown of these amounts by group of recipients is not possible.

55 According to the decisions taken in General Shareholders' Meetings, among the most important companies which distributed additional dividends were Hidroelectrica in September, and Transelectrica, Nuclearelectrica, Transgaz, Romgaz and Conpet in November.

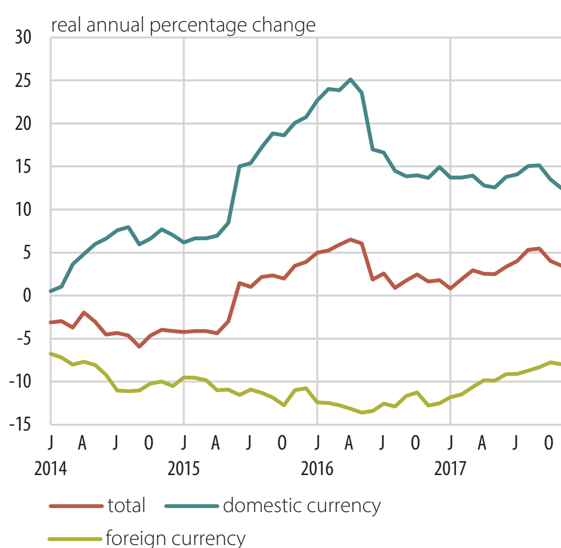
56 The relative abatement in the average dynamics of wage earnings was accompanied by the faster growth of remittances from abroad and income in the form of social benefits.

57 Capital accounts included.

58 Unless otherwise indicated, percentage changes refer to the average annual growth rates in real terms for September-November 2017.

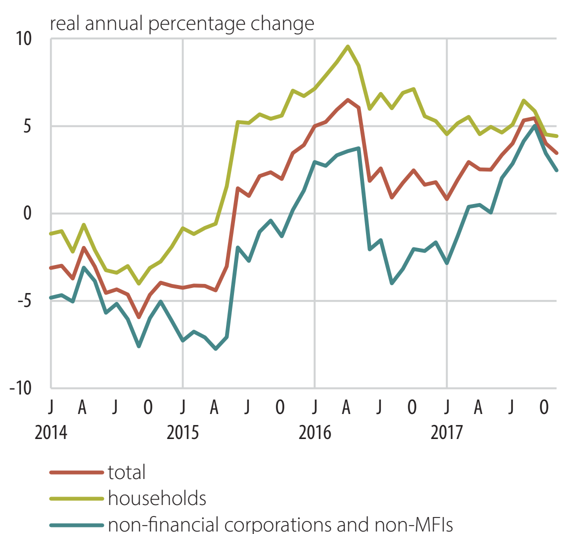
59 A higher reading was recorded in May 2012.

Chart 3.8. Credit to the private sector by currency



Source: NIS, NBR

Chart 3.9. Credit to the private sector by institutional sector



Source: NIS, NBR

before slowing down in each of the following months, also due to the statistical effect of the higher annual inflation rate.

The slightly faster average pace of increase most likely stemmed from the rise in overdraft credit, revolving credit included, with opposite effects being exerted by the relative contraction in annual terms of the flow of new loans and by the larger volume of non-performing loans removed from banks' balance sheets. The breakdown by currency shows that the leu-denominated component further was the key driver, while the dynamics of the foreign currency component remained in negative territory. Against this background, the share of leu-denominated loans in total private sector credit continued to widen, reaching a new post-1996 high of 61.8 percent in November.

Looking at the breakdown by group of recipients, loans to non-financial corporations remained the main contributor (Chart 3.9). Their annual growth rate picked up in September, owing to the lei component and, to a smaller extent, to short-term foreign-currency loans. However, the dynamics slowed down in the following two months, amid the relative decline in new loans and increased volume of non-performing loans removed from credit institutions' balance sheets compared with the previous year[60]. In this period, an opposite, albeit weaker, impact had the stronger growth of revolving loans, which probably occurred in industry and services[61].

Household credit witnessed steadily slacker dynamics, mainly due to leu-denominated loans, whereas the foreign-currency component posted an almost flat negative rate of change. The slowdown in the annual growth rate of leu-denominated household credit was attributable to consumer credit and other loans, affected by the drop in relative terms of the flow of new loans, also likely as a result of the tightening of related credit standards[62]. In the case of housing loans, the milder annual dynamics of the stock reflected exclusively the statistical effect of the annual inflation rate, the growth rate of new loans taken for this purpose accelerating markedly.

60 In November, to these added the statistical effect of the higher annual inflation rate.

61 Based on CCR data.

62 As shown in the NBR's November 2017 *Bank Lending Survey*.

4. Inflation outlook

The annual CPI inflation rate is projected to reach 3.5 percent at the end of 2018 and 3.1 percent at the end of 2019. Its path is marked by a temporary jump to levels nearing 5 percent during the first three quarters of the current year. Behind this pick-up stands the fading-out of first-round statistical effects associated with some indirect tax cuts and the scrapping of a number of non-tax fees and charges at the beginning of 2017, as well as the temporary influences of sizeable hikes in administered prices and fuel prices in the latter part of last year. To this adds the ongoing build-up of domestic inflationary pressures stemming from fundamentals driving core inflation. In the absence of other shocks materialising, starting from the end of this year until the forecast horizon, the annual CPI inflation rate is expected to return into and remain in the upper half of the variation band of the target, given the fading-out of the inflation bout affecting the exogenous components of the consumer basket. By contrast, the annual core inflation rate will run above the upper bound of the band during 2019. Contributing to this are both the progressive rise in economic agents' inflation expectations, although the levels anticipated for this horizon stay inside the variation band of the target, and the projected persistence of excess aggregate demand, amid the stimulative nature, albeit on the wane to neutral values, of real monetary conditions. The balance of risks to the annual inflation projection is assessed to be tilted to the upside compared to its path in the baseline scenario, with the sources of risks being associated with the domestic environment in particular.

1. Baseline scenario

1.1. External assumptions

Over the projection interval, external demand, assessed based on the effective EU GDP (EU-28 excluding Romania), is seen strengthening further, its annual growth rates running close to 2 percent and exceeding the levels foreseen in the previous *Inflation Report* (Table 4.1). Among the most notable factors supporting domestic demand in Romania's main trading partners across the euro area are the persistence of the ECB's accommodative monetary policy stance and the ongoing improvements in labour market conditions. Global growth is envisaged to further underpin exports, amid a brighter macroeconomic outlook in the major emerging economies, i.e. China, Brazil and Russia, and in advanced economies, particularly the USA, in the context of a gradual recovery of investment. Given the robust economic growth, accompanied by a more favourable outlook for total investment and a falling unemployment rate, the growth trend in the effective EU GDP was revised upwards. Accordingly, the positive

gap of the effective EU GDP is expected to be lower than previously projected, but to post rising levels almost throughout the forecast interval, reflecting the ongoing cyclical advance of trading partners' economic activity, with a stimulative impact on economic activity in Romania.

Table 4.1. Expectations on the developments in external variables

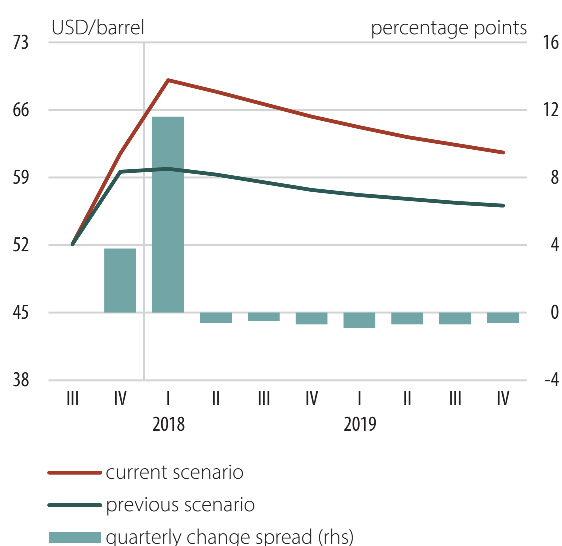
annual averages

	2018	2019
Effective EU economic growth (%)	2.3	2.1
Annual inflation rate in the euro area (%)	1.4	1.6
Annual inflation rate in the euro area, excluding energy (%)	1.3	1.6
Annual CPI inflation rate in the USA (%)	2.0	2.2
3M EURIBOR (% per annum)	-0.3	-0.1
USD/EUR exchange rate	1.18	1.19
Brent oil price (USD/barrel)	67.2	62.9

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

The annual HICP inflation rate in the euro area is further forecasted to remain below the 2 percent benchmark, yet posting higher readings than in the previous *Report*. The anticipated increase in wage costs, as a result of improved labour market conditions, and global inflationary pressures cause the average annual HICP inflation rate excluding energy to follow an upward path in the euro area in 2018 and 2019. The dynamics of oil and food commodity prices will continue to mark the short-term developments in inflation rate. Annual inflation rate in the USA is foreseen to be higher than that in the euro area and slightly above the 2 percent benchmark during 2019.

Chart 4.1. Brent oil price scenario



Source: U.S. Energy Information Administration, NBR assumptions based on Bloomberg data

The trend of euro appreciation versus the US dollar is projected to continue over the forecast interval, yet in light of the recent developments, this assumption is associated with stronger uncertainty.

The scenario for the developments in the international Brent oil price is based on futures prices and foresees a downtrend during the projection interval, reaching USD 61.6 per barrel at the forecast horizon (Chart 4.1). The levels expected for the oil price are further uncertainty-ridden, as mirrored by the revised trajectories of futures prices in the successive projection rounds. On the background of both supply-side factors (the November extension of the agreement between OPEC members and other non-OPEC oil-producing countries to further cap oil output, geopolitical tensions) and demand-side factors (pick-up in global economic activity), oil prices saw an upsurge in 2017 Q4. This evolution is expected to continue into 2018 Q1, hence projected levels are above those in the previous forecasting round.

1.2. Inflation outlook

The baseline scenario of the macroeconomic projection places the annual CPI inflation rate at 3.5 percent and 3.1 percent at end-2018 and end-2019 respectively (Table 4.2). These values are at the upper bound of and inside the ±1 percentage

point variation band of the 2.5 percent flat target respectively (Chart 4.2). The path of the annual inflation rate is marked by a jump at the turn of 2018 up to levels around 5 percent, which are seen persisting during the first three quarters of this year. These developments result from: the fading-out of first-round statistical effects associated with some indirect tax cuts in January 2017 and the scrapping of a number of non-tax fees and charges in February 2017; the expected sizeable hikes in administered prices; fuel price increases; as well as from the build-up of domestic inflationary pressures at the level of core inflation. Starting with the final months of this year, the annual CPI inflation rate is projected to decelerate substantially, amid the fading impact of the shocks that affected the exogenous components of the consumer basket[63] September through November 2017. These shocks are associated with the hikes in the fuel excise duty, oil prices and electricity and heating prices[64].

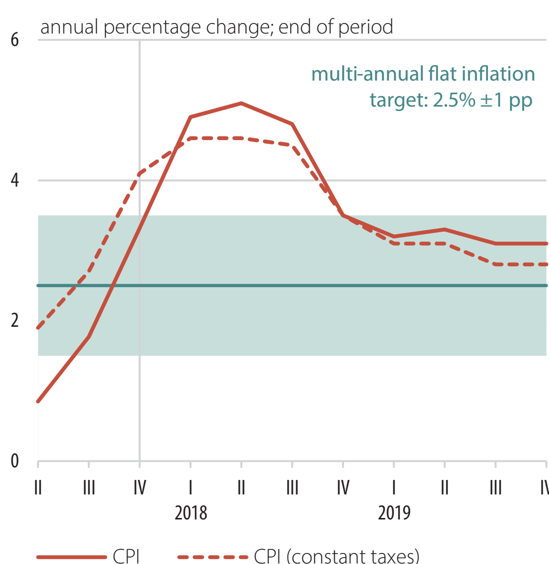
Table 4.2. The annual inflation rate in the baseline scenario

annual percentage change; end of period

	2018				2019			
	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	4.9	5.1	4.8	3.5	3.2	3.3	3.1	3.1
CPI projection*	4.6	4.6	4.5	3.5	3.1	3.1	2.8	2.8

*) calculated at constant taxes

Chart 4.2. Inflation forecast



Source: NIS, NBR projection

Compared to the previous *Inflation Report*, the forecasted annual CPI inflation rate has been revised upwards by 0.3 percentage points for the end of 2018, amid larger projected contributions from all components beyond the monetary policy scope, dampened by a lower contribution from the adjusted CORE2 index.

Table 4.3. Annual adjusted CORE2 inflation rate in the baseline scenario

annual percentage change; end of period

	2018				2019			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Adjusted CORE2	2.8	3.0	3.1	3.3	3.7	3.7	3.7	3.6

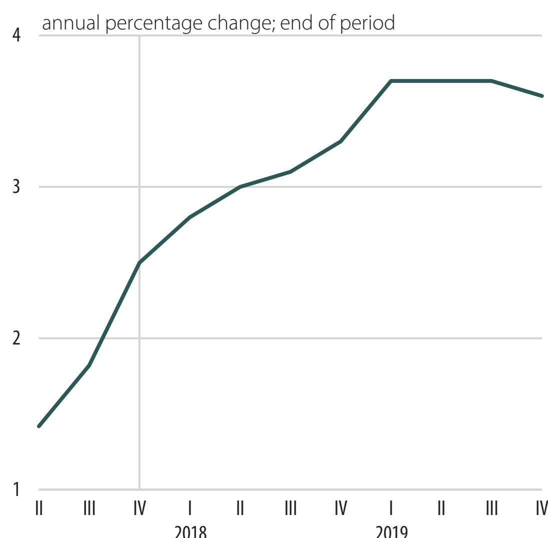
Having gained momentum in the latter part of 2017, the annual adjusted CORE2 inflation rate will remain on an upward path this year as well, on the back of the rise in economic agents' inflation expectations and the further high excess aggregate demand economy-wide. Contributing to this will be the pro-cyclical fiscal and income policy stance, the stimulative real monetary conditions, particularly in the first part of the reviewed interval, and the favourable outlook for private sector wages, amid the labour market tightening and the rise in labour productivity. During 2019, annual core inflation will stick to relatively steady levels, yet above the upper bound of the variation band of the target (Table 4.3 and Chart 4.3). At this horizon, economic agents' inflation expectations are seen remaining slightly above 3 percent and excess demand is envisaged to decline against the backdrop of close-to-neutral values of real broad monetary conditions. With inflation rates in Romania's main trading partners remaining well below 2 percent and imports rather than domestically-produced

63 Their path during the projection interval is, however, marked by high uncertainty. For further details, see Section 1.4 – Risks associated with the projection.

64 These atypical increases will temporarily impact the annual CPI inflation rate over a one-year time span.

goods accommodating the expansion in consumption to a larger extent, the external environment will continue to put downward pressure on the dynamics of domestic core inflation.

Chart 4.3. Annual adjusted CORE2 inflation



Source: NIS, NBR projection

Compared to the November 2017 *Inflation Report*, the annual adjusted CORE2 inflation rate was subject to an upward revision during the first three quarters of this year; subsequently, assuming the softening of supply-side shocks that impacted agri-food prices at the end of 2017, the annual rate of adjusted CORE2 index will stand 0.4 percentage points lower at the end of 2018. Starting in 2019 Q1, the annual core inflation rate will run at levels similar to the previously forecasted ones, yet above the upper bound of the variation band (3.7 percent).

The cumulative contribution of inflation components beyond the scope of monetary policy, namely administered prices, volatile food (VFE) prices, fuel prices and tobacco product and alcoholic beverage prices, to the annual CPI inflation rate is seen at 1.6 percentage points at end-2018 (a value revised upwards by 0.6 percentage points versus the previous *Inflation Report*) and at 0.9 percentage points at the end of next year (Table 4.4).

Table 4.4. Components' contribution to annual inflation rate*

percentage points

	2018	2019
Administered prices	0.8	0.4
Fuels	0.3	0.1
VFE prices	0.3	0.2
Adjusted CORE2	2.0	2.1
Tobacco and alcoholic beverages	0.1	0.2

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

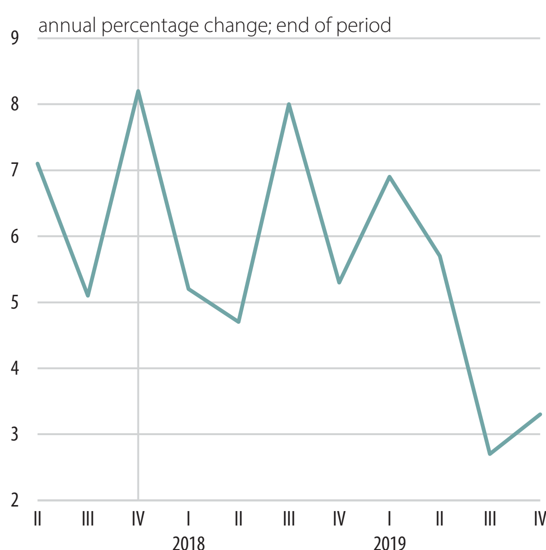
The annual dynamics of volatile food (VFE) prices are projected at 5.3 percent at the end of this year and 3.3 percent at the end of next year (Chart 4.4), assuming normal agricultural years[65] in 2018 and 2019. For 2018, the projected value was revised upwards by 1.5 percentage points relative to the previous *Report*, amid weak production of eggs at European level at the end of the previous year.

The baseline scenario of the projection foresees the annual dynamics of administered prices coming in at 4.2 percent at the end of 2018 and 1.9 percent at the end of 2019 (Chart 4.5). For this year, the upward revision by 1.2 percentage points is based mostly on the hike in the natural gas price for households, amid higher acquisition prices[66]. The projected path is marked by uncertainties related to the effects of completing the electricity price liberalisation, with the final stage being implemented on 31 December 2017.

65 In the absence of other relevant information, the standard assumption envisages normal crops, i.e. close to the multiannual average of agricultural production.

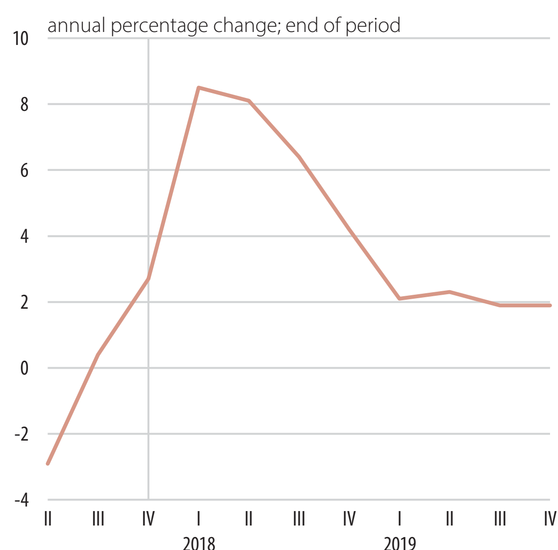
66 Following the meeting of 8 January 2018, the Regulatory Committee of the Romanian Energy Regulatory Authority decided to raise the unitary gas cost from lei 81.48 per MWh to lei 88.28 per MWh, due to higher acquisition prices of domestically-produced natural gas. For further details, see the Romanian Energy Regulatory Authority press release of 8 January 2018 available at: http://www.anre.ro/ro/ presa/ comunicate/comunicat-08-01-2018-preturi-furnizare-gaze-naturale-clienti-casnici (Romanian only).

Chart 4.4. VFE prices annual inflation



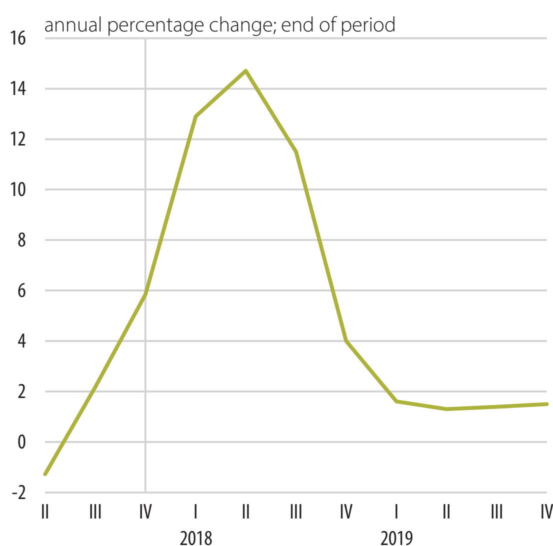
Source: NIS, NBR projection

Chart 4.5. Administered prices annual inflation



Source: NIS, NBR projection

Chart 4.6. Fuel prices annual inflation



Source: NIS, NBR projection

The annual dynamics of fuel prices are projected at 4 percent at end-2018 and 1.5 percent at end-2019 (Chart 4.6). The path of this component is marked by the two-step increase in the excise duty on 15 September and 1 October 2017 (assessed to have a cumulated impact of 0.3 percentage points on the annual CPI inflation rate for a one-year time span). In 2018, the annual fuel price dynamics will exceed by 2.8 percentage points the projection in the previous *Inflation Report*, owing to a higher expected annual rise in the USD-denominated oil price and an upward shift in inflation expectations. For the latter part of the forecast interval, given the expected slowdown in the international oil price dynamics, the annual growth rate of fuel prices will stand below the previously projected one.

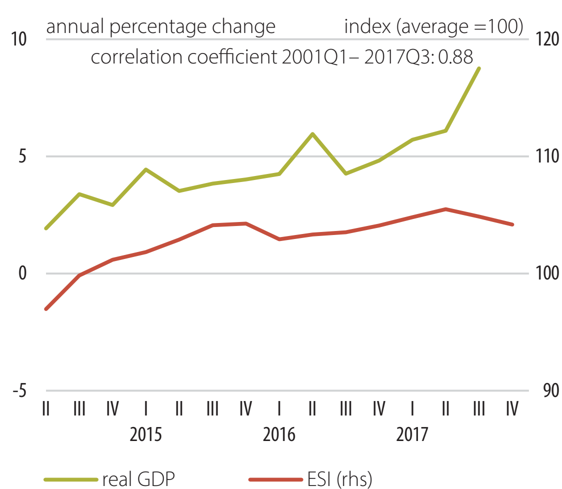
The path of tobacco product and alcoholic beverage prices foresees rises of 1.3 percent at the end of this year and 3.1 percent at the end of next year, reflecting the April hikes in excise duties anticipated for both years of the projection, pursuant to the legislation in force governing their calculation method. Compared to the previous forecasting round, the annual dynamics of these prices were revised upwards by 0.4 percentage points for this year following the manufacturers' increases in tobacco product prices at the end of the prior year.

1.3. Demand pressures in the current period and over the projection interval[67]

Output gap

In 2017 Q3, real GDP rose by 2.6 percent versus the previous quarter and by 8.8 percent compared to the same year-ago period[68]. The quarterly dynamics reflected the notable contribution of the agricultural sector on the supply side and of the private consumption on the demand side, respectively (also on the back of the rise in the self-consumption component, strongly correlated with the evolution of agriculture). The projections for the next two quarters indicate decelerating dynamics from 2017 Q3 to levels close to the historical average. This forecast is supported by signals coming from monthly indicators. In particular, the quarterly dynamics of industrial production rebounded, whereas the retail trade turnover volume lost momentum and the economic sentiment indicator, especially consumer confidence, saw a decline (Chart 4.7)[69]. The quarterly GDP growth is anticipated to be further driven by domestic demand, while the contribution of net exports of goods and services is expected to remain negative on account of the developments in imports, fuelled by those in domestic absorption and exports.

Chart 4.7. Economic sentiment indicator* and economic growth



*) seasonally adjusted data

Source: NIS, EC-DG ECFIN

The potential GDP dynamics reflect positive contributions from all production factors throughout the forecast interval. The capital stock benefits from the recent favourable developments, as well as from the projected growth of the gross fixed capital formation (GFCF). The contribution of labour is based on the upward trend of employment[70], amid the favourable developments in economic activity. The dynamics of the total factor productivity (TFP) trend are associated with the persistent effects of the recent GDP acceleration, accompanied by increases in labour productivity in sectors such as industry or retail trade, as well as agriculture, whose contribution throughout 2017 is assessed to be exceptional. A higher absorption rate of structural and cohesion funds could have additional positive effects. On the long term, several factors weigh on the TFP trend, such as the delay in infrastructure

[67] Unless otherwise indicated, percentage changes are calculated based on seasonally adjusted data series. Source: NBR, MPF, NIS, Eurostat, EC-DG ECFIN and Reuters.

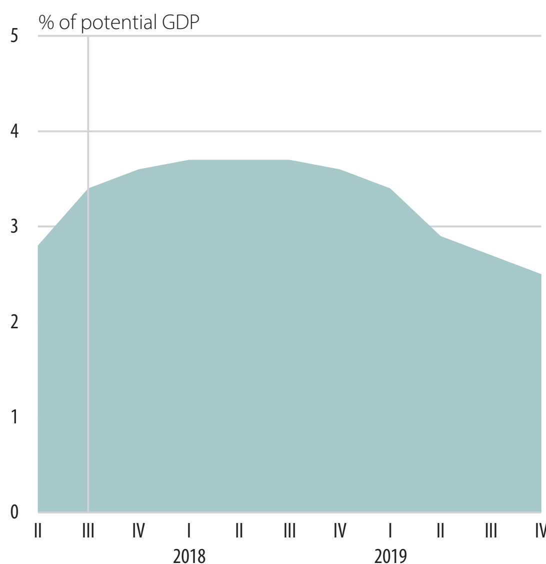
[68] NIS Press Release No. 16 of 12 January 2018. The recorded values hit post-crisis highs in both quarterly and annual terms. The annual dynamics are calculated based on gross data series.

[69] Compared to the average of 2017 Q3, in October-November 2017, industrial production increased by 1.8 percent, while the dynamics of retail trade turnover volume (excluding motor vehicles and motorcycles) slowed down to 1.7 percent. Even though the economic sentiment indicator went down 0.7 points in 2017 Q4 compared to a quarter earlier, it still stands above its historical average.

[70] The decomposition shows that the increase in the activity rate of working-age population and the ILO unemployment downward trend more than offset the multi-annual demographic decline.

investments, with an impact also on capital and labour mobility, a series of structural rigidities (e.g. the regulatory framework[71]) or the modest allocation of resources for innovation.

Chart 4.8. Output gap



Source: NBR calculations based on NIS data

The output gap (Chart 4.8), which widened throughout 2017[72], is expected to stay in 2018 at values similar to those recorded at end-2017, before narrowing during 2019. The magnitude and dynamics of excess demand mirror: (i) the impact of the discretionary component of fiscal policy and income measures, projected to diminish more visibly in 2019; (ii) the gradual decline of the stimulative nature of real broad monetary conditions to neutral values in the course of 2019; (iii) the decelerating dynamics of households' real disposable income starting with 2018 and (iv) the advance of the external demand gap into positive territory. As compared to the previous *Inflation Report*, the domestic output gap for 2017 and 2018 is projected at similar values, but narrower for 2019, amid the reconfiguration of real broad monetary conditions to close-to-neutral values at this horizon. From the perspective of aggregate demand components, the output gap path is shaped by the developments in the gap of individual consumption of households and, to a lesser degree, by those in the GFCF gap. In turn, the gaps of exports and imports of goods and services are assessed at positive values, yet further having a negative net contribution to the output gap. The assessment of the output gap and of the gaps of GDP components is surrounded by a degree of uncertainty mirroring, *inter alia*, the frequency and size of the revisions of historical series and also their relatively high volatility.

The baseline scenario of the projection shows economic growth to have gathered momentum in 2017, before slowing down progressively throughout 2018 and 2019, *inter alia* amid a gradual decline in the stimulative nature of real broad monetary conditions to neutral values in the course of 2019 and the lower impact of the discretionary component of fiscal and income policy (i.e. the fiscal impulse). The projected GDP growth is determined by the evolution of private consumption, to which adds the GFCF rebound (further marked, however, by uncertainty). The advance in domestic demand is anticipated to fuel the imports of goods and services to rise faster than exports. Thus, the contribution of net exports to GDP growth is forecasted to register negative values, which will decrease in magnitude starting with 2019.

[71] In the *Worldwide Governance Indicators* (2017), the "Regulatory Quality" section presents perceptions regarding the ability of authorities to formulate and implement adequate policies and regulations and to promote the development of the private sector (moderate in the case of Romania, given the 0.6 indicator value on a scale from -2.5 to 2.5).

[72] Corroborative evidence on the cyclical position of the economy is brought by a broad set of indicators which point to a strengthening of overheating signals (in 2017 Q3 versus the previous quarter) or their remaining at least at a moderate level. For details on the set of variables under review, see Box 5 in the November 2017 *Inflation Report*.

Aggregate demand components

In 2017 Q3, the actual final consumption continued to rise in quarterly terms (3.7 percent, at a slightly faster rate)[73]. For the next two quarters, the forecast points to slower dynamics of this component. Signals in this respect are given by the developments in the average net wage economy-wide[74], as well as by the evolution of the consumer confidence indicator, whose sub-components (general economic context, financial situation, unemployment and developments in savings) worsened in 2017 Q4 versus the previous period.

The actual final consumption is projected to remain the key driver of economic growth over the entire interval, despite a slower annual growth compared to that assessed for 2017. This mirrors the expected sharp slowdown in the dynamics of households' real disposable income starting with 2018, given the significantly lower increases in public sector income and in wages (despite a persistently tight labour market), to which the anticipated path of the annual CPI inflation rate is added.

The quarterly dynamics of GFCF remained positive in 2017 Q3 as well, although decelerating significantly against the previous quarter (0.9 percent versus 3.2 percent). The near-term outlook indicates favourable GFCF dynamics for the next two quarters, but without a notable step-up. This forecast is based on signals regarding the expansion of production capacities in industry[75], due to increased confidence of companies operating in this sector, on the one hand, and on the further decline in construction works[76], on the other hand.

GFCF is foreseen to post positive annual dynamics in 2018 as well, yet the developments in this component are further affected by a number of factors that increase the uncertainty of the forecast. The latter is based on the recent favourable signals related to the industrial output of capital goods (in sub-sectors such as manufacturing of motor parts, electrical equipment and also agricultural machinery), the prospects of increased direct investment flows and the expected improved absorption of EU structural and investment funds. Relevant uncertainties are associated both with incidental factors, such as the low volume of capital expenditure of general government (amid the constraint of keeping the budget deficit capped at 3 percent of GDP), and with structural ones, such as the poor quality of infrastructure or the skilled labour shortage.

During 2017 Q3, exports of goods and services advanced by 1.2 percent versus the previous quarter. Given the ongoing recovery of external demand, new increases in this component are expected over the next two quarters.

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73 For details on drivers of GDP components in 2017 Q3, see Chapter 2, Section 1. Demand and supply.

74 In October-November, the average net wage saw an increase in real terms of only 0.1 percent as compared to the Q3 average.

75 In 2017 Q4, the capacity utilisation rate in industry is assessed at 76.7 percent, up by 1.6 percentage points as compared to Q3.

76 In October-November, construction works decreased by 3.7 percent compared to the Q3 average, on account of all sub-components (residential, non-residential and civil engineering works).

For the remainder of the projection interval, exports of goods and services will record favourable dynamics, albeit slower than in the previous years. On the one hand, the rise in exports of goods and services will be supported by favourable developments in the economies of main trading partners and also by the sales of sectors integrated in global value added chains (such as the manufacture of transport equipment and related sub-sectors). On the other hand, the real effective exchange rate is foreseen to diminish and even reverse its stimulative influence during the current year, thus adding to the pressures from unit labour costs exerted on the price competitiveness of local products. The slowdown in the growth rate of exports of goods and services is also determined by a series of dragging structural features of the economy, such as infrastructure quality or the level of innovation and sophistication of production processes[77].

Amid the domestic absorption advance and the favourable dynamics of exports, 2017 Q3 registered a new rise in imports of goods and services (+1.3 percent versus the previous quarter). In accordance with the developments in domestic absorption, the growth rate of imports of goods and services is forecasted to gradually decelerate, while still outpacing that of exports throughout the projection interval. In this context, net exports are anticipated to make a negative contribution to GDP growth over the entire projection interval, which will diminish starting next year.

In 2017 Q3, the balance-of-payments current account deficit continued its widening trend[78], primarily on account of the larger deficit on trade in goods (4-quarter cumulative data). Over the projection interval, the current account deficit is anticipated to continue to widen, posting values slightly above 3.5 percent of GDP in the medium term. At the same time, despite the recent decrease in the stable, non-debt-creating capital flows[79], the current account deficit will continue to be fully covered by these flows, even though their share in GDP is projected to be smaller as compared to historical values. This is based on the assumption of a lower absorption of EU structural and investment funds compared to 2016. Nevertheless, the widening of the current account deficit due to swifter consumption carries the potential to jeopardise macroeconomic equilibria, with a direct impact on capital flows to the local economy, given that developments in Romania's current account balance are divergent from those recorded by the other emerging economies in the region.

Broad monetary conditions

Broad monetary conditions capture the impact exerted on future developments in aggregate demand by the real interest rates applied by credit institutions on leu- and foreign currency-denominated loans and deposits of non-bank clients and by the

77 Nevertheless, in sectors such as the automotive industry, there are optimistic expectations about external demand developments, on the background of car manufacturers releasing new models or opening new production facilities in countries in the region. This will translate into a higher number of orders to local suppliers.

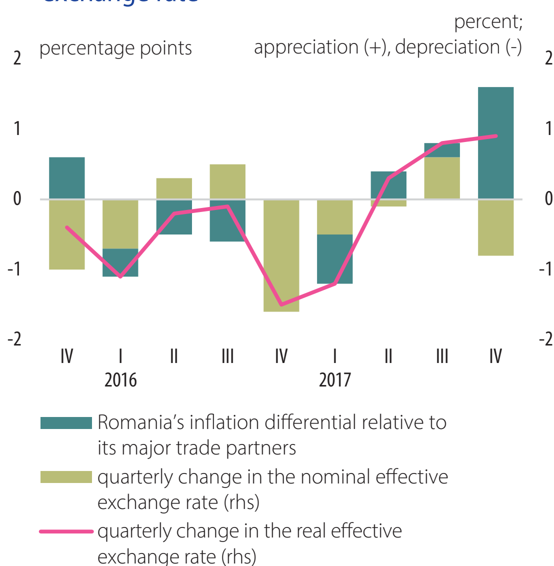
78 As a share in GDP, its value stood at 2.9 percent (4-quarter cumulative data) as compared to 2.5 percent in Q2 and 2.1 percent in 2016.

79 The equity component of foreign direct investment and the capital transfers associated with EU structural and investment funds.

real effective exchange rate[80] 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[81].

In nominal terms, interest rates on new loans and new time deposits in lei are assessed to have risen in 2017 Q4 (amid the influences brought on by the extensive changes in liquidity conditions in the banking system and by the NBR narrowing the corridor defined by interest rates on the standing facilities) and are anticipated to further rise in 2018 Q1. In real terms, however, interest rates are seen to have decreased in 2017 Q4 (given the faster upward trend of economic agents' inflation expectations) and subsequently to marginally increase in 2018 Q1. Thus, for the aforementioned quarters, the real interest rates continue to exert a cumulated stimulative impact on the economic activity in the periods ahead.

Chart 4.9. Quarterly change in the effective exchange rate



Source: Eurostat, U.S. Bureau of Labor Statistics, NBR, NBR calculations

In 2017 Q4, the domestic currency witnessed a depreciation in nominal effective terms, mainly on account of its developments versus the euro. In the same period, the domestic currency is assessed to have appreciated in real effective terms (Chart 4.9), mainly as a result of the positive differential between the inflation rate in Romania and that reported by its trading partners. The real effective exchange rate is therefore estimated to further have a stimulative impact, albeit softening, on the economic activity in the periods ahead via the net export channel.

The wealth and balance sheet effect in 2017 Q4 and 2018 Q1 continues to exert stimulative influences on the output gap in future periods, as the ECB's persistently accommodative monetary policy is mirrored in the further significant negative gap of the real foreign interest rate. At the same time, the anticipated evolution of the real effective exchange rate gap is seen to exert a stimulative effect, while the sovereign risk premium, approximated based on the option adjusted spread (OAS), is assessed to have a relatively neutral effect via its gap.

Overall, throughout 2017 Q4 and 2018 Q1, real broad monetary conditions are assessed to continue to exert a stimulative impact on the aggregate demand in the following quarters. However, the impact is softening, mainly due to the lowering stimulative contribution of the real effective exchange rate via the net export channel.

[80] The relevant exchange rate for the NBR's macroeconomic model for analysis and medium-term forecasting relies on the EUR/RON and USD/RON exchange rates, with the weighting system mirroring the weights of the two currencies in Romania's foreign trade.

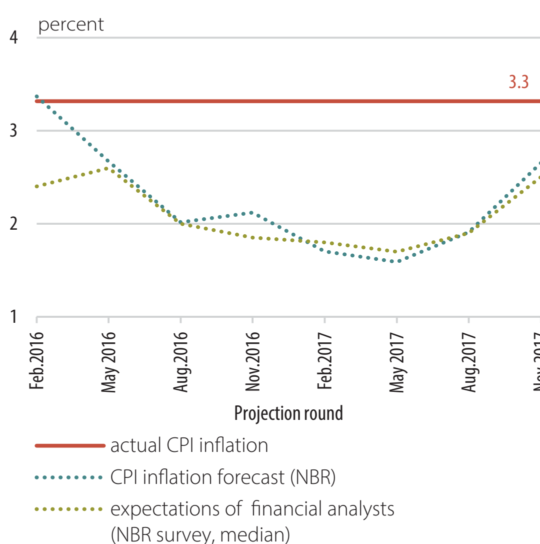
[81] The relevance of this channel has declined gradually in recent periods, given the drop in the share of foreign currency-denominated loans in total credit to the private sector, amid the faster rise in leu-denominated flows versus those in foreign currency.

Over the forecast interval, real broad monetary conditions are anticipated to gradually diminish their stimulative influence to neutral values in 2019. Favourable contributions, though on the decline, are attributed to real interest rates on new loans and new time deposits and also to the wealth and balance sheet effect, amid the ECB's persistently accommodative monetary policy. An increasing differential of the inflation rate relative to trading partners will entail the emergence of a restrictive impact of the real effective exchange rate on economic activity via the net export channel. The NBR's monetary policy stance is shaped with a view to ensuring and maintaining price stability over the medium term in a manner conducive to achieving sustainable economic growth and preserving macroeconomic stability.

Box 3. Assessment of forecast errors for the December 2017 annual CPI inflation

Macroeconomic forecasts play a pivotal part in the inflation targeting strategy, considering that the central bank's decisions work their way through the economy with specific time lags. With a view to improving the forecasting framework, the assessment of forecast errors is common practice among central banks with such a monetary policy regime in place[82]. In this context, this box carries on the previous years' endeavours to assess the accuracy of NBR projections made in successive rounds, this time focusing on the annual CPI inflation rate for end-2017. Relative to this point of reference, eight projection rounds were identified, corresponding to the *Inflation Reports* published from February 2016 to November 2017.

Chart A. Successive forecasts of annual CPI inflation rate for December 2017



Source: NIS, NBR projections, NBR survey

After the recent years saw a trend of overestimating the annual CPI inflation rate[83], the December 2017 value[84] was underestimated in all the rounds under review, except that of February 2016. The forecast errors[85] ranged between a low of -1.7 percentage points (in the May 2017 *Inflation Report*) and a high of +0.1 percentage points (in the February 2016 *Inflation Report*). In terms of accuracy, the size of these errors is similar to the median of those arising from financial analysts' forecasts taken from the

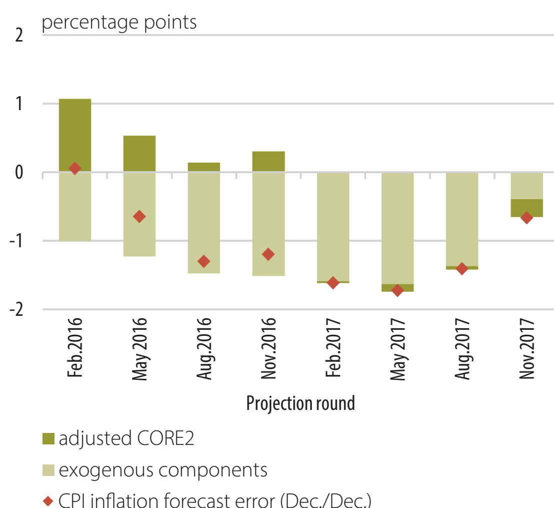
[82] See, for instance, the March *Inflation Reports* released by Magyar Nemzeti Bank or the May 2017 study titled "Evaluation of the Riksbank's Forecasts" published by Sveriges Riksbank.

[83] Domestically, especially amid the numerous taxation changes, which were not known or whose implementation was not certain at the time the forecasts were made, but also owing to the overestimation of administered price dynamics. On the external front, the persistence of a deflationary/disinflationary environment worldwide had also an important influence on domestic price dynamics via imported goods. For further details, see the dedicated boxes in the *Inflation Reports* of February 2016 and 2017.

[84] According to NIS press release No. 17 of 12 January 2018, the annual CPI inflation rate for end-2017 came in at 3.32 percent.

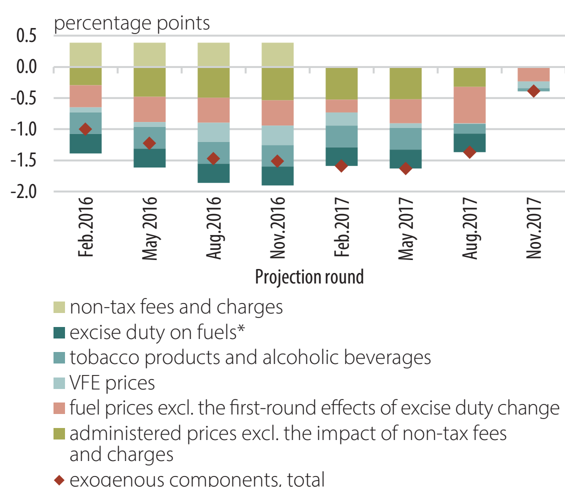
[85] Forecast errors are calculated as the difference between the successively forecasted values and the actual one. A negative difference implies that the projection underestimated the actual CPI inflation rate, whereas a positive difference reveals its overestimation.

Chart B. Forecast errors in successive rounds distributed by contribution of adjusted CORE2 and of exogenous components



Source: NBR calculations

Chart C. Contributions of exogenous components to the forecast errors in successive rounds



*) it refers to the impact of the two-step hike in 2017 (September and October). The January 2017 cut was incorporated in the November 2015 projection round.

Source: NBR calculations

Survey on inflation expectations conducted by the central bank in the months when *Inflation Reports* were published (Chart A).

Chart B sets out the contributions to the forecast errors from adjusted CORE2 inflation rate and the components exogenous to the monetary policy scope. In the first two forecasting rounds under review, the overestimation of the adjusted CORE2 index dynamics occurred amid disinflationary pressures from imported inflation, given the global environment characterised by persistently low inflation. At the same time, at EU level, global shocks (significant falls in international commodity prices), together with a slow recovery of aggregate demand, overlapped with other regional shocks. In particular, an additional disinflationary impulse was caused by the persistent agri-food oversupply following the ban imposed by Russia in 2014 and extended later on and that imposed on Turkey as well. Subsequently, the forecast errors declined, also as a result of the recalibration process of the macroeconomic model for analysis and medium-term forecasting. This process was carried out amid a great deal of evidence pointing to a weaker relationship between core inflation rate and the evolution of domestic economic activity (proxied by the output gap) over the past years, which may be linked to a higher relative importance of external factors in explaining the dynamics of domestic prices[86].

However, the prevailing contribution to explaining forecast errors was that of consumer-basket components beyond the monetary policy scope (administered prices, volatile food prices, fuel prices, tobacco product and alcoholic beverage prices; Chart C).

The annual dynamics of administered prices at the end of the previous year were significantly affected by the increase, which had not been anticipated in the forecasting rounds prior to November 2017[87], in the competitive market component of electricity prices, as well as by the authorities' decision to remove some non-tax fees and charges in early 2017. This removal was included in the

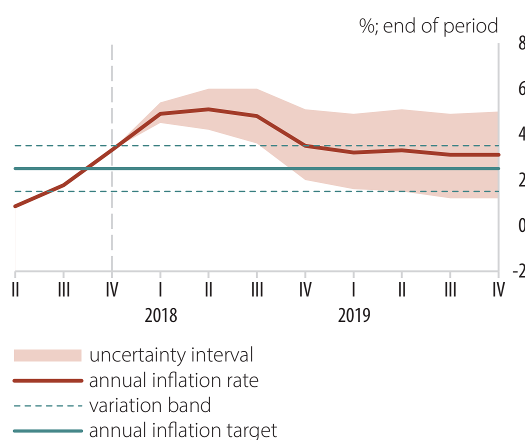
[86] For further details, see Box 2 titled Revisions of Inflation Projections of Some Central Banks in the August 2016 *Inflation Report* and Box 2 titled The Relationship Between Economic Activity and Inflation in the May 2017 *Inflation Report*.

[87] For further details, see the Romanian Energy Regulatory Authority press release of 26 September 2017, available at: http://www.anre.ro/ro/presa/comunicate/comunicat-26-09-2017-avizare-tarifecpc-trimestrul-iv (Romanian only).

forecast coordinates starting with the February 2017 round (its contribution to the forecast error of annual CPI inflation rate equalled 0.4 percentage points in the rounds when this measure was not known, i.e. February through November 2016).

The developments in fuel prices and tobacco product prices – other components beyond the scope of monetary policy – also had significant contributions to the underestimation of annual CPI inflation rate. The annual dynamics of fuel prices for December 2017 were underestimated in all eight forecasting rounds under review, amid the unexpected hike in Brent oil prices in the closing months of 2017. This occurred against the backdrop of the extension of the agreement between OPEC members and non-OPEC producers to cap oil output until end-2018, alongside growing demand for this commodity at global level. As for the measures concerning changes in the excise duty on fuels (removal of the special excise duty in January 2017 and, later on, the two-step hike thereof on 15 September and 1 October 2017), even though the cumulated effects on the annual fuel price inflation at end-2017 and, hence, on CPI inflation were subdued, the breakdown of forecast errors reflects those measures differently, depending on the time the information was released and embedded into the projection. Specifically, the impact of the cut in the excise duty at the turn of the year was considered in every round under review, while that of its hike was taken into account in the November 2017 round alone, owing to the authorities' belated announcement of this measure. The annual dynamics of tobacco product prices for end-2017 were underestimated owing to an unanticipated increase in these prices by suppliers during the latter half of the previous year, most likely on the back of stronger demand.

Chart 4.10. Uncertainty interval associated with inflation projection in the baseline scenario



Note: The uncertainty interval was calculated based on the annual CPI inflation forecast errors in the NBR projections during 2005-2017. The magnitude of forecast errors is positively correlated with the time horizon they refer to.

Source: NIS, NBR calculations and projections

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 4.10). The risks specific to the current round relate primarily to the domestic environment, stemming from the future fiscal and income policy stance, the developments in the wage-productivity gap, amid tight labour market conditions, as well as from possible deviations of the administered price dynamics from the trajectory in the baseline scenario, in the context of the numerous recent adjustments in these prices.

A more pro-cyclical fiscal and income policy stance than that assumed in the baseline scenario, given the uncertainties surrounding possible reconfigurations of the public budget coordinates over the projection interval, may, in time, lead to a larger widening of the positive output gap and, implicitly, to stronger inflationary pressures. Opposite influences could arise from possible additional corrective fiscal measures during the current

year to ensure compliance of the fiscal deficit with the envisaged targets. Moreover, the adoption of such measures could imply a further reduction in public investment spending in favour of current expenditure, which might affect the economy's growth potential, *inter alia* in the context of the already noticed delays in the absorption of EU structural and investment funds.

Additional inflationary pressures might stem, given the considerable labour market tightness, from a faster-than-assumed growth rate of disposable income, in the absence of comparable productivity gains. At the same time, if the expansion of consumption continued to be increasingly accommodated from imports of goods rather than from domestically-produced goods, the external imbalance would widen, possibly leading to reassessments by foreign investors of the risks associated with financial investments in the domestic economy, with implications on the stable capital flows to the Romanian economy.

In this context, it is desirable to consistently implement a balanced macroeconomic policy mix, as well as to speed up structural reforms necessary to maintain macro-stability and ensure lasting and sustainable economic growth, without prejudice to the objective of price stability.

On the external front, further relevant are the uncertainties surrounding the impact of the diverging monetary policy stances pursued by the Fed and the ECB and of the Brexit talks on the global macroeconomic environment, in a context marked by resurgent geopolitical tensions and volatility on international financial markets. In the short run, the international macroeconomic environment is deemed to be relatively stable, with favourable effects being primarily attributable to the fiscal stimulus recently implemented in the USA[88] and to the moderation, already in the course of 2017, of the uncertainties associated with the future evolution of major emerging economies that benefited from a set of fiscal stimuli and loose financial conditions, likely to mitigate their vulnerabilities in the face of potential external shocks. However, in the medium term, emerging economies seem to be further exposed to a potential tightening of global financial conditions, in the context of the gradual monetary policy strengthening by the Fed[89], with possible implications on these economies' indebtedness level. Thus, the risk of possible portfolio shifts across the region and/or worldwide is not to be ruled out, with consequences on the Romanian economy as well.

Upside risks to the inflation outlook are associated with developments in administered prices, in the context of the numerous adjustments recently implemented and in the absence of more precise calendars of the competent authorities for future changes in these prices. The outlook for volatile food prices is further marked by uncertainties relative to the impact of weather and specific market conditions on the supply of agricultural produce both domestically and internationally.

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[88] This refers mainly to the corporate income tax cut and to the full tax deduction, ever since the first year, of eligible investments.

[89] Unexpected increases in the Fed funds rate may occur amid, *inter alia*, a step-up in inflation above expectations, against the background of the favourable effects on aggregate demand from the recently implemented fiscal stimulus.

The strong uncertainties surrounding the projection of the exogenous components of the consumer basket are also reflected in the analysis of forecast errors in successive years, which indicated overestimations alternating with underestimations of these components. Under the circumstances, the likelihood of wider future adjustments than in the baseline scenario cannot be ruled out. For the assessment of forecast errors concerning the annual inflation rate at end-2017, see Box 3.

The balance of risks posed by international commodity prices (energy prices in particular) is assessed to be in equilibrium. Uncertainties still linger, however, over the oil price dynamics, given the influences associated, on the one hand, with supply-side factors amid the agreement signed by OPEC and some non-OPEC producers to cap oil output until the end of 2018, and, on the other hand, with demand-side factors, in the context of the upturn in global economic activity, concurrently with persistent risks to the macroeconomic outlook in the main advanced and emerging economies.

Abbreviations

CDS	credit default swaps
CPI	consumer price index
DG ECFIN	Directorate General for Economic and Financial Affairs
EC	European Commission
ECB	European Central Bank
EIB	European Investment Bank
ESI	Economic Sentiment Indicator
EU	European Union
Eurostat	Statistical Office of the European Union
FAO	Food and Agricultural Organization of the United Nations
GDP	gross domestic product
GFCF	gross fixed capital formation
HICP	harmonised index of consumer prices
ILO	International Labour Office
IMF	International Monetary Fund
IPPI	industrial producer price index
MPF	Ministry of Public Finance
NBR	National Bank of Romania
NIS	National Institute of Statistics
OAS	option adjusted spread
OPEC	Organisation of the Petroleum Exporting Countries
ROBOR	Romanian Interbank Offer Rate
TFP	total factor productivity
VAT	value added tax
VFE	vegetables, fruit, eggs

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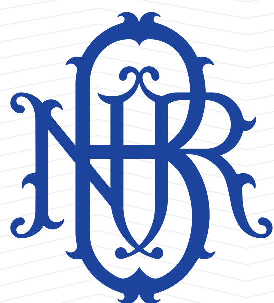

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