National Bank of Romania

Inflation Report

November 2017

Year XIII, No. 50

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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 November 2017 and the cut-off date for the data underlying the macroeconomic projection was 1 November 2017.

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 Q3 to reach 1.8 percent in September, up 0.9 percentage points from end-Q2. This path continued to reflect increasing domestic pressures, generated by the pick-up in the production costs of firms, whose pass-through to final consumer prices is fostered by the opening of the positive output gap in the economy. Moreover, the impact of some exogenous factors, associated with developments in the electricity market, the rise in international oil prices, as well as with the hike in the fuel excise duty, also played an important role. Given that part of these developments were not anticipated, in September, the annual CPI inflation rate stood 0.2 percentage points above the forecast in the August 2017 *Inflation Report*. The average annual HICP inflation rate saw a stronger advance and came in at 0.5 percent in September 2017, further reflecting the statistical effects related to the numerous changes in indirect taxes and fees that occurred in the period used for the calculation of the indicator.

The annual CPI inflation rate calculated at constant taxes[1] also posted a step-up in Q3, from 1.9 percent in June to 2.6 percent in September, thus marginally exceeding the 2.5 percent central target at the end of the quarter. Except for tobacco product and volatile food prices – the dynamics of the latter reflecting the correction to the surge generated in the first part of the year by the adverse weather conditions at European level –, the evolution of all components contributed to the upward movement in the annual CPI inflation rate at constant taxes. In Q3, administered prices saw a shift from negative to positive annual growth rates, whereas core inflation and fuel price inflation posted faster positive dynamics.

At end-September 2017, the annual adjusted CORE2 inflation rate reached 1.8 percent (2 percent net of the VAT effect), up by 0.4 percentage points from June. Core inflation stood 0.2 percentage points higher than the forecast in the August 2017 *Inflation Report*. The upward trend continued to be driven by the dynamics of processed food prices, amid the pick-up in the production costs of firms. The latter were influenced by the persistence of wage pressures, given the fading out of the offsetting disinflationary impact from the external environment. The pass-through of higher production costs to final consumer prices was facilitated by the rise in excess demand in the economy, while the competitive pressure at both the producer and retail stages worked in the opposite direction, amid a larger contribution of imports to accommodating consumption, as well as in the context of a higher relative importance of e-commerce.

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

The positive dynamics of unit labour costs increased to 14.4 percent in 2017 Q2; however, a significant contribution came from the spectacular climb in the number of unpaid workers in agriculture, which did not entail an (immediate) corresponding increase in output, thus weighing on labour productivity in the economy. In the absence of this influence, the annual dynamics of unit labour costs would have still been brisk, probably at a level similar to that seen in Q1 (almost 10 percent). The pass-through of these pressures to final consumer prices becomes all the more likely as the economy evolves into the upward phase of the business cycle and the offsetting influence of the other cost components of firms (costs of raw materials, utilities expenses, transportation costs) has faded. At the same time, in industry, the annual dynamics of unit wage costs moderated during 2017, partly reflecting structural productivity gains in certain sub-sectors. Nevertheless, in consumer goods industries, the growth rate of wage earnings continues to exceed that of labour productivity, entailing a fast pace of increase of unit wage costs.

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

In its meeting of 4 August 2017, the NBR Board decided to keep the monetary policy rate at 1.75 percent per annum. The annual inflation rate continued to rise, remaining, nevertheless, inside the variation band of the flat target and well below the prevalent values in the EU. At the same time, the baseline scenario of the forecast, surrounded by heightened risks and uncertainties, reconfirmed the prospects for the annual inflation rate to accelerate, while staying inside the variation band of the target, yet following a higher path than in the previous *Inflation Report*, mainly in the short run. This evolution reflected both the fading out of the transitory effects of the previous cuts in indirect taxes and fees, as well as the inflationary pressures caused by the progressive opening of the positive output gap, to which added the gradual step-up in economic agents' inflation expectations. The increase in consumer goods prices was foreseen to be additionally spurred by the dynamics of domestic producer prices, amid expectations of further strong pressures from unit wage costs.

The uncertainties and risks associated with the projection stemmed from both the domestic and the external environment. On the domestic front, these were enhanced by the fiscal and income policy conduct, also in the context of the envisaged budget revision. On the external front, the uncertainties and risks posed by economic growth and inflation developments in the euro area and worldwide (in the context of Brexit negotiations and the economic policies pursued by the US Administration) and by the monetary policy stances of major central banks and their implications on the local financial market, given *inter alia* the economic and financial context in the region, remained further relevant.

Subsequently, statistical data showed the annual inflation rate remaining on an upward path in the first two months of Q3 on the whole, the indicator recording a significant rise in July (to 1.42 percent from 0.85 percent in the previous month), followed by a slowdown to 1.15 percent in August, slightly lower than the forecast. The advance in the annual inflation rate owed to administered prices, following the hike in the electricity price, being also driven by fuel price developments given the uptrend in international oil prices, as well as by the acceleration of core inflation. The mentioned effects were partly offset by the impact of the decline in volatile food prices. The annual core inflation rate exceeded the forecast marginally to reach 1.6 percent in August, on account of a swifter rise in services prices and, to a lower extent, in processed food prices. Against the background of domestic demand developments, in 2017 Q2, economic growth saw a new pick-up, above expectations, the annual dynamics of real GDP climbing to 5.9 percent from 5.7 percent in the previous quarter.

In the Board meeting of 3 October 2017, the latest assessments reconfirmed the prospects for the annual inflation rate to continue to increase in the coming months at a slightly faster pace than in the medium-term forecast released in the August 2017 *Inflation Report*, yet that outlook was further surrounded by heightened risks and uncertainties related to developments in both the domestic and the external environment. On the domestic front, these were associated with the fiscal and income policy conduct, as well as with the outlook on administered prices (natural gas, electricity) and on volatile food prices. On the external front, previously identified risk sources persisted, alongside the risks of escalating geopolitical tensions.

Based on the data available and in the context of the identified risks and uncertainties, the NBR Board decided to initiate an adjustment in the monetary policy stance by narrowing the symmetrical corridor defined by interest rates on the NBR's standing facilities around the policy rate to ±1.25 percentage points from ±1.50 percentage points. The central bank also kept unchanged the monetary policy rate – at 1.75 percent per annum – and the existing levels of minimum reserve requirement ratios and decided to further pursue adequate liquidity management in the banking system.

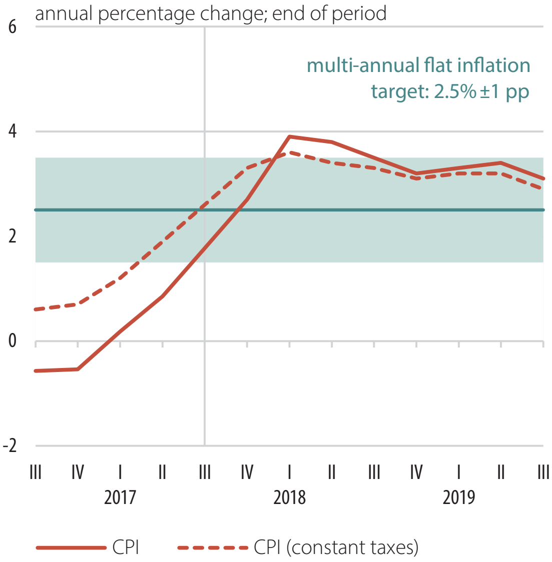
Inflation outlook

The annual CPI inflation rate is projected at 2.7 percent at end-2017, 3.2 percent at end-2018 and 3.1 percent at the forecast horizon, i.e. 2019 Q3. Compared to the August 2017 *Inflation Report*, the annual CPI inflation rate forecast was revised upwards by 0.8 percentage points for the end of 2017, but was left unchanged for the end of 2018. Over the near term, the revision owed to larger projected contributions from the exogenous components of the consumer basket, fuel and administered prices in particular. At the same time, the annual dynamics of the adjusted CORE2 index was revised downwards throughout the reviewed period, as a result of the persistently larger traction from external developments[2], despite the upward revision in excess aggregate demand for most of the forecast interval. The annual CPI inflation rate at constant taxes will enter the upper half of the variation band of the target as early as the end of this year, reaching 3.3 percent, before slowing gradually to 3.1 percent at end-2018 and 2.9 percent in 2019 Q3.

In 2017, economic growth will gather momentum against 2016, being anticipated to stand at around 6 percent, well above potential GDP dynamics. On the one hand, amid the revision of the output gap to higher levels, the structural deficit, i.e. the

[2] A series of indicative signs regarding the nature of the recent determinants of adjusted CORE2 index dynamics were presented in Box 2 of the May 2017 *Inflation Report*. Subsequent empirical evidence has pointed to a further weakening of the relationship between domestic economic activity and core inflation.

Inflation forecast



Source: NIS, NBR projection

discretionary component of fiscal policy, was revised slightly upwards, yet its stimulative impact remains substantially lower in 2017 than that assessed for the previous year. On the other hand, economic growth in Romania's trading partners[3] is expected to strengthen at around 2 percent, posting a faster rate this year, with the negative external output gap being assessed to have closed in the first part of the current year. The major driver of growth will remain private consumption, whose dynamics will however decelerate next year, while the annual rate of increase of gross fixed capital formation is expected to return to positive territory this year and subsequently pick up somewhat, also amid the expected improved absorption of EU structural and investment funds. The developments in private consumption will mirror those in real disposable income, given the fiscal easing and public-sector income policy measures and the pay rises in the private sector, against the background of unemployment rate being anticipated to remain at its recent low levels. According to the baseline scenario, favourable lending conditions are expected to support developments in both aggregate demand components over the entire forecast interval.

With domestic demand projected to increase significantly, at a pace that was revised upwards, imports of goods and services are seen expanding faster than exports; the current account deficit will thus widen against its 2016 readings and near 3 percent of GDP over the medium term. Current account deficit financing is envisaged to further be covered largely by stable, non-debt-creating flows, the share of which will decrease, however, versus 2016. To this will contribute the expected weaker absorption of EU structural and investment funds, as well as lower foreign direct investment inflows[4]. Under the circumstances, the reopening of the current account deficit, on the back of swifter consumption and a wider fiscal deficit, carries the potential to jeopardise macroeconomic equilibria, with a direct impact on capital inflows to the local economy, given that developments in Romania's current account are divergent from those in the other emerging economies across the region.

The reassessed path of the output gap continues to be influenced by developments in real disposable income of households, amid the fiscal easing and income policy measures, by the stimulative real broad monetary conditions, although their dynamics will slacken over the medium run, and by the return of external demand gap to positive territory in the course of 2017.

3 Assessed via the effective EU GDP, a measure of foreign demand based on the breakdown of Romania's intra-EU exports by country of destination.

4 Although they have undergone an improvement in structure, reflected by the larger share of "equity" component.

The annual adjusted CORE2 inflation rate is projected to reach 2 percent at the end of 2017 and 3.7 percent at the end of next year. In both cases, the projected levels are lower than those published in the previous *Inflation Report*. After the impact of the VAT rate cut has faded, this inflation measure is seen running above the target (by 0.3 percentage points in 2018 Q1 and 1.2 percentage points in 2018 Q4 respectively). The path of this component is largely shaped by the developments in the output gap, to which add the progressive rise in economic agents' inflation expectations and influences of higher domestic producer prices, amid further strong pressures coming from unit wage costs. At the same time, as inflation rates in Romania's main trading partners are well below 2 percent and the expansion in consumption is accommodated to a larger extent by imports than by domestically-produced goods, the external environment will continue to exert a considerable 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 1.5 percentage points at the end of 2017 and 1 percentage point at the end of 2018, following their upward revision, particularly for this year. The breakdown shows that the rate of increase of fuel prices was revised upwards in the first part of the projection interval, mirroring the dynamics of the international oil price and the higher excise duty levied on motor fuels. Furthermore, the contribution of administered price dynamics to the annual inflation rate reflects the assumption of full liberalisation of the electricity price at the end of this year and the anticipated natural gas price hikes in the periods ahead.

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 to be relatively in equilibrium. At the current juncture, the relevance of uncertainties is further attached to the fiscal and income policy measures seen carrying the potential to exert additional inflationary pressures, whereas contrary influences are associated with the changes to the external environment.

Given the need to implement an adequate macroeconomic policy mix, the fiscal and income policy stance remains a matter of concern amid uncertainties regarding the budget configuration over the projection interval. From this perspective, a source of concern is the impact that the legislative acts already adopted or in the process of being adopted – which aim to implement additional fiscal stimuli or income policy measures – might have on the future configuration of fiscal parameters. If the implementation of corrective fiscal measures to ensure compliance with the deficit targets primarily implied public investment spending cuts, there would be a risk of depressing the economy's growth potential, also in light of the already manifest delays in the absorption of EU structural and investment funds. At the same time, if the potential fiscal stimuli were aimed mostly at fuelling consumption and insofar as its dynamics caused the current account deficit to widen, foreign investors might reconsider the risk attached to their financial investments in the local economy which, in turn, could directly affect the stable capital flows to the Romanian economy.

Global developments continue to be a sizeable source of risks to the inflation path in the baseline scenario. Specifically, given the evidence on growing relative importance of external factors to the detriment of domestic ones in explaining consumer price changes, a stronger persistence than that projected in the baseline scenario of relatively subdued price dynamics worldwide, in general, and in the euro area, in particular, may cause the annual inflation rate to post downward deviations from the forecasted path. Also on the foreign 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 negotiations may have on the global macroeconomic coordinates, in an environment characterised by geopolitical tensions and uncertainty about the traction on growth coming from major emerging economies, especially China.

Turning to the CPI basket components beyond the scope of monetary policy, the balance of risks to the annual inflation rate projection is assessed to be relatively in equilibrium. However, uncertainties still linger over the future administered price adjustments – in the absence of clear-cut signals from the relevant authorities regarding future price changes – and, inherently, over weather conditions, which may either boost or squeeze the farm produce supply and, in turn, domestic food prices.

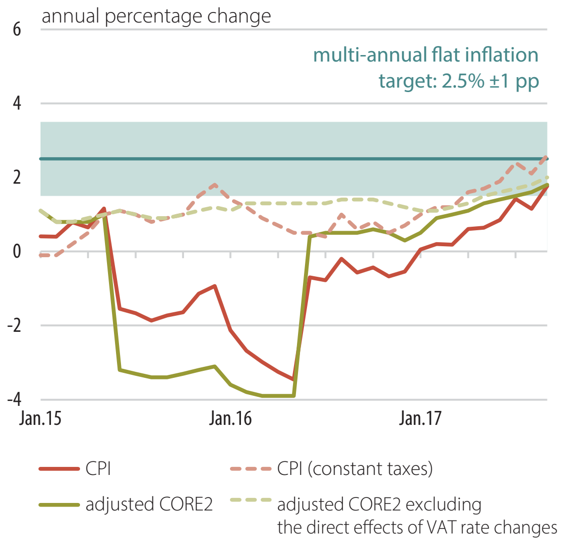
Monetary policy decision

Given the features of the updated path in the projected annual inflation rate and its determinants, as well as the risks thereto, stemming mainly from the fiscal and income policy conduct and the uncertainties associated with economic growth in the euro area and worldwide, the Board of the National Bank of Romania decided to continue the adjustment of the monetary policy stance by narrowing the symmetrical corridor of interest rates on the NBR's standing facilities around the policy rate to ±1.00 percentage points from ±1.25 percentage points and by ensuring firm liquidity management in the banking system. The NBR Board also decided to keep unchanged the monetary policy rate at 1.75 percent per annum and 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 markedly upward trend of consumer prices strengthened in 2017 Q3, even exceeding expectations, the annual CPI inflation rate rising to 1.8 percent and thus re-entering the ±1 percentage point variation band of the 2.5 percent flat target. Some exogenous factors continued to play an important part, namely those linked to the developments on the electricity market and to the unexpected hike in the world oil price and in the excise duty on fuels. At the same time, domestic pressures (stronger excess demand, much higher production costs), which also drove economic agents' inflation expectations on an upward path, have become increasingly visible in consumer prices, the annual dynamics of adjusted CORE2 inflation accelerating to 1.8 percent in September. Excluding the direct effects of the changes to non-tax fees and indirect taxes, the annual growth rate of consumer prices came close to 2.6 percent at end-2017 Q3 (2.0 percent for core inflation, Chart 1.1).

Chart 1.1. Inflation developments



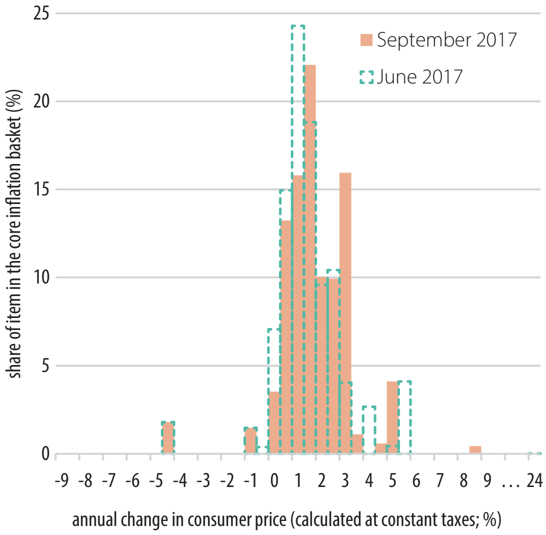
Source: NIS, NBR calculations and estimates

2017 Q3 was impacted by further inflationary pressures from exogenous factors. Specifically, the ongoing liberalisation of the electricity market and the significant rise in trading prices on the competitive market pushed the electricity price up again in July (by 6.8 percent from June). At the same time, the unexpected hike in the world oil price, following the steep correction in June, as well as the higher excise duty starting with 15 September, brought the annual dynamics of fuel prices back into positive territory (+2.2 percent compared with -1.3 percent at end-2017 Q2).

After witnessing benign developments in the last three years, adjusted CORE2 inflation consolidated its uptrend during 2017, reaching 2 percent in September – annual change net of the first-round effects of the VAT rate cut. Thus, the widening of the positive output gap in the economy is increasingly reflected by consumer prices, all the more so as the past countereffect of external economic conditions has faded. Specifically, the pick-up trend in the annual growth rate of prices was once again almost broad-based for the items included in core inflation (Chart 1.2).

Compared with the forecast, core inflation dynamics in 2017 Q3 exceeded expectations by 0.2 percentage points, the higher growth being mainly due to relatively stronger pressures on food items, which have actually marked the entire

Chart 1.2. Developments in the prices of items included in the core inflation basket

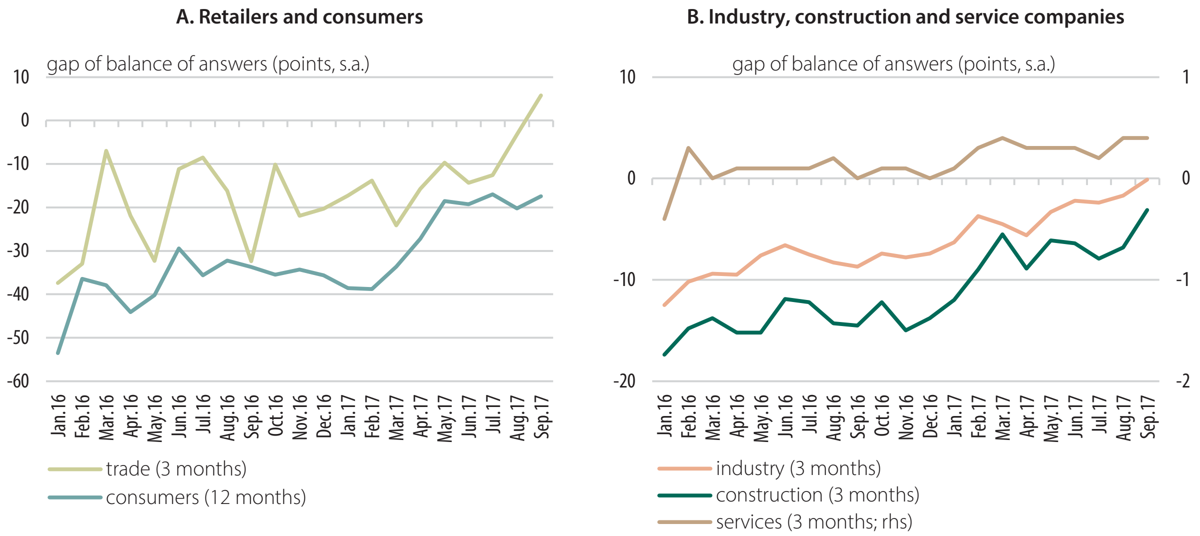


Source: NIS, NBR calculations and estimates

path of core inflation since the beginning of this year. The renewed rise in the prices of some key commodities (especially meat and milk) and the fast pick-up in labour costs triggered a stronger pace of increase of producer prices in the related industry, which passed through relatively quickly to consumer prices amid robust domestic demand. Empirical evidence shows that an increase in producer prices in the food industry feeds through by a third to consumer prices of processed food items over a quarter, the pass-through gradually going up to two thirds over six months and exceeding 80 percent over one year (Box 1).

The selling prices of non-food items also witnessed an upward trend, albeit less steep, given: (i) the prevalence of imports on this market; (ii) the likelihood of adopting common pricing policies at transnational level by major retailers, as well as (iii) the competitive climate, fuelled by the increase in the relative importance of e-commerce. Market services prices followed a similar path (up 1.9 percent in annual terms in September, excluding the direct effect of the VAT rate cut), amid the weakening of the leu against the euro in the last two months of 2017 Q3, the dominant share of services with foreign currency-expressed prices (telephony, air transport, rent) making the group highly sensitive to exchange rate fluctuations.

Chart 1.3. Expectations on price developments



Note: Data series were calculated as deviations from their long-term average (2005-2017).

Source: DG ECFIN/NIS Survey

The only CPI components posting slowdowns in 2017 Q3 concerned tobacco product prices (down 1.7 percentage points to 2.1 percent), as a result of a base effect, and volatile food prices respectively (down 2 percentage points to 5.1 percent), following the correction of the large increases in citrus and other Southern fruit prices, brought about in 2017 H1 by adverse weather conditions at European level.

Inflation expectations, especially in the short term, remained on an upward trend July through September. Specifically, in all economic sectors covered by the DG ECFIN Survey (industry, construction, services, trade), the balances of answers about price developments in the following quarter increased July through September, even exceeding the long-term average for trade and services. The balance of consumers' answers for the next 12 months also witnessed an uptrend (Chart 1.3.). Turning to financial analysts (NBR survey), their inflation expectations for end-2017 were gradually revised upwards in the period under review, yet long-term expectations (at the one- and two-year horizons) have remained anchored inside the variation band of the target.

The average annual HICP inflation rate posted a faster pace of increase, standing at 0.5 percent in September, the still low reading being due to the statistical effects of the multiple VAT rate cuts and the scrapping of a number of non-tax fees in the period used for its calculation. However, the differential versus the EU average has slightly widened to -1 percentage point, given the further relatively robust path of EU inflation.

Similarly to 2017 Q2, the actual annual inflation rate continued to surprise to the upside, standing in September 0.2 percentage points above the level forecasted in the August 2017 *Inflation Report*. The main contribution came from underestimating the core inflation, amid rising domestic pressures, while for the volatile component, the impact of the higher-than-expected rise in fuel prices was almost fully offset by the developments in volatile food prices.

Box 1. The pass-through of industrial producer prices on the domestic market to consumer prices

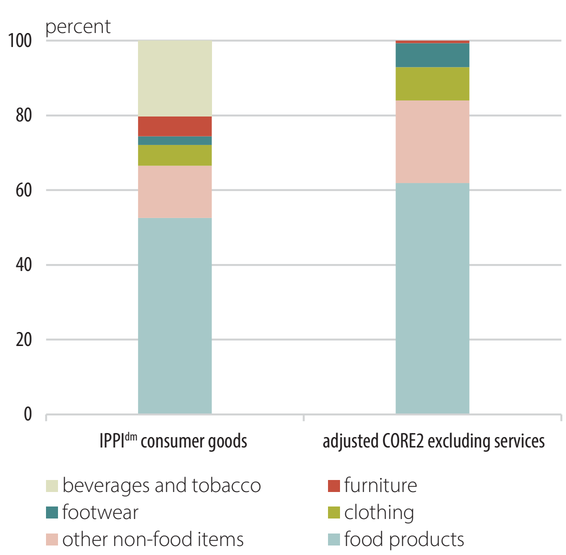
Ensuring and maintaining price stability is the National Bank of Romania's primary objective, hence, the way final consumer prices are set and changed is of particular importance for the research and analysis of the monetary policy transmission mechanism. Looking at the consumer price structure, the most significant component is the purchase price of goods, with an estimated share of 70-80 percent. At an aggregate level, domestic producers remain the main providers of consumer goods, although, over the last years, their market share came down from about 60 percent in 2013 to almost 50 percent at present, affected by the competition from imports; consequently, the build-up of cost-related inflationary pressures becomes increasingly relevant at the current juncture, with the external environment playing a less offsetting part, once the disinflationary influences via this channel have faded. Thus, this box aims at assessing to what extent changes in the industrial producer prices on the domestic market ($IPPI^{dm}$) feed through into consumer price changes.

Ex ante, the pass-through is anticipated to be less than one, as the purchase price is only a component of the final price. Besides, prices are changed with a certain frequency, with the pricing policy being set at the company level, and therefore the transmission is also expected to occur with a certain time lag[5].

In assessing the pass-through of industrial producer prices to consumer prices, heed should be taken of the differences between the structures of the two price indices (the consumer price index – CPI and the industrial producer price index on the domestic market – IPPI^{dm}). Thus, there are goods the prices of which are included in the calculation of the CPI, but not in that of the IPPI^{dm} – for instance, unprocessed food (vegetables, fruits) or services. At the same time, the IPPI^{dm} shows the developments in all the categories of industrial goods, whereas relevant to the transmission under review are the producer prices of consumer goods, that already incorporate the evolution of the costs entailed by other components (intermediate goods, capital goods, energy). Furthermore, the CPI uses an annually updated weighting scheme, based on the structure of households' purchases of consumer goods and services two years before, while for the industrial producer price index weights are much less frequently updated (those currently used reflect the structure of production back in 2010). In addition, the changes in indirect taxes and in distribution costs affect consumer prices only, without influencing producer prices.

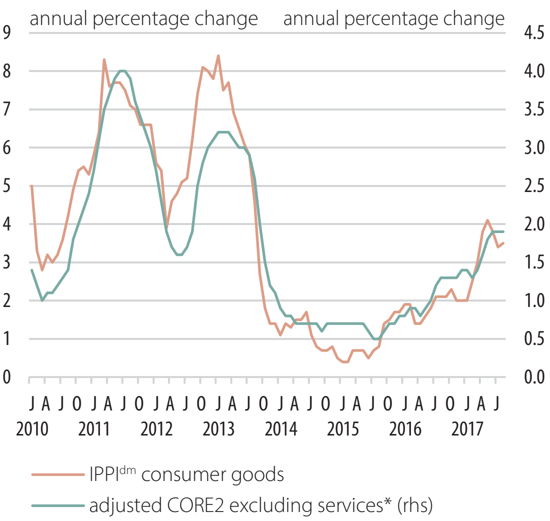
Considering the differences in methodology and coverage, the quantitative analysis focused on those sub-indices that ensure the best possible matching between the structure of industrial sub-sectors and that of the consumer basket: IPPI^{dm} for consumer goods and adjusted CORE2 (net of services and first-round effects of VAT rate changes), as their evolution over time is visibly correlated (Charts A and B). Moreover, given the different characteristics of the two market segments – food and non-food –, the pass-through was analysed also separately for these two categories of goods; the energy segment was not covered, as the transmission of crude oil prices

Chart A. Price index structure



Source: NIS, Eurostat, NBR calculations and estimates

Chart B. Developments in consumer goods prices



*) net of the direct effects of VAT rate changes

Source: NIS, Eurostat, NBR calculations and estimates

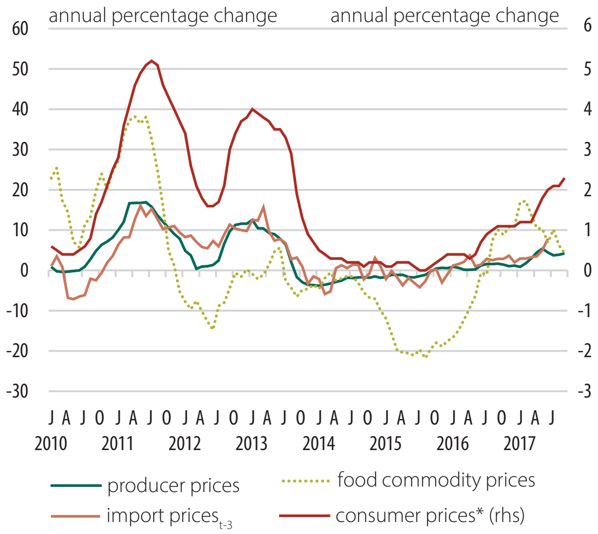
5 According to a survey on the price-setting mechanism, conducted by the NBR in 2014, over 50 percent of companies regularly reassess prices (time-dependent policy), but prices are actually changed only when new information emerges concerning the economic environment (details in *Occasional Papers* No. 10/2015).

was assessed in a dedicated box in the February 2015 *Inflation Report*, while such an approach is not feasible for electricity and natural gas prices owing to their regulated nature.

The results of the VECM-based assessments (VECM – vector error correction models) indicate a strong and relatively stable transmission over time of changes in the IPPI^{dm} for consumer goods to the adjusted CORE2 dynamics (net of services and the direct effects of VAT rate changes), estimations showing a 70 percent pass-through in one year's time. The strong transmission owes essentially to the food component, with an estimated coefficient of over 80 percent. The main explanation lies with the accommodation of food consumption primarily by domestic supply (approximately 70 percent). However, even if the direct influence of the external environment (via imports of such final goods) is lower in this case, it remains relevant to developments in raw material costs of local producers, which inherently reflect external trends, given the openness of the economy (Chart C).

By comparison, the transmission coefficient is significantly lower for non-food items – approximately 10 percent[6]. The weaker correlation of the two indices in this case (Chart D) owes mainly to the inverted ratio of forces between local production and imports on this market segment (roughly 80 percent of consumption is covered from imports). Besides, consumer prices of non-food items may show higher rigidity than those of food items[7].

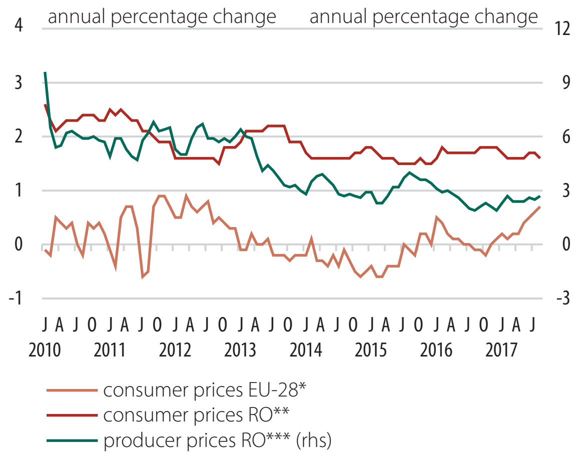
Chart C. Developments in food prices



*) net of the direct effects of the VAT rate changes

Source: NIS, Eurostat, FAO, NBR calculations and estimates

Chart D. Developments in non-food prices



*) index calculated by aggregating consumer prices of durables and semi-durables

**) net of the direct effects of the VAT rate changes

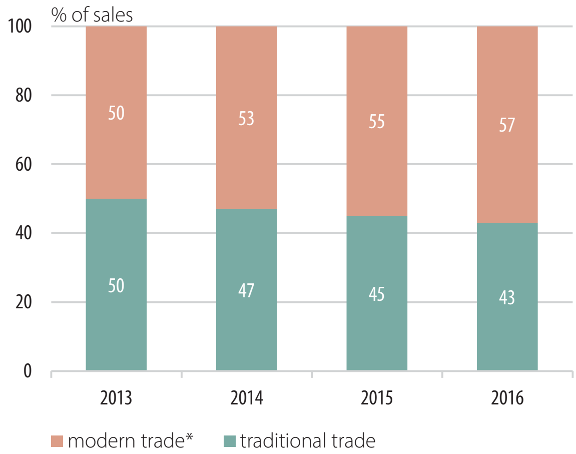
***) consumer goods excluding food, beverages, tobacco

Source: NIS, Eurostat, NBR calculations and estimates

6 Estimations indicate an approximately 10 percent pass-through coefficient at present, slightly lower than in 2014 (14 percent). The outcomes must be, however, cautiously construed, as they are sensitive to changes in the specification. By contrast, estimations for the whole group of consumer goods and those for the food segment are robust, regardless of the chosen specification.

7 Dhyne *et al.* (2009) identify such a phenomenon across the euro area, the outcomes of the surveys conducted among companies in the Member States showing a significantly higher frequency of price changes for food items than for non-food items.

Chart E. Modern trade versus traditional trade on the fast moving consumer goods



*) hypermarket, supermarket, discounter, cash & carry, proximity stores

Source: GfK – Fast Moving Consumer Trends, 2017

The increase in the relevance of the global context for explaining the dynamics of domestic prices was probably spurred by the aggressive expansion of large retailers, integrated with global distribution networks, modern trade gaining a dominant position in 2016, with a market share of approximately 57 percent of the value of sales (Chart E). Furthermore, their bargaining power relative to domestic producers and the rising competition from imports favour a more moderate upward path of producer prices on the domestic market relative to the current demand conditions. Over the last quarters, evidence was gathered in connection with the increasing relative importance of external factors in explaining the domestic consumer price dynamics. Such evidence was looked at in Box 2 in the May 2017 *Inflation Report*.

To sum up, in the period ahead, consumer prices are expected to further follow an upward path, in line with the trend seen for producer prices, reflecting, on the one hand, the build-up of domestic pressures, associated with the change in the cyclical position of the economy, and, on the other hand, with the fading out of disinflationary influences stemming from the external environment.

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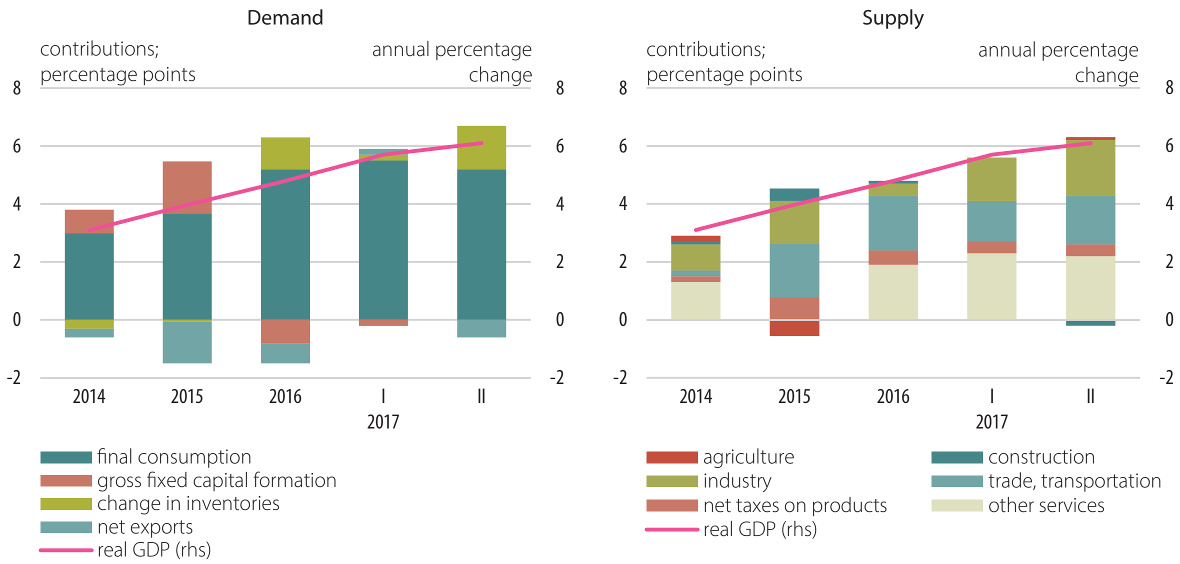
2. Economic developments

1. Demand and supply

The fast growth recorded by Romania's economy in 2016 gained further speed in the first half of 2017, the advance seen in Q2 (6.1 percent from a year ago) ranking among the strongest across the EU-28. Consumer demand continues to have a prevailing influence, under the stimulative impulse of a pro-cyclical fiscal policy. The swift economic expansion triggers however upward pressures on the external position, given that a significant part of domestic absorption is accommodated by imports. The rise in imports erodes the favourable evolution of exports, against the background of new foreign direct investment inflows and of the strengthening demand from European economies. As for fixed capital investment, the successive annual declines came to a halt in Q2, but the severe contraction in infrastructure investment continues to raise concerns, in view of the negative impact on the growth potential (Chart 2.1).

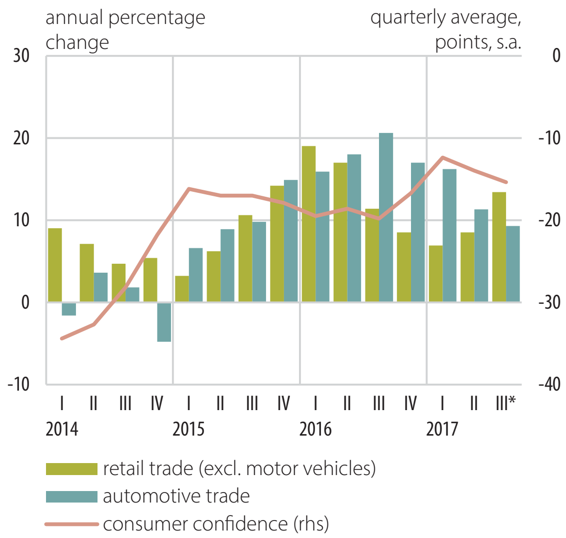
Chart 2.1. Contributions to economic growth



Source: NIS, NBR calculations

Private consumption continued to expand at a fast pace in 2017 Q2 (7.5 percent, annual change), fostered by the increase in households' purchasing power, under the effect of further favourable labour market conditions in terms of household income and employment. Households' propensity to consume was also supported by borrowed funds, the volume of new consumer credit and other loans sticking to an upward trend. The recent positive performance of the purchasing power seems to have also caused a change in consumer behaviour, entailing a stronger

Chart 2.2. Trade and household confidence



*) Jul.-Aug. 2017 for trade turnover

Source: NIS, EC-DG ECFIN

preference for higher-end products[8] or leisure activities, as suggested by the stepped-up increase in receipts from market services.

Household consumption further enjoys strong growth prospects for the latter half of 2017 as well, the first signals showing robust trade turnover developments in the period from July to August, due to purchases of both durables (furnishings, in particular) and non-durables. The upward trend is underpinned by new hikes in households' income implemented as of 1 July 2017 (the approved rise in the pension point and in the wages of certain public-sector employees). At the same time, the confidence indicators of consumers and trade and services companies[9] continue to post relatively high levels (Chart 2.2).

In 2017 Q2, the general government budget posted a deficit of lei 7.8 billion, i.e. 0.9 percent of GDP[10], after the surplus of lei 1.5 billion, i.e. 0.2 percent of GDP, recorded in the first three months of 2017[11]. The return to a negative budget balance mainly reflected the substantial increase in total budget spending[12], triggered by both current expenditure (government spending on goods and services, compensation of employees, social security spending, other expenditure in the form of transfers[13]) and capital expenditure[14]. The re-emergence of a deficit owed also to the relative decline in total income[15], mainly as a result of the contraction in tax revenues[16], with opposite effects, albeit of lower intensity, being exerted by the rise in non-tax revenues[17] and social security contributions.

Despite the fast increases posted in 2017 H1 (quarterly changes of 3-4 percent), gross fixed capital formation stands only marginally higher in Q2 than in the same year-ago period (0.2 percent). The advance in investment was supported by the expansion of residential buildings and, recently, by the step-up in equipment purchases, but the delayed resumption of public investment works still exerts a pronounced negative

8 According to GfK Romania, the share of private-label products of retail networks on the market of fast-moving consumer goods went down for the first time in the past decade, to reach 15.3 percent in Q1.

9 According to the NIS/DG ECFIN survey in July-September.

10 For 2017, the GDP level used in this year's first budget revision approved in September was taken into account.

11 In the same year-ago period, the budget execution had generated a deficit of lei 6.9 billion, i.e. 0.9 percent of GDP, as compared with a surplus of lei 3.0 billion, i.e. 0.4 percent of GDP, posted in 2016 Q1.

12 The real annual dynamics of which decelerated slightly, i.e. 9.0 percent versus 10.2 percent in Q1.

13 A similar contribution had also the rise in interest expenses (however, they fell in year-on-year comparison).

14 Under the circumstances, the annual rate of decline of capital expenditure slowed down.

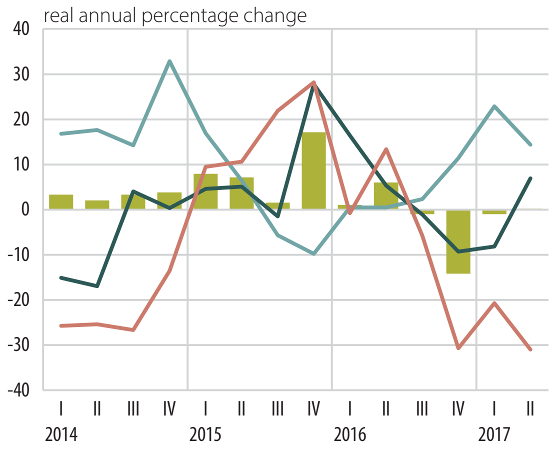
15 However, its real annual growth pace accelerated slightly to 8.5 percent, from 7.0 percent.

16 Caused mainly by the drop in receipts from property taxes and fees; similar contributions also had the lower receipts from corporate and personal income taxes (which picked up further in annual terms, albeit at a slower pace) and VAT.

17 Amid the growth of receipts from dividends granted by state-owned enterprises.

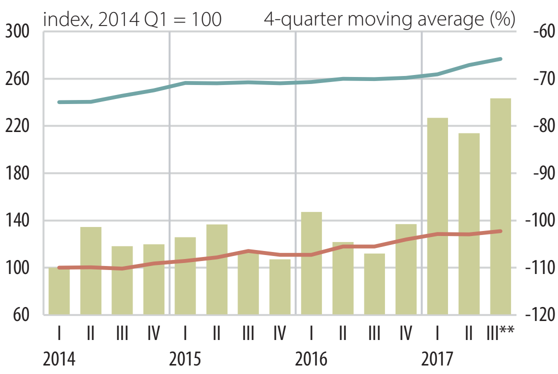
impact. Whereas emerging signs point to favourable prospects for the first two components also in the period ahead, infrastructure investment is less likely to see its annual dynamics revert to positive territory, given the sharp contractions recorded over the past three quarters (Chart 2.3).

Chart 2.3. Investment



Source: NIS, NBR calculations

Chart 2.4. Construction of dwellings*



*) seasonally adjusted data

**) Jul.-Aug. 2017 for residential construction works and building permits

Source: NIS, EC-DG ECFIN, NBR calculations

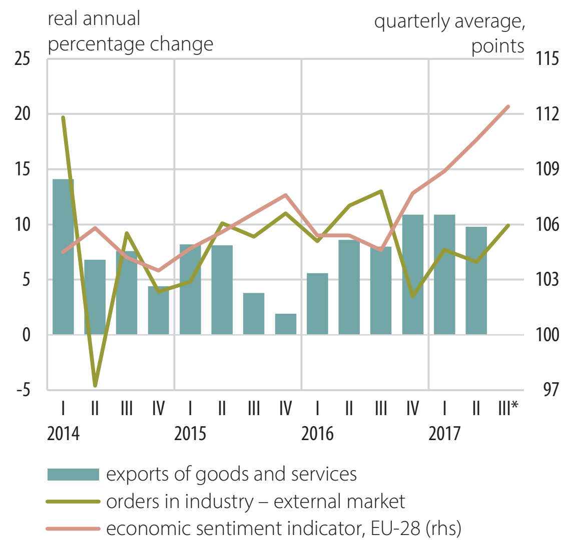
The consolidation of households' disposable income over the past years translated into an increase in average consumer spending per capita up to levels even higher than those registered during the previous boom period, as well as into a stronger propensity for saving. This "financial well-being", together with the availability of housing loans, entailed a recovery in housing demand, with residential construction being, in fact, the only major component of investment demand which saw a steady positive evolution throughout the past year. Housing demand is likely to stay on an upward course in the period ahead, as suggested by consumers' improved expectations on building or purchasing a home (according to the NIS/DG ECFIN Survey, in the first three quarters of 2017, the balances of answers for this position stood above the historical average), as well as by the rise by over 11 percent in the construction area stipulated in building permits (average annual change for the past 12 months calculated for August 2017). Nevertheless, a slower growth pace of house purchases is not excluded, considering the authorities' decision to stop supplementing the state guarantees under the "First Home" programme this autumn (Chart 2.4).

The rebound in equipment purchases (up 6.9 percent, annual change) also spurred investment demand in 2017 Q2. The industries manufacturing transport equipment and related products (electrical equipment, rubber) stand out in terms of their interest in unfolding projects to expand production capacities, increase the value added content of products and automate technological lines, driven by the larger volume of external orders. Optimistic signals also come from the manufacture of machinery and equipment, household appliances and building materials, in the latter case under the influence of demand on the residential segment. These developments helped, in fact, accelerate the industrial production growth since the beginning of 2017, so that the sector's contribution to the real GDP dynamics rose to 1.9 percentage points in Q2. As for funding sources, capital investment benefits overall from the solid support of foreign investors, given that the reinvestment of earnings in the Romanian economy[18] increased 2.7 times in the past 18 months.

Conversely, the contribution of public investment to the annual dynamics of gross fixed capital formation remained strongly negative, the volume of civil engineering works standing, in 2017 Q2 too, well below that recorded in the same year-ago period, i.e. -31 percent. Apart from the base effect associated with the completion, in 2016, of reimbursements from EU-funded investment projects approved within the 2007-2013 financial framework, the decline in infrastructure works owed to the delayed absorption of structural and cohesion funds under the new financial programme. The initiation of this process in the latter half of 2017 is, however, little likely to bring the annual dynamics of civil engineering works back into positive territory, given the persistent constraints related to public capital expenditure included in the September 2017 budget revision.

Exports of goods and services stayed on an upward course, despite the slight slowdown in their annual dynamics, i.e. down 1.1 percentage points versus Q1 to 9.8 percent. External demand prospects remain favourable, as suggested by the latest forecasts on the euro area economic growth in the latter half of 2017, as well as by the gradual improvement to post-crisis highs in the confidence indicator across the EU-28 during the first nine months of 2017. An additional sign is the rise by another 7.8 percent in the portfolio of external orders received by local industrial companies in the period from April to August, the pace being similar to that seen in 2017 Q1 (Chart 2.5).

Chart 2.5. Exports of goods and services



*) Jul.-Aug. 2017 for orders

Source: NIS, EC-DG ECFIN

Exports of goods picked up 6.4 percent, the main contribution being further made by sales of 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. 17 percent, albeit slower than in the previous quarter, and the opening of new production facilities in central European countries will further translate into high demand for the products of local specialised suppliers in the period ahead as well. Apart from the favourable prospects for exports of parts and accessories, positive expectations also emerge, starting this autumn, with regard to motorcars, considering the start of production of a new Ford model at Craiova-based plant and the official launch of the new Duster model produced at Mioveni.

[18] Expressed as 12-month moving sum.

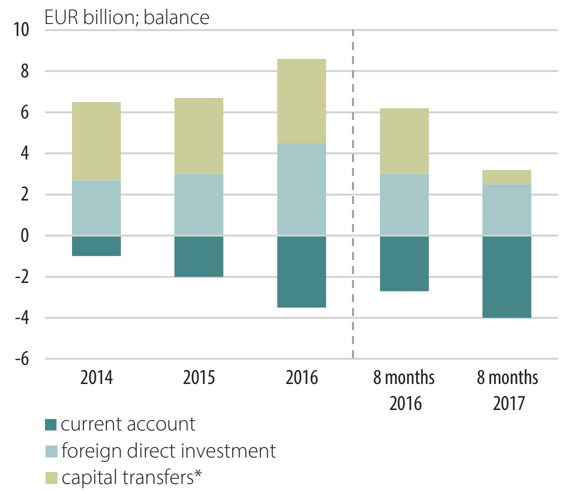
Exports of metal products also headed further upwards, the quick rebound in the turnover volume over the last year (up to 26 percent in Q2) being bolstered by the persistence of EU-wide measures to reduce the unfair competition from some Asian producers. A notable positive evolution was also reported by exports of agri-food commodities (cereals and oleaginous plants), in which case Romania's net exporter position consolidated in recent years (the 2013-2016 average standing 2.5 times higher than that for the 2008-2012 period). A substantial contribution had the investment made by major agricultural traders, which were stimulated by Romania's agriculture potential and favourable geographical position enabling the transit of agri-food commodities yielded by other countries in the region.

Lower export volumes posted wearing apparel, a sub-sector further facing competitiveness losses, and crude oil products, amid the volatility induced by refineries' scheduling of overhauls (which affected the production activity in the period from February to May) – overall, this sub-sector has however remained on an upward course and the companies in this market continue to make investments.

Imports of goods and services kept increasing at a swift pace in Q2 (11 percent in real terms), which reflected the further high domestic demand and the expansion of exports. Specifically, imports of intermediate and capital goods were on a rise, in correlation with both the integration of certain industrial sub-sectors within the global production networks (as is the case with imports of motor parts) and the recovery of investment in industry (machinery, equipment, measuring and control devices). Moreover, consumer demand continued to boost imports (up 5.6 percent, annual change on this segment), thus fuelling the erosion effect on the trade balance generated by the balance on trade in consumer goods, as exports thereof have failed to provide firm support so far.

The worsening trade balance continues to be partly offset by further robust net receipts from international services (EUR 2.1 billion, covering about 70 percent of the deficit on trade in goods in Q2). Nevertheless, the growth pace of the services surplus tended to decelerate in the first eight months of 2017, largely on the back of households' increasing resort to external services of tourism and transport, which suggests that this current account component may exhaust its capacity to counterbalance the trade deficit. In the same context, mention should also be made of certain negative signals that have recently emerged in freight transport by road, which could affect the long-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, an increasing number of haulage contractors have stopped investing in enlarging their new vehicle fleet, the main reasons invoked being the skilled labour shortage, the poor local road infrastructure, as well as the legislative amendments in some European countries.

Chart 2.6. Current account deficit financing via non-debt creating flows



*) mainly EU investment funds

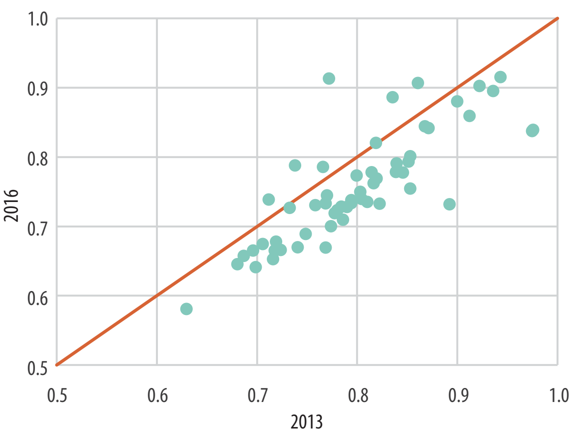
Source: NBR

The cyclical economic expansion, which is expected to mark the entire year, raises concerns about the external position, the current account deficit in the first seven months of 2017 already exceeding the value for the whole 2016. Unfavourable developments have also been noted in respect to financing this deficit. Specifically, after having been fully covered over the past years by non-debt creating capital flows (mostly foreign direct investment and EU investment funds), in the period from January to August 2017 the current account deficit saw a drop in coverage to 78 percent (Chart 2.6).

Labour productivity

In 2017 Q2, the annual growth pace of labour productivity economy-wide decelerated significantly (1 percent versus 4.7 percent in Q1), amid the spectacular climb in the number of self-employed in agriculture and, particularly, in that of unpaid family workers (predominantly inactive previously); this movement could be at least in part associated with the opening in April of the submission session for EU-funded projects through several support schemes under the 2014-2020 financial framework[19] and has not probably entailed an immediate corresponding increase in output. High productivity dynamics are further visible in trade and industry, given the sharpening uptrend of the business cycle, whereas the absence of investment in infrastructure contributes to the steeper contraction in construction.

Chart 2.7. Labour productivity dispersion



Note: The relative dispersion index of labour productivity distribution was determined based on the ratio of the interquartile range to the third quartile. In the sectors under the first bisection, the dispersion decreased in 2016 versus 2013. The analysis included the NACE divisions from 1 to 63.

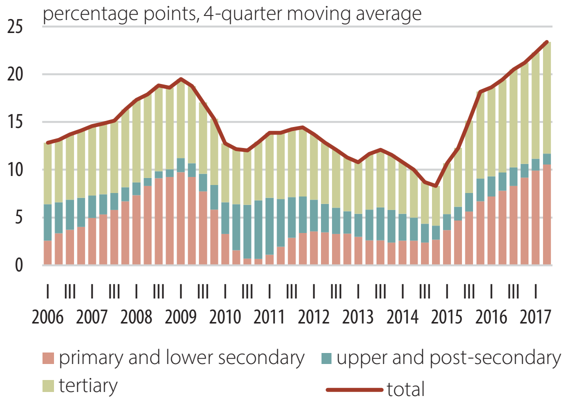
Source: MPF, NBR calculations

Apart from the influence of the cyclical factor, which has prevailed over the past two years, the post-crisis upward trend in labour productivity was underpinned by the efficient reallocation of resources, given that important economic sectors have shifted towards a more competitive structure: in industry, the labour intensive sub-sectors lost ground in favour of medium- and high-tech industries, modern trade gradually replaced traditional trade, while the ICT activity evolved from providing outsourced non-core services to establishing software development centres that can create higher value added. A key role in these developments had foreign direct investment, the profile of a productive firm in Romania indicating a large, young, private company with majority foreign capital, which is part of a group undertaking. However, the business relations between these firms and domestic companies seem to have favoured the diffusion of competitive advantages across the economy, with the latter firms replicating the management model or even technology. This probably contributed to reducing the relative dispersion between the efficiency levels of less and the most productive companies economy-wide in the period from 2013 to 2016 (Chart 2.7).

19 The financing of agriculture development projects under the current financial programme went smoothly, reimbursements being made ever since the first half of 2016. By contrast, the absorption of funds for investment projects under the cohesion policy (where infrastructure investment plays a significant part) was unblocked no sooner than in the summer of 2017, once the managing authorities had been accredited.

The support from private sector investment to increasing labour productivity was not, however, accompanied by a similar contribution from the public sector, the absence of progress in infrastructure further deterring the movement of capital and labour and, consequently, limiting productivity gains. Specifically, the absence of proper transport infrastructure led to the emergence of investment and business clusters in regions closest to the Western markets, contributing to the additional tightening of labour market, already affected by high structural unemployment and major discrepancies between the available labour force skills and the requirements of employers; the most pronounced skill mismatches are further visible at the opposite ends of the skill spectrum, with labour supply being much lower than demand for high-skilled workers, while the situation is opposite for low-skilled workers (Chart 2.8). Moreover, the absence of employment opportunities in other country regions caused a widening of regional gaps, fostered emigration and entailed a worsening of the skillset of the remaining human capital.

Chart 2.8. Skill mismatch index on the labour market*



*) calculated as the summation of differences in absolute value across each skill group between labour supply (approximated based on the share of the unemployed with a certain level of education in total unemployed) and labour demand (approximated based on the share of the employed with the same level of education in total employment).

Source: Eurostat, NBR calculations

Box 2. Wage-productivity relationship and implications for inflation

The pursuit of an economic activity amid the persistent decoupling between the unit labour cost and the benefit associated with the use of this production factor, namely labour productivity, is not feasible over the long term, as the two indicators are inseparably linked at both the microeconomic and the aggregate levels. Although labour productivity is a fundamental factor, it is not the sole determinant of wage cost dynamics throughout the business cycle, as the developments in labour market conditions play an important part too. Thus, during the economic upturn, the expansion of the activity above its potential level pushes the demand for labour above the available supply, resulting in an increase in wage costs, possibly higher than that in labour productivity. Conversely, during a downturn, the contraction in economic activity generates excess labour, which exerts wage adjustment pressures.

The existence of a persistent differential between the growth rate of wage costs and that of productivity gains is a relevant issue in monetary policy analysis, particularly in view of its potential to give rise to inflationary pressures via the cost channel. Given that at firm level the producer price is set by applying a (fixed or variable) mark-up over the marginal cost, the positive differential between wage and labour productivity dynamics may pass through, fully or partially, to a rise in the price charged by the company. This feed-through is all the more likely in an environment marked by excess aggregate demand, which is, in fact, a defining feature of the current domestic economic context. Thus, while during the economic recovery gross wages followed the advance in labour productivity, starting in 2015 the growth rate of labour costs markedly outpaced that of productivity, similarly to the pre-crisis period (Chart A). In this context, this box

Chart A. Developments in average gross wage and in labour productivity in the economy

Source: NIS, Eurostat, NBR estimates

Table A. Results of estimations based on macroeconomic data

	OLS	IV	OLS	
	(1a)	(1b)	(2)	(3)
Dependent variable	ΔAverage gross wage$_t$			
ΔAverage gross wage$_{t-1}$	0.64*** (0.07)	0.58*** (0.11)	0.46*** (0.16)	0.57*** (0.09)
ΔLabour productivity$_t$	0.36*** (0.09)	0.68** (0.26)	0.42*** (0.12)	0.41*** (0.09)
ΔUnemployment rate$_{t-2}$	-0.03*** (0.01)	-0.02*** (0.007)	-	-
Deviation of the number of employees $_{t-3}$	-	-	0.001* (0.0008)	-
LMCI$_{t-2}$	-	-	-	0.001* (0.0009)
ΔCPI$_{t-2}$	0.30** (0.14)	0.28* (0.15)	0.23* (0.13)	0.72*** (0.24)
Constant	-	-	0.01** (0.004)	-
Number of observations	51	51	51	47
Adjusted R^2	0.71	0.62	0.65	0.67

Note: (1) The sample used in the estimation covers the period 2004-2017 based on seasonally adjusted quarterly data.
(2) In the case of equation (3), the rate of inflation excluding the direct effects of the VAT rate changes was employed, exerting contemporaneous influences.
(3) Considering the possible endogeneity between wages and productivity, in the case of equation (1b) the estimation used the instrumental variable method.
(4) *, ** and *** statistically significant at the 10%, 5% and 1% levels respectively.
(5) Standard errrors are given in parantheses.

Source: NIS, Eurostat, NBR estimates

aims to determine the extent to which the recent wage increases have owed to productivity gains and to other influences associated with the labour market respectively, as well as the implications for consumer price dynamics.

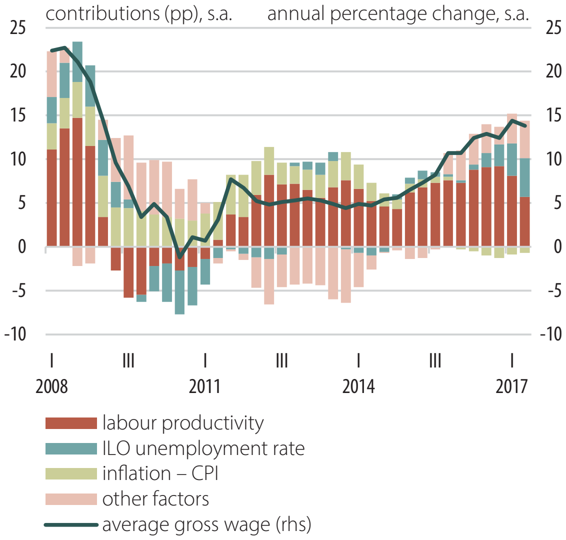
Determinants of wage dynamics in the economy

The first stage of the empirical analysis involved the macroeconomic estimation of an equation to describe the developments in wage costs. Subsequently, the relationship between wages and productivity was also assessed at microeconomic level, the theoretical foundation of the estimated specifications being based on a common set of assumptions. Under the said framework (the wage Phillips curve), wage dynamics are the cumulative result of the influences exerted by: (i) value added (labour productivity); (ii) labour market conditions (assessed with the help of several indicators: the unemployment rate, the labour market conditions index – LMCI[20], the deviation of the number of employees economy-wide from the trend); (iii) labour market participants' expectations, which are deemed to be adaptive, in the sense that the reservation wage (the lowest wage at which a potential worker is willing to accept a job) depends on the previous levels of wage and inflation.

The macroeconomic estimates show the significant importance of labour productivity in explaining the path of wages (Table A). Thus, irrespective of the specification chosen to capture labour market conditions, the contribution of labour productivity during the economic recovery ranged between 3 percentage points and 7 percentage points, fully covering the wage hikes. Nevertheless, the support provided by this factor to wage dynamics has diminished of late; an increasing contribution came from the gradual tightening of the labour market (Chart B), as the higher demand for labour pushed the unemployment rate to historical lows. The estimates of the magnitude of this influence are however relatively sensitive to the measure employed to highlight the overall evolution of the

[20] The synthetic index was calculated based on the principal component method, which was applied to a set of indicators relevant to the labour market (the number of employees, the flows of entries and exits, as well as the stock of unemployed, companies' expectations of future employment, vacancies and the share of long-term unemployed).

Chart B. Contribution of determinants to the dynamics of average gross wage economy-wide



Source: NIS, NBR calculations and estimates

Table B. Results of estimations based on microeconomic data

	OLS	IV	OLS	IV
	(1a)	(1b)	(2a)	(2b)
Dependent variable	log(Real wage cost)$_t$		ΔGrowth rate of real wage cost$_t$	
log(Real wage cost)$_{t-1}$	0.29*** (0.002)	0.3*** (0.002)	-	-
log(Labour productivity)$_t$	0.11*** (0.001)	0.005** (0.002)	-	-
Unemployment rate at county level$_t$	-0.02*** (0.0003)	-0.02*** (0.0003)	-0.04*** (0.0005)	-0.05*** (0.0004)
ΔLabour productivity$_t$	-	-	0.14*** (0.003)	0.13*** (0.001)
Constant	5.65*** (0.021)	-	-	0.27*** (0.002)
Number of observations	617,128		539,987	617,128

Note: (1) The estimation was made based on a balanced sample of annual panel data that cover the period 2007-2015, fixed effects being included as well.
(2) Considering the endogeneity between wages and productivity, validated by the results of econometric tests, in the case of equations (1b) and (2b) the estimation used the instrumental variable method.
(3)*, ** and *** statistically significant at the 10%, 5% and 1% levels respectively.
(4) Estimations were made with robust standard errors (given in parantheses).

Source: MPF, NIS, Eurostat, NBR estimates

labour market, the contribution to the dynamics of the average gross wage economy-wide being assessed in a range between 1 percentage point and 4 percentage points over the past year. Moreover, it is worth mentioning that influences exogenous to the mechanism described by the Phillips curve have recently made a positive and significant contribution. They can be associated, at least in part, with certain institutional factors such as the rise in budgetary sector wages and the hike in the minimum gross wage, with direct and second-round effects that were passed through to the economy.

The robustness of the macroeconomic estimation of the relationship between the growth rate of wages and that of labour productivity is corroborated by the assessments based on microeconomic data, even though in this case the conduct of the empirical exercise lacks input from other variables that are informative about the wage policy of the firm (such as employees' level of training or experience), which are not available[21]. Thus, the developments in wages at firm level are inextricably linked to the value added by the employee within the company and labour market tightness/looseness is seen as a distinctive determinant of wage dynamics, while the evolution of the unemployment rate is estimated to lead to contrariwise changes in the growth rate of wages (Table B).

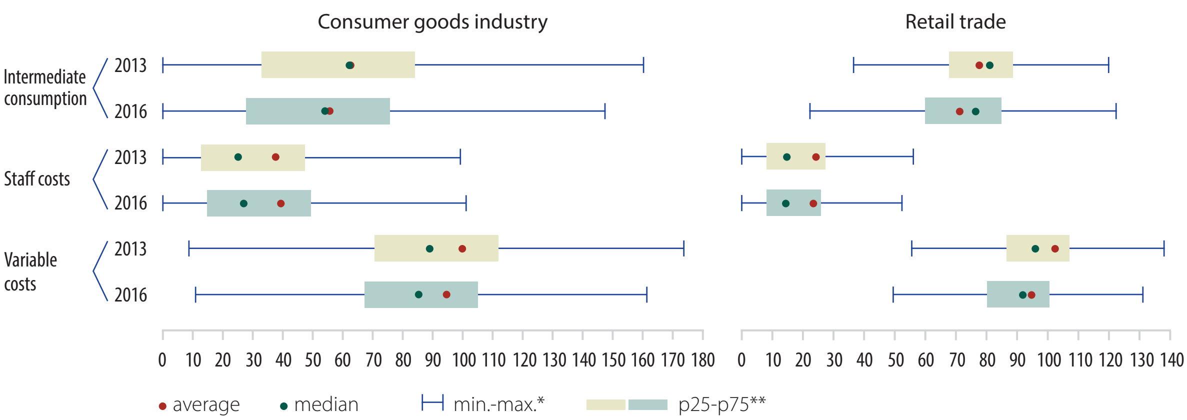
The relevance of the two factors indicated by the econometric analysis in explaining the path of wages is confirmed also by qualitative assessments, the results of the survey about the price-setting behaviour of Romanian firms conducted by the NBR showing that the companies for which employee productivity and corporate profitability are the most important determinants of wage developments account for an overwhelming share, i.e. over 70 percent (Iordache and Pandioniu, 2015).

21 In this context, the assessment at micro level includes the so-called fixed effects, which substitute firms' individual characteristics in bulk and whose presence will mitigate the estimated influence of the variables that were introduced as such. Consequently, the level of the coefficients associated with productivity that were calculated at micro level is expected to be lower than its correspondents at macro level, the results of the two approaches capturing, in fact, the said difference.

Implications for the change in consumer prices

Nevertheless, the rise in consumer prices mirrored only to a small extent the decoupling between wage and labour productivity growth rates seen over the past years. This phenomenon occurred against the backdrop of the decline in the said period in inflation sensitivity to the change in unit labour costs (or in other variables used as a proxy, such as the deviation from the trend of the average gross wage), which was identified by the econometric estimations in several specifications made based on the same theoretical framework of the Phillips curve (in this case, the dependent variable being however the change in consumer prices). The relatively low pass-through of the significant wage increases over the past years to consumer prices is also corroborated by related analyses at macroeconomic level on the lately weaker relationship between inflation and the output gap, concurrently with the higher relative importance of external factors to the detriment of internal ones in explaining domestic price dynamics – the subject was tackled in boxes included in the previous *Inflation Reports* of August 2016 and May 2017. The increased role of international factors in accounting for inflation has a regional dimension too, being recently observed in the case of Hungary and Poland as well.

Chart C. Distribution of companies' cost structure, 2016 vs 2013



*) range that does not include extreme values
**) percentiles of the distribution

Note: Firm-level costs are calculated as a share of turnover (proxy of the share of costs in the company's price). Variable costs are the sum of staff costs and intermediate consumption (made up of costs of raw materials and consumables, of other materials, costs of goods for resale, utilities expenses).

Source: MPF, NBR estimates

At microeconomic level, the explanation lies in the counterbalance provided by the global disinflationary environment until 2016 to the pressure on companies' costs stemming from the substantial wage hikes starting in 2015 (Chart C). This phenomenon was even more pronounced in the case of retailers than in that of consumer goods producers, amid the higher relative importance of imports in accommodating consumer demand and the former's greater bargaining power relative to suppliers. Nonetheless, the broad-based increases in the main commodity prices over the current year suggest that the other cost components of firms (costs of raw materials, utilities expenses, transportation costs) no longer have the potential to offset the aforementioned pressure. Thus, the future change in prices is likely to reflect the large rises in labour costs over the recent period to a higher extent.

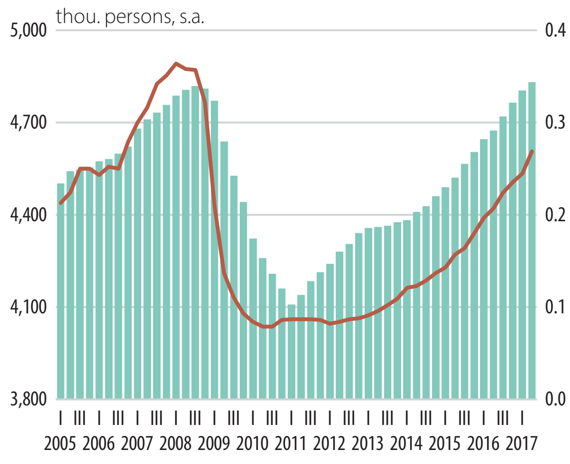
References

Iordache, S. and Pandioniu, L. – "The Price-setting Behaviour of Romanian Firms", National Bank of Romania, *Occasional Papers* No. 10, 2015

Labour market developments[22]

In April-July 2017, the number of employees in the economy rose further, reaching an all-time high of 4.83 million persons (Chart 2.9). However, the annual growth pace slowed down slightly to 3.2 percent, after about one and a half years of values similar to the historical high, suggesting a potential decrease in the room for improving employment in the future and increased obstacles to recruitment faced by firms. The slowdown was seen exclusively in the private sector, more precisely in construction and market services. In the latter case, the trend was relatively broad-based, except for trade and ICT, where the recently announced projects on the expansion of activity indicate the continued dynamism of hiring. In industry, hiring picked up slightly, special mention deserving, this time too, the automotive industry and the related sub-sectors (manufacture of rubber), as well as the manufacture of computers, where staff numbers rose at a fast tempo, in association with the swift expansion of activity and recent investments. Moreover, the number of employees rose further in the budgetary sector as well, hires being made in health services and public administration.

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



Source: Eurostat, NIS, NBR calculations

The higher capacity of the economy to absorb workforce, illustrated by the increase in job vacancy rate, was also mirrored by excess labour supply, with both unemployment indicators dropping about 0.2 percentage points in the period from April to August as compared with 2017 Q1, i.e. the registered unemployment rate went down to 4.4 percent and the ILO unemployment rate fell to a historical low of 5.1 percent. Nevertheless, structural deficiencies persist, given that the activity rate in Romania ranks further among the lowest in Europe, standing well below the EU average (almost 68 percent versus 73 percent) – especially that the recent pick-up was due to unpaid workers in agriculture, whereas labour market tightening was largely manifest in other economic sectors. Additionally, the long-term unemployment rate started to decrease no sooner than the beginning of 2017, after stagnating at 3 percent in the past five years (for comparison reasons, the aggregate indicator has followed a downward path since 2015, dropping from about 7 percent to the current level of 5 percent).

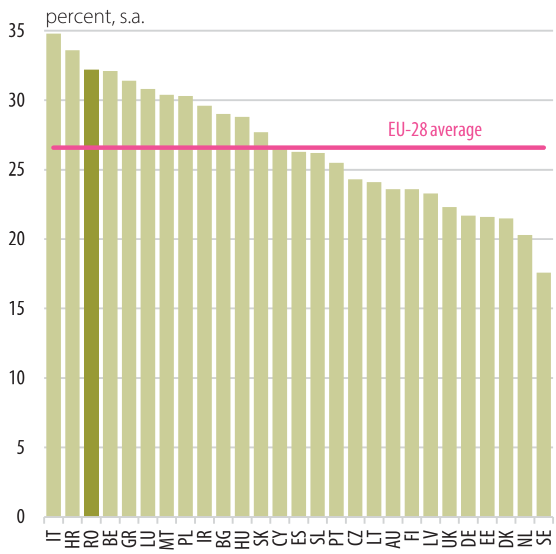
22 The analysis is based on seasonally adjusted data.

A solution for easing tensions could consist in attracting economically inactive population to a larger extent to enter the labour market, although its structure and the aforementioned mobility restrictions suggest limited possibilities for capitalising on this labour reserve (Box 3). In this context, the import of workforce from non-EU countries and the resort to automation are increasingly invoked as alternative solutions for reducing the difficulties arising from insufficient labour supply, yet the trends are rather incipient in both cases.

Box 3. Could the economically inactive population be a solution for easing labour market conditions?

At the moment, around 4 million people in Romania are economically inactive. Although aged between 15 and 64, therefore considered fit for work, they do not have and do not actively seek employment, nor are they self-employed. The magnitude of the phenomenon is relatively high, the inactivity rate (calculated as the ratio of the economically inactive population to the working-age population) standing at 32 percent in 2017 Q2 – one of the highest readings in the EU (Chart A).

Chart A. Inactivity rates in the EU



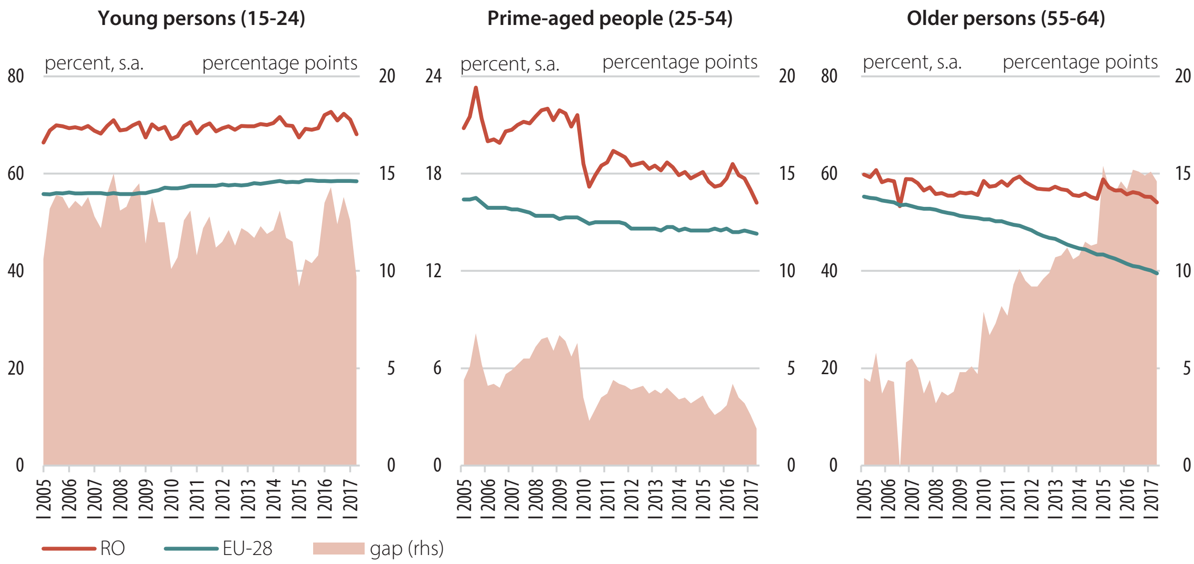
Source: Eurostat, NBR calculations

According to statistics, only 10 percent of these persons state that they would like to work, despite not looking for a job (by comparison, the EU average is almost twice as much). Such a low percentage is probably due largely to the perception of a too-high opportunity cost attached to giving up social security benefits in favour of employment (the difference between social security and wage, free time sacrificed). Moreover, it should not be overlooked that half of these persons live in rural areas, and thereby in many cases are poorly connected to the transport network and lack proper information means (e.g. regarding employment opportunities)[23]. And even if they were motivated to work or informed about job vacancies, the generally low level of training (around 60 percent only graduated from lower secondary schools or trade/vocational schools) and skill deterioration over time due to the prolonged period of inactivity make it unlikely for these candidates to meet employers' demands, in the absence of retraining courses. The excess labour supply already exhibits a low level of education, which does not match employers' requirements despite there being interest in candidates fitting this profile – ManpowerGroup's most recent Talent Shortage Survey shows that the jobs most difficult to fill are not only engineering positions, but also skilled trades positions.

[23] Even though this category led to an increase in the participation rate by 2 percentage points in 2017 Q2, due to the higher number of unpaid family workers in agriculture, the positive effects of this movement on labour market conditions are rather limited: on the one hand, other sectors are witnessing a tightening, and on the other hand, there is a wide disproportion between the share of people working in agriculture in total employment and the sector's contribution to GDP formation.

The breakdown by age group shows that the widest gaps of the inactivity rate can be found at the level of young people (15-24) and older persons (55-64) (Chart B). Looking at prime-aged people (25-54), which are basically the core of human capital in an economy, the inactivity rate in Romania is very close to that of the EU (16 percent versus 14 percent). Specifically, there is relatively smaller room for improvement in this segment, all the more so as only 20 percent of these individuals are interested in working (compared with 30 percent in the EU) and most live in rural areas (over 50 percent). In the case of young people, a lower participation rate was expected, given that a significant number of them are in education or training (around 80 percent, which is however below the EU average of approximately 90 percent). Nonetheless, poor international test scores call into the question the extent to which this group could become a strong labour resource in the future. Moreover, with regard to young persons not in education, the fact that they are not involved in any kind of activity (neither education, nor employment) substantially reduces their chances to become a viable resource on the labour market. However, the broadest gap in comparison with the EU (and growing) is in the case of people aged between 55 and 64, which essentially make up a third of the total economically inactive population. The inactivity rate on this segment is extremely high (around 54 percent), making relatively little progress since 2005, when it stood at 60 percent. The EU average was at a similar level at that moment, yet the reforms implemented by Member States for maintaining the labour force active for a longer period of time, amid the increasing ageing of the population, have been reflected in the considerably lower degree of inactivity in this segment (40 percent in 2016).

Chart B. Inactivity rates by age group



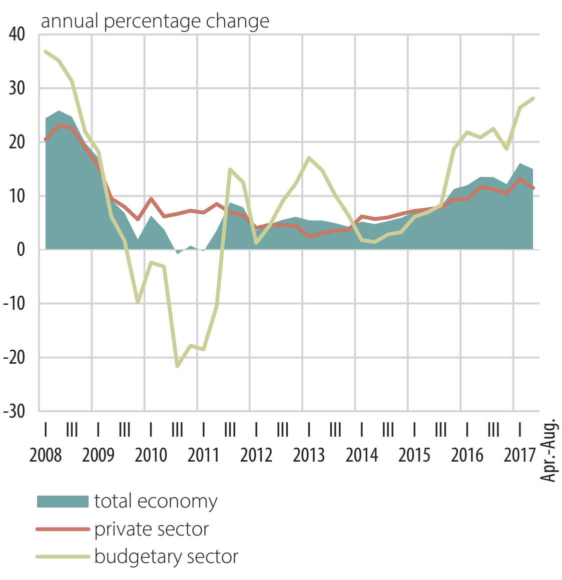
Source: Eurostat, NBR calculations

Unlike most EU countries, where the net flow of persons changing their inactive status to active and vice versa is positive, in Romania it has been almost zero in the past 6 years and even negative on average. In terms of share, those leaving the economically inactive population, over a period of one year, amounted to approximately 20 percent of the total (yet again among the lowest percentages in Europe, best-performing countries posting even double that reading), which suggests a relatively high level of inertia. Assuming that there would be no more changes in the annual stock of economically inactive persons and that all would be motivated to seek employment, it would take approximately 6 years for these people to become economically active. However, this scenario is very unlikely given that population projections[24] (conducted in order to measure the impact of the ageing population on the economy) are pessimistic, pointing out to a decrease in the working-age population in Romania by 1.7 million by 2030 (-13 percent, one of the sharpest declines in the EU).

In conclusion, it is very unlikely that the (re)entry of economically inactive people would play a significant part in easing the labour market, in the absence of active integration measures, especially for older persons, and of investments in a high-performing education system, ensuring lifelong learning and best adapted to market needs (including training courses for more efficient farming). These reforms are all the more necessary as the high degree of non-participation carries social repercussions, Romania exhibiting one of the highest rates of poverty among the Member States.

For the end of 2017, mixed signals are emerging with regard to developments in the number of employees. Specifically, the EC-DG ECFIN survey indicates stable employment intentions in industry and construction, as well as an expansion in payrolls in trade and market services. By contrast, the Manpower survey shows that employment prospects remain positive overall, with trade expected, however, to see the weakest hiring pace in the past seven years.

Chart 2.10. Nominal gross wage earnings



Source: NIS, NBR calculations

The annual growth rate of gross average wage earnings was further high in the April-August 2017 period, so that in the first eight months of the year it reached 15.4 percent, standing 2.6 percentage points above the level recorded in 2016[25] (Chart 2.10). The brisker pace of increase was ascribable to the gradual labour market tightening, the decoupling trend seen in the past years between the dynamics of wages and those of labour productivity being further manifest in the period under review (Box 2). In the same vein acted institutional factors: (i) pay rises in the budgetary sector, the dynamics of which stepped up to 27.5 percent from about 21 percent in 2016; (ii) the 20 percent hike in the minimum gross wage economy-wide, with an impact particularly on unskilled labour, which saw the fastest growth pace of wages, according to the 2017 Paywell Romania survey conducted by PricewaterhouseCoopers (PwC).

24 Population projections made by Eurostat in association with national statistics offices.

25 According to the Paywell survey, wage hikes higher than those planned for 2017 were registered in industry, trade and accommodation and food service activities.

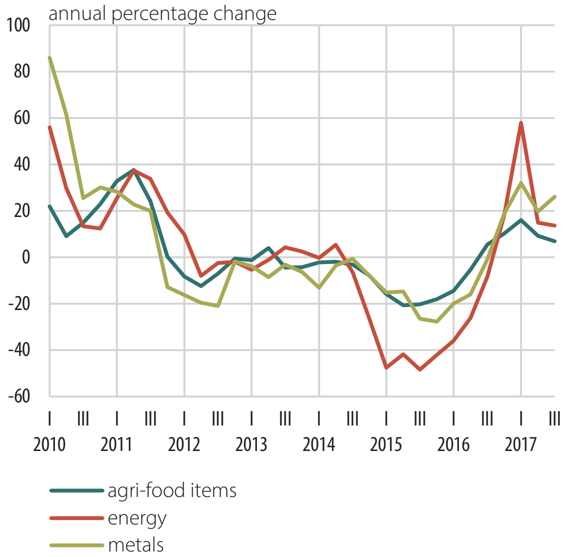
2. Import prices and producer prices on the domestic market

The hike in electricity prices in 2017 Q3 brought about a faster growth rate of producer prices on the domestic market (to 2.9 percent in July-August). Pressures in the same direction further came from unit wage costs, particularly in the consumer goods industry, their feed-through along the production chain being facilitated by the expansionary phase of the economy. Import prices also posted strong positive dynamics, albeit slightly slower than in early 2017, in tandem with the developments in main commodity prices.

2.1. Import prices

In 2017 Q3, commodity prices recorded smaller increases than in 2017 H1 (Chart 2.11). As far as energy prices are concerned, they resumed an upward trend after the Brent oil price had dropped below USD 50 per barrel in June. Specifically, the downward revision of the initial estimates on global stock levels and the output disruptions in some countries pushed the Brent oil price back above the aforementioned threshold. Looking ahead, the latest data point to the oil price further hovering around this value until the end of 2017 before picking up moderately to USD 55 per barrel towards end-2018 (futures prices provided by Bloomberg and EIA forecasts), given that no wide swings in either demand or supply are envisaged.

Chart 2.11. International commodity prices



Source: World Bank, FAO, NBR calculations

As regards metal prices, their annual rate of change consolidated around 26 percent, being similar to that recorded in 2017 H1. However, over the medium term it may decelerate, given the signals on a potentially weaker demand on this segment, particularly from China, as well as the fears about the adjustment of the glut in production in the said economy.

By contrast, the growth rate of agri-food commodity prices slowed down gradually starting in March 2017, to about 7 percent in 2017 Q3. As for grain prices, the favourable estimates of this year's agricultural output led to a slacker pace of increase of wheat prices and to the annual dynamics of maize prices entering negative territory. The prices for sunflower seeds and sugar continued to witness declines by more than 20 percent in annual terms, amid expectations of a substantial rise in production in both cases. The annual dynamics of processed food prices remained positive: 6 percent for meat and 40 percent for milk and dairy products, due to persistent excess demand, yet slowdowns could be noticed compared with the previous period.

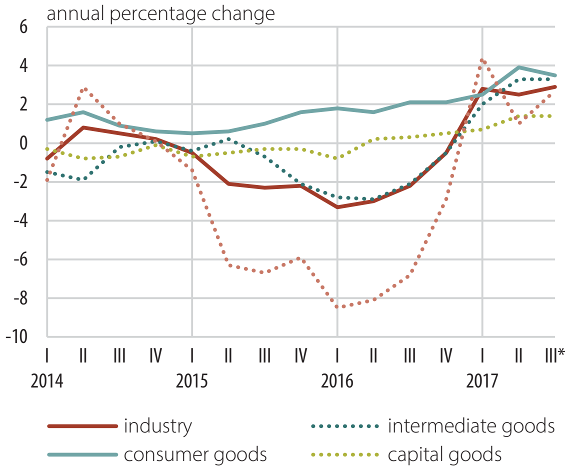
The more moderate pace of increase of international commodity prices was also mirrored by the evolution of the unit value index of imports (UVI)[26], which fell marginally to 103.1 percent in 2017 Q2. The most important contribution to the dynamics of the aggregate index was made by mineral products, whose UVI shed 31 percentage points to 118.5 percent, whereas the UVIs of base metals and chemical products further recorded slight pick-ups. As regards the goods holding a relevant share in the CPI basket, the UVIs of most food and non-food items alike stood above 100 percent. An exception were again transport means, whose UVI fell below 100 percent (to 99.5 percent, down 1.5 percentage points), as a result of consumers' continued preference for imported used cars (with high pollutant emissions and lower prices), boosted by the removal of the environmental stamp duty at the beginning of 2017.

2.2. Producer prices on the domestic market

In July-August 2017, the annual rate of change of industrial producer prices on the domestic market increased by 0.4 percentage points from the previous quarter, to 2.9 percent, returning to a level similar to that posted in the early months of 2017 (Chart 2.12). This trend was induced by the developments in the energy sector (+1.7 percentage points, to 2.7 percent), following the hike in electricity prices on the free market.

At the same time, domestic pressures from labour costs contributed to the persistence of high, well above average annual dynamics of producer prices for consumer goods (3.5 percent). Nevertheless, a slowdown (-0.4 percentage points) is observable, owing to the food industry (-0.9 percentage points, to 3.9 percent), in correlation with the slacker annual growth rate of prices of agri-food items, particularly vegetal products. By contrast, the annual pace of increase of producer prices for consumer goods excluding food, beverages and tobacco products remained on a slightly upward trend (2.6 percent in July-August 2017). The developments in producer prices for consumer goods give signals about the future movements in final prices. However, the magnitude of the pass-through depends on the price group, being considerably higher in the case of the food segment, where domestic producers continue to hold the larger market share, despite the increasing relative importance of imports over the past years.

Chart 2.12. Industrial producer prices on the domestic market



*) Jul.-Aug.

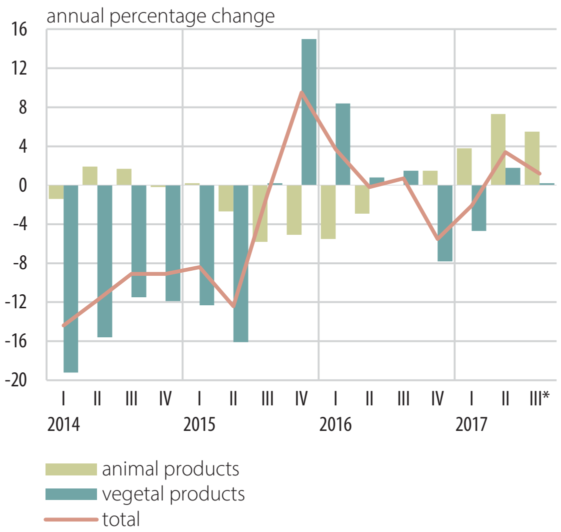
Source: NIS, Eurostat

The dynamics of producer prices for capital goods and for intermediate goods seem to have stabilised at 1.4 percent and 3.3 percent respectively, associated with the moderate pace of increase of international commodity prices seen starting in 2017 Q2.

26 Expressed in EUR.

July through August 2017, the annual growth rate of agricultural producer prices decelerated to 1.2 percent, down 2.2 percentage points from Q2. Prices for vegetal products made an important contribution thereto and their annual dynamics may even enter negative territory in the coming period, given that the latest estimates point to record crops domestically (increases well above the long-term average) and that global prospects are positive too. As for animal product prices, their annual rate of change remained robust, i.e. 5.5 percent, yet on the wane in this case as well, taking into account the forecasts about a rise in production at European level (mainly with respect to pork products) and the alignment of domestic prices to external developments (Chart 2.13).

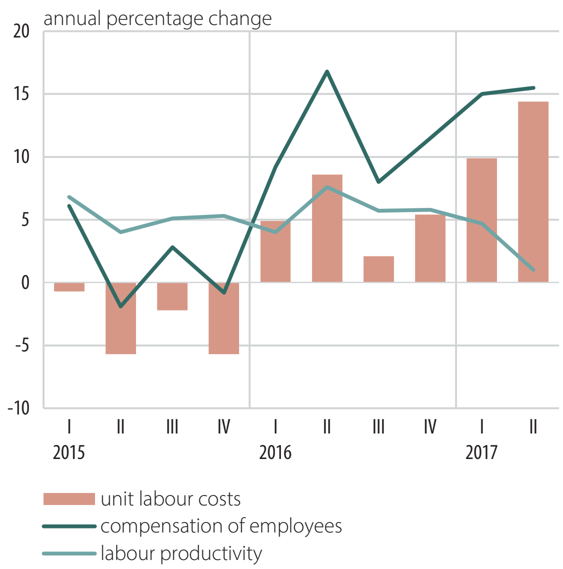
Chart 2.13. Agricultural producer prices



*) Jul.-Aug.

Source: NIS

Chart 2.14. Unit labour costs



Source: Eurostat, NIS

Unit labour costs

The growth rate of unit labour costs was positive and on the rise, reaching 14.4 percent in 2017 Q2. A significant contributor to this development was the impact of the change in employment in agriculture on labour productivity (Chart 2.14). The pass-through of these labour cost pressures to consumer prices is all the more likely as the offsetting influence of the other cost components of firms (costs of raw materials, utilities expenses, transportation costs) has faded.

In industry, the annual dynamics of unit wage costs decelerated during 2017 (from 6.4 percent in Q1 to 4.4 percent in Q2 and 3.5 percent in July-August respectively), partly mirroring the structural productivity gains in certain sub-sectors. Specifically, in the industries that absorbed substantial investment flows such as the automotive industry, the manufacture of electrical equipment and that of machinery and equipment, technological improvement in the production process covered the rise in wage costs, thus ensuring further the external competitiveness of these sub-sectors. Nevertheless, at the same time, consumer goods industries continue to record sizeable wage-productivity differentials that translate into a growth rate of wage costs of around 20 percent.

3. Monetary policy and financial developments

1. Monetary policy

In October 2017, the NBR initiated an adjustment of the monetary policy stance, narrowing the symmetrical corridor of interest rates on the NBR's standing facilities around the policy rate to ±1.25 percentage points from ±1.50 percentage points. August through October, the central bank left unchanged the monetary policy rate at 1.75 percent and the minimum reserve requirement ratios on both leu- and foreign currency-denominated liabilities of credit institutions. Moreover, the NBR preserved the adequate liquidity management in the banking system, tailoring it to the developments in credit institutions' net liquidity position. The measures were aimed at ensuring the sustainable achievement of the medium-term inflation target, in a manner further supportive of economic growth.

In its meeting of 4 August, the NBR Board decided on a status-quo of the parameters of monetary policy instruments, in a context in which the annual inflation rate had continued to rise[27], while remaining, however, comfortably below the lower bound of the variation band of the flat target and far below the values prevailing across the EU, and the prospects for its significant step-up in the quarters ahead – reconfirmed by the updated forecast on medium-term macroeconomic developments – were surrounded by heightened risks and uncertainties. The new path of the forecasted annual inflation rate stood slightly higher than previously projected, with annual inflation expected to re-enter the variation band of the flat target in Q3, before picking up to 1.9 percent[28] in December 2017 and 3.2 percent in December 2018 and nearing the upper bound of the variation band of target at the end of the projection horizon[29] (Chart 3.1). Among the determinants of the prospective pick-up in inflation were the base effects associated with the previous cuts in indirect taxes and fees[30], as well as the anticipated developments in exogenous CPI components[31]. However, pressures were expected to stem mainly from the cyclical position of the economy, from unit labour costs, and from the uptrend in inflation expectations over the short

27 The 12-month inflation rate had reached 0.85 percent in June from 0.64 percent in May.

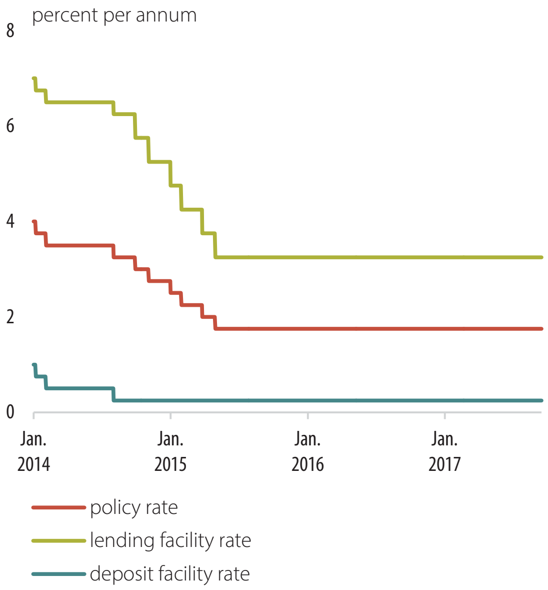
28 Instead of the previously forecasted 1.6 percent in the May 2017 *Inflation Report*.

29 Versus 3.1 percent and 3.4 percent respectively in the earlier projection.

30 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 scrapping of non-tax fees and charges in February 2017.

31 The anticipated growth rates, over the short term, of VFE prices, administered prices – in particular of electricity – and tobacco prices were relatively higher, the influence of this revision being only partly offset by the impact of the reduction in projected fuel prices.

Chart 3.1. NBR rates



term[32]. The widening of the positive output gap was anticipated to be larger than previously forecasted, given the faster-than-expected economic growth in 2017 Q1[33], as well as the outlook for a relative step-up in growth in 2017 and 2018 compared with the earlier forecast, amid the strengthening of the pro-cyclical stance of the fiscal and income policies, the further accommodative monetary conditions, and the consolidation of external demand.

Nevertheless, the outlook for the fiscal and income policy stance was difficult to anticipate, given (i) the heightened uncertainty surrounding the actual manner of implementing the unified wage law and the set of measures that would probably accompany it, designed to alleviate its expansionary effects, as well as (ii) the possible adoption of corrective fiscal measures in the context of the envisaged budget revision. To these added the risk of a possible persistence, at least in the short run, of the low rate of absorption of EU structural and investment funds under the 2014-2020 financial framework. Downside risks to the inflation outlook also came from the external environment, amid the ongoing relatively low euro area inflation and the uncertainty surrounding the pace of economic recovery in the euro area/EU and globally. Particularly relevant were deemed the upcoming monetary policy decisions of the major central banks, as well as the stance of other central banks in the region (Box 4).

Box 4. The monetary policy stances of the major central banks and of those in the region

Inflation picked up towards end-2016 and at the beginning of 2017 both in the advanced economies and in the region, after a long period of low, even negative values; the step-up in the annual inflation rate lost momentum thereafter, but resumed more visibly in recent months. The fluctuations owed primarily to changes in the international oil price, while the generally upward trend reflected mainly the almost continuous increase in core inflation in most of these economies, amid the revival of economic activity and hence the gradual narrowing – until the near closing – of the negative output gap. In developed economies, inflationary pressures from fundamentals have remained relatively moderate for the time being, but are anticipated to strengthen in the future. Against this background, major central banks are already undergoing, or else are about to initiate, a process of monetary policy normalisation. Across the region, however, central banks have undertaken somehow different approaches, with an emerging propensity rather for extending the accommodative stance of the monetary policy (Table A).

[32] By contrast, relatively less intense pressure was expected to be exerted by prices of imports, also against the backdrop of the likely higher import volume.

[33] GDP annual dynamics gained momentum to 5.7 percent from 4.8 percent in 2016 Q4.

Table A. Macroeconomic developments and monetary policy stance in advanced economies and in the region

		US	UK	Euro area	CZ	PL	HU	RO
Inflation target/objective[b,c] (%)		2%	2%	below, but close to 2%	2% ±1pp	2.5% ±1 pp	3% ±1 pp	2.5% ±1 pp
Annual inflation rate (%)	Sep. 2017	1.63[e]	3.00[b]	1.50[a]	2.70[b]	2.19[b]	2.50[b]	1.77[b]
	Q4 2017 – forecast[b,c]	1.6	3.0	1.2	2.7	1.9 (year 2017)	2.4	2.7 (Dec.)
	Q4 2018 – forecast[b,c]	1.9	2.4	1.4	2.2	2.0 (year 2018)	2.5	3.2 (Dec.)
Monetary policy rate[b,c] (%)	Dec. 2016	0.5-0.75	0.25	0	0.05	1.5	0.9	1.75
	Nov. 2017	1-1.25	0.5	0	0.5	1.5 (Oct.)	0.9 (Oct.)	1.75
Output gap[b,c] (% of potential GDP)		slightly positive, widening	negative, closing	negative, closing	slightly positive	negative, closing	negative, close to zero	positive, widening
General government balance* (% of GDP)	2016	-3.2[f]	-3.0[d]	-1.5[c]	0.7[b]	-2.4[d]	-1.8[d]	-3.0[d]
	2017 – forecast	-3.6[f]	-2.9[d]	-1.3[c]	1.4[b]	-2.9[d]	(-1.6; -1.8)[b]	-3.5[d]
	2018 – forecast	-2.8[f]	-2.3[d]	-1.0[c]	1.4[b]	-2.8[d]	(-2.2; -2.4)[b]	-3.7[d]
Current account balance (% of GDP)	2016	-2.5[d]	-4.4[d]	3.5[c]	1.1[b]	-0.3[d]	4.8[d]	-2.1[b]
	2017 – forecast	-2.8[d]	-3.9[d]	2.9[c]	0.9[b]	-0.9[d]	3.5[b]	-2.8[d]
	2018 – forecast	-3.3[d]	-3.2[d]	2.5[c]	1.0[b]	-1.3[d]	2.5[b]	-2.9[d]

*) ESA 2010 methodology, except for US

Source: a) Eurostat, b) NCBs, c) ECB, d) European Commission, e) Federal Reserve Economic Data, f) US Congressional Budget Office

In particular, the European Central Bank announced in October 2017 the reduction, as of January 2018, in the monthly pace of its net asset purchases to EUR 30 billion from EUR 60 billion previously, while keeping unchanged, for an extended period of time, the monetary policy rate and the interest rates on the standing facilities[34]. Moreover, the asset purchase programme was extended until the end of September 2018 or beyond. The decisions were taken in a context in which the euro area annual inflation had witnessed a standstill in September at 1.5 percent and, according to the ECB's latest forecast[35], it was expected to decline in the short run, before re-embarking on an upward path over the longer term, albeit at levels below the central bank's objective, also amid the likely slowdown in economic growth (after peaking in 2017 at a 10-year high of 2.2 percent). In turn, the Fed maintained the target range for the federal funds rate at 1 to 1.25 percent in the 30 October – 1 November meeting, after having increased it by 0.25 percentage points in each of the March and June meetings, sticking to the cycle initiated in December 2015, and having announced in September the launch of a gradual balance sheet normalisation process[36]. At the same time, the Bank of England conducted on 2 November the first monetary policy rate hike since 2007 (by 0.25 percentage points, to 0.50 percent), given that the annual inflation rate had picked up to

34 Thus, the interest rate on the main refinancing operations was kept at 0 percent, while the deposit and lending facility rates were left unchanged at -0.4 percent and 0.25 percent respectively. These levels have been in place since March 2016.

35 September 2017 *ECB Staff Macroeconomic Projections for the Euro Area*.

36 Via a reduction in the reinvestment of maturing financial assets, at first by up to USD 10 billion per month, a threshold that would be raised to USD 50 billion over a one-year period.

3.0 percent in September and, according to the central bank's forecast, it was seen on the rise over the short term, before declining gradually in the vicinity of the 2 percent target.

At a regional level, the Polish central bank maintained in October the monetary policy rate at 1.5 percent, where it had been lowered in March 2015, given that the central bank's projection foresees further moderate annual inflation rates – below the midpoint of the target – over the following quarters, amid a mild increase in external prices, accompanied by the likely gradual heightening of domestic inflationary pressures, due to the improved economic picture. The Hungarian central bank also kept interest rates unchanged in October, after having taken several monetary policy easing measures a month earlier, namely: (i) lowering the overnight deposit rate by 0.1 percentage points, to -0.15 percent; (ii) lowering the upper limit on the stock of three-month deposits, and (iii) increasing the stock and extending the maturities of swap instruments providing forint liquidity. The annual inflation rate decelerated slightly in September, to 2.5 percent, and the central bank's latest medium-term forecast sees it stepping up gradually and reaching the 3 percent target in 2019 Q2, before sticking to this level thereafter.

By contrast, the Czech National Bank resorted in November to a further rise in the monetary policy rate (by 0.25 percentage points, to 0.5 percent[37]) – the second in the cycle launched in August 2017[38]. The decision was warranted by the fact that the annual inflation rate had climbed in September to 2.7 percent from 2.5 percent in the previous month and the central bank's latest medium-term forecast expected it to run for most of 2018 in the upper half of the ±1 percentage point tolerance band of the 2 percent target, before declining and remaining close to the midpoint of the target, also amid the anticipated slowdown in economic growth.

Subsequently-released statistical data pointed to the further step-up in the annual inflation rate in the first two months of Q3 as a whole[39], under the influence of the electricity price hike, fuel price developments and faster core inflation[40], only partly offset by the impact of the drop in prices of fruit and vegetables[41]. Data also indicated that the acceleration trend of economic growth had unexpectedly extended into Q2 (5.9 percent[42] from 5.7 percent in the previous quarter), implying a likely larger-than-anticipated widening of the positive output gap. The robust economic growth was due, this time as well, primarily to private consumption, whereas the contribution of net exports became negative again, amid the more pronounced deceleration in the growth rate of exports of goods and services than in that of imports thereof; against this background, but also owing to the worsening of the primary income

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37 Moreover, the deposit facility rate was kept at 0.05 percent, while the Lombard rate was raised to 1.0 percent.

38 In April, the Czech central bank decided to discontinue the use of the exchange rate of the domestic currency as a monetary policy instrument by exiting from the exchange rate commitment of CZK 27 per euro.

39 The 12-month inflation rate rose to 1.42 percent in July and then posted a more modest decline, to 1.15 percent – slightly lower than forecasted. In the absence of all changes in indirect taxes, excise duties and non-tax fees and charges, the annual inflation rate would have gone up to 2.1 percent in August from 1.9 percent in June.

40 The annual adjusted CORE2 inflation rate marginally exceeded expectations, hitting 1.6 percent in August from 1.42 percent in June.

41 The base effect of tobacco product price dynamics also acted in the opposite direction.

42 According to data available in real time.

balance, the current account deficit almost trebled in Q2 versus Q1 – a source of concern *inter alia* in terms of the leu exchange rate developments. At the same time, the labour market tightening trend grew stronger in 2017 Q2; the annual growth rate of average gross nominal wage earnings economy-wide picked up further in the period from June to July and consolidated at two-digit levels, particularly high from a historical perspective, while the annual pace of increase of unit wage costs in industry stepped up somewhat in July as compared with the Q2 average, amid the slightly slower dynamics of labour productivity.

Credit to the private sector grew at a faster rate July through August[43] (4.7 percent[44] versus 2.8 percent in Q2), driven by the brisker dynamics of new loans along with the reduction in non-performing loan sales. The move was underpinned, this time as well, mainly by credit to non-financial corporations, whose pace of increase peaked at a five-year high, prompted by the swifter advance in medium- and long-term loans in domestic currency. Loans to households also witnessed a step-up in their annual rate of change, largely on the back of the faster rise in consumer credit and other loans (the highest annual growth rate in the past eight years[45]), correlated with the evolution of income and the keener appetite for major purchases[46]; the dynamics of loans for house purchase picked up only slightly, remaining under the influence of the "First Home" programme. Developments in credit to major customer categories were largely correlated with the results of the August 2017 *Bank Lending Survey* conducted by the NBR, which pointed to expectations of further robust increase in non-financial corporations' demand for loans in Q3, as well as to a relative recovery in demand for consumer credit, somewhat at odds with the envisaged additional tightening of applicable credit standards. Looking at the breakdown by currency, the key driver was the faster growth rate of the leu-denominated component (14.6 percent versus 13.0 in the previous three months), to which added a smaller contribution from the slower annual rate of decline of foreign currency credit[47]; however, the share of the leu-denominated component in total private sector credit continued to widen and reached 61.0 percent in August.

Also against this background, the annual dynamics of broad money regained momentum in July and August (8.9 percent and 10.4 percent respectively), after having slowed to a two-year low during the previous three months (8.1 percent in June)[48]. The advance was fuelled, *inter alia*, by the relative increase in disbursements related to EU funds (including in agriculture), as well as in other types of budget expenditures. The swifter growth rate of M3 was primarily underpinned by the renewed step-up in the annual dynamics of narrow money, mainly on the back of corporate overnight deposits, while the rate of change of time deposits with a maturity of up to two years recovered at a much slacker pace and therefore remained in negative territory.

43 Unless otherwise specified, indicators are calculated as average annual changes expressed in real terms.

44 The annual growth rate in nominal terms peaked at a five-year high of 6.5 percent in August.

45 The advance reflected, to a certain extent, the loans granted by banks to recipients of APIA-implemented support schemes.

46 According to the DG-ECFIN Survey.

47 Based on outstanding balances expressed in euro.

48 The average M3 growth during July-August equalled that in Q2.

The assessments conducted in this context reconfirmed the outlook for the annual inflation rate to further pick up in the following months, at an even faster pace than that projected in the current medium-term forecast[49]. Moreover, assessments pointed to a relatively faster-than-previously anticipated pace of economic growth in the second half of the year, implying a relatively wider opening of the positive output gap during that period as well. Upside risks to the medium-term inflation outlook also stemmed from the future fiscal and income policy stance[50], from the likely composition of public spending[51], as well as from the possibly higher increase in companies' wage costs and their potentially no longer having room for a further narrowing of profit margins. To these added a balance in relative equilibrium of risks generated by the external environment, given – on one hand – the potentially faster-than-expected growth of the euro area and global economies in the period ahead and – on the other hand – the risks to the long-term outlook for these economies induced by the US economic policies, the geopolitical tensions and the Brexit.

Under the circumstances, in its meeting of 3 October 2017, the NBR Board decided to narrow the symmetrical corridor of interest rates on the standing facilities around the policy rate to ±1.25 percentage points from ±1.50 percentage points. Furthermore, the central bank kept the monetary policy rate at 1.75 percent per annum and left unchanged the minimum reserve requirement ratios on both leu- and foreign currency-denominated liabilities of credit institutions. At the same time, the NBR further pursued adequate liquidity management in the banking system, tailoring it to developments in credit institutions' net liquidity position.

Real monetary conditions remained highly accommodative in July and August, amid the increase in the current and expected annual inflation rate, along with the fall in the average lending rate on new business and the standstill of the average interest rate on new time deposits. Towards end-Q3, interbank money market rates saw a pronounced uptrend, which stemmed partly from the upward revision of inflation expectations and the stronger expectations on the adjustment of the monetary policy stance, *inter alia* in light of international financial market developments. The trend was subsequently spurred by the reduction in the structural liquidity surplus on the money market, under the simultaneous influence of key autonomous liquidity factors, with a major role played by the operations in the Treasury account and by non-residents' transactions on the local financial market, the latter reflecting a likely shift in the related risk perception. Given the emergence of daily net liquidity shortfalls and the prospects of their persistence in the near run, the central bank supplied liquidity to credit institutions via repo operations with full allotment for the first time in almost two years.

49 August 2017 *Inflation Report*.

50 Given the one-off nature of actions entailing higher budget revenues and the expansionary effects of the new unified wage law, potentially alleviated however by fiscal measures expected to accompany it.

51 Reflecting the further reduction in public investment spending in favour of expenditures meant to foster consumer demand.

2. Financial markets and monetary developments

The daily interbank deposit rate fluctuated slightly in the first months of Q3, before rising steeply towards the end of the quarter and thus nearing the monetary policy rate. The EUR/RON exchange rate saw its uptrend extend into the first part of the quarter and afterwards levelled off in the vicinity of its five-year peak. Credit to the private sector further grew at a faster pace June through August 2017, contributing in the latter part of the interval to a relatively brisker expansion of liquidity across the economy.

2.1. Interest rates

The daily average interbank money market rate posted minor fluctuations for most of 2017 Q3, before increasing sharply at the end of the quarter in the vicinity of the monetary policy rate. Its quarterly average added 0.10 percentage points versus April-June, to stand at 0.47 percent.

After having recorded only slightly higher readings against the previous three months (around 0.4 percent) July through August and for most of September, overnight rates on the interbank money market witnessed a quick adjustment towards the end of the quarter, rising close to the monetary policy rate. The advance was due to the fact that the narrowing trend of the structural liquidity surplus on the money market was bolstered in the latter part of the quarter by the simultaneous influence of the key autonomous liquidity factors, with a major role played by changes in the pattern of developments in the balance of the Treasury's leu-denominated account and of non-residents' transactions on the local financial market. Against this background, the onset of the 24 September – 23 October reserve maintenance period saw the emergence of daily reserve shortfalls, which prompted the NBR to resume its one-week repo operations for liquidity provision.

In turn, longer-term (3M-12M) ROBOR rates reflected the changes in the current/anticipated nature of money market liquidity conditions (Chart 3.2). Specifically, towards the end of the quarter, they saw a steepening of the upward trend brought about, starting in the first part of August, by the consolidation of credit institutions' expectations of an adjustment, in the near future, in the NBR's monetary policy stance, in line with rising inflation expectations, as well as with the central bank's guidance – *inter alia* via the revision of the inflation forecast – and with developments on the international financial market.

Chart 3.2. Policy rate and ROBOR rates

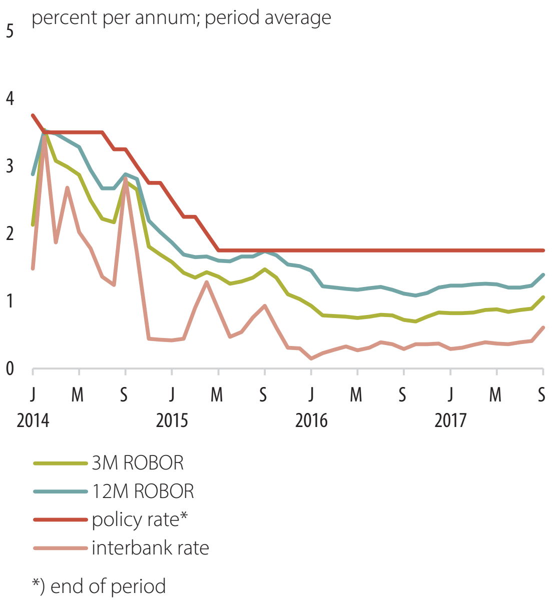
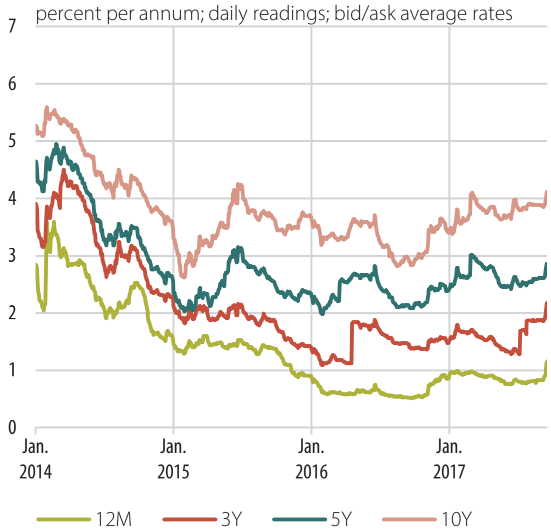


Chart 3.3. Reference rates on the secondary market for government securities



Under the circumstances, ROBOR rates also tended to come close to the monetary policy rate. Hence, the average 3M ROBOR rate stood in September 0.22 percentage points higher than in June, coming in at 1.06 percent, while the average 6M and 12M rates added around 0.20 percentage points each, to 1.22 percent and 1.39 percent respectively[52].

Under the influence of the same factors, short-term government security yields (6 to 12 months) posted broadly similar developments (Chart 3.3). At the same time, those on the medium/long term (5-10 years) embarked in August on a smooth upward path – contrary to the trend displayed in August and in the early days of September by the corresponding yields in advanced economies and in other countries in the region[53] –, probably reflecting also heightened uncertainties/risks surrounding the fiscal and income policy outlook. Towards the end of the quarter, their upward path steepened, due *inter alia* to the recent resumption in the increase of yields on external markets[54]. Against this backdrop, the monthly averages of reference rates on the secondary market[55] stood approximately 0.20 percentage points higher in September than in June across the entire maturity spectrum[56].

On the primary market, the average accepted rates at the last auctions conducted in September continued to rise versus the end of the previous quarter, by values ranging between 0.09 percentage points for the 3-year maturity (to 1.85 percent) and 0.14 percentage points for the 6-month and 7-year maturities (to 0.65 percent and 3.36 percent respectively). The increase was steeper in the case of securities with a residual maturity of 5 years, whose yield added 0.26 percentage points to 2.71 percent. The relative decline in the interest of investors (non-resident ones included) in government securities was also illustrated by the reduction in the average demand-to-supply ratio against the previous three months – with this ratio falling in July, recovering in August, but dropping again in September –, as well as

52 Looking at end-of-period readings, the advance versus the previous quarter ranged between 0.72 percentage points for the three-month maturity and 0.52 percentage points for the 12M rate.

53 As a consequence of revised investor expectations on the future conduct of the major central banks' monetary policy (given the subdued inflation and the political uncertainties in the US, and the absence of a sustained increase in inflationary pressures across the euro area respectively), to which added stronger geopolitical tensions globally, entailing a fall in yields of so-called "safe-haven" assets.

54 This was brought about by the consolidation of expectations that the Fed would announce in September the launch of the balance sheet normalisation process in October, as well as by the markedly higher likelihood of another policy rate hike the Fed would perform in December, expectations validated by the Fed decision/signals of 20 September.

55 Bid/ask average rates.

56 In terms of end-of-period readings, the increase against the previous quarter was more visible at the short end of the yield curve (0.55 percentage points for the six-month maturity, compared with 0.21 percentage points for the 10-year one), which therefore flattened.

Chart 3.4. Bank rates

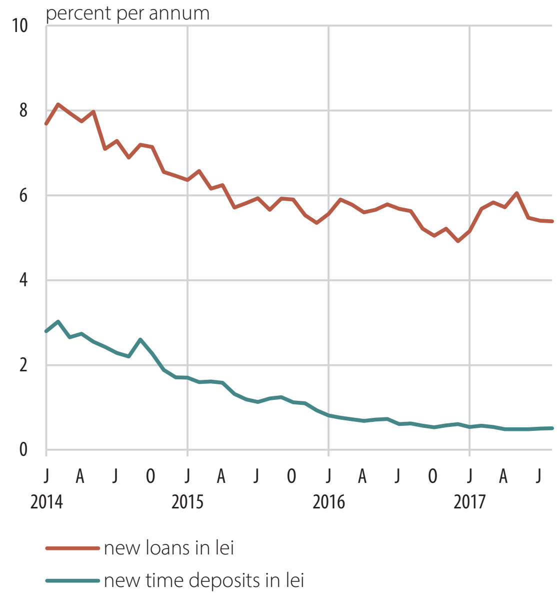
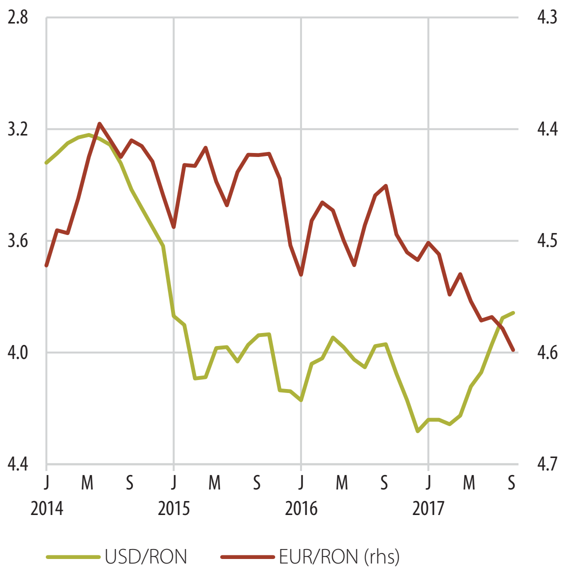


Chart 3.5. Nominal exchange rate



by the volume of securities issued as a share of the pre-announced volume coming down to 99 percent (from 102 percent in 2017 Q2)[57].

June through August 2017, the average remuneration of new time deposits from non-bank customers was quasi-stable at 0.51 percent, reflecting a slight advance in the case of non-financial corporations (up 0.07 percentage points to 0.40 percent) and a marginal decline for households, to a new post-1990 low of 0.74 percent (Chart 3.4). Conversely, the average lending rate on new business shed 0.66 percentage points, to 5.39 percent, on account of both corporate loans – whose interest rate dipped 0.24 percentage points, to 3.78 percent, driven by developments in new low-value loans (below EUR 1 million equivalent) – and household loans (down 0.60 percentage points, to 6.63 percent). The latter reflected primarily the lower relative weight of new consumer credit, with the average interest rates across the major loan types posting significantly smaller declines.

2.2. Exchange rate and capital flows

The EUR/RON exchange rate continued to follow an overall upward path in the first two months of 2017 Q3 and remained quasi-stable in September, at levels close to its 5-year high. Its behaviour, partly uncorrelated with that of the exchange rates of the main currencies in the region, primarily reflected the change in investors' risk perception on the local economy and financial market, as well as the fluctuations in the global risk appetite (Chart 3.5).

The EUR/RON witnessed a renewed swift increase in the early days of July. The upward move – contrary to developments in the exchange rates of other currencies in the region – occurred in the context of additional legislative initiatives and measures in the area of taxation being announced and publicly debated, which likely affected investors' risk perception. The rise was corrected in the second 10-day period of the month and the exchange rate remained stable thereafter until end-July, amid an increase in global risk appetite stemming from the revised investor expectations on the pace of monetary policy tightening by the major central banks, in response to the signals conveyed and the

57 The MPF partly rejected the bids submitted at the last auction in September for government securities with a residual maturity of approximately 5 years.

decisions taken that month by the ECB and the Fed. However, the leu appreciated significantly against the US dollar, given the protraction of the relatively fast strengthening trend that the euro had embarked on vis-à-vis the US dollar at end-June[58].

The EUR/RON exchange rate re-entered at the beginning of August and followed throughout the month a relatively steep upward path. The pair moved in tandem with the exchange rates of the other currencies in the region only in the first part of the period, with the upward trajectory being driven by the worsening of the global risk appetite, owing to escalating tensions in the Korean Peninsula and higher uncertainty about the US economic policies. Afterwards, the move reflected financial investors' increased concern over the prospective fiscal policy stance and the nature of corrective fiscal measures circulated and discussed also in the context of the envisaged budget revision, as well as over the steeper worsening trend of the goods and services balance and of the current account balance[59,60].

The EUR/RON rose and then levelled off in September in the vicinity of its 5-year peak, *inter alia* in a context in which the consolidation of investor expectations on the Fed's forthcoming launch of its balance sheet normalisation process, as well as on a renewed policy rate hike to be conducted in December, reduced the attractiveness of investment in emerging financial markets. These influences fed through to the currencies in the region as well, which witnessed relatively pronounced depreciations in the last month of 2017 Q3.

Under the circumstances, the balance of non-residents' transactions on the interbank forex market gradually fell again deeper into negative territory in August and September, after having posted a relative contraction in the first month of 2017 Q3 (Table 3.1). Given that this was only partly offset by the increase in residents' net supply of

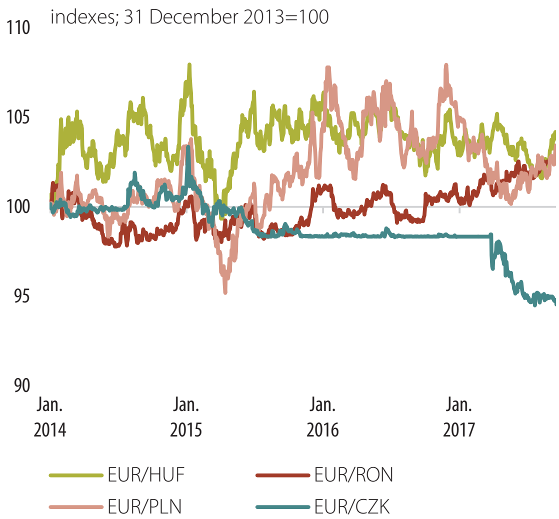
Table 3.1. Key financial account items

EUR million

	8 mos. 2016			8 mos. 2017		
	Net acquisition of financial assets*	Net incurrence of liabilities*	Net	Net acquisition of financial assets*	Net incurrence of liabilities*	Net
Financial account	5,694	3,635	2,060	4,435	5,095	-661
Direct investment	596	3,634	-3,038	89	2,599	-2,510
Portfolio investments	183	525	-343	497	2,192	-1,695
Financial derivatives	x	x	20	x	x	-42
Other investment	3,786	-525	4,312	2,199	305	1,895
– currency and deposits	2,629	-2,158	4,787	1,506	-949	2,455
– loans	120	-915	1,035	63	-444	506
– other	1,037	2,548	-1,510	630	1,698	-1,066
NBR's reserve assets, net	1,109	0	1,109	1,687	0	1,687

*) "+" increase/"-" decrease

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



Source: ECB, NBR

58 In response to President Draghi's speech at the ECB Forum in Sintra.

59 According to the data released in mid-August, the negative balance on trade in goods and services rose to EUR 1.5 billion in 2017 H1 (from EUR 0.4 billion in the same year-ago period) and the external deficit widened to EUR 2.7 billion (from EUR 2 billion in 2016 H1).

60 This information quasi-offset, in terms of influence, that about the economy performing above expectations in Q2, as revealed by new statistical data (GDP growth – flash estimate and the strong advance in industrial output in June).

foreign currency, the overall market deficit for the period as a whole exceeded that in the previous quarter and stood at a high level by comparison to the past few years.

During the period under review, the domestic currency weakened against the euro by 0.6 percent in nominal terms[61] and strengthened by 0.04 percent in real terms. In relation to the US dollar, the leu appreciated by 5.5 percent in nominal terms and 6.1 percent in real terms, given the former's sharp weakening versus the single currency[62] (Chart 3.6). Looking at the average annual exchange rate dynamics in 2017 Q3, the leu saw a higher nominal depreciation versus the euro and posted the first nominal appreciation against the US dollar in the past five quarters.

2.3. Money and credit

Money

In June, the annual growth rate of broad money (M3) continued to decline, before accelerating in the following months, due to the relatively higher disbursements to recipients of EU funds, including for agriculture, and to the faster increase in the public wage bill and social security spending, as well as in purchases of goods and services (in July; Table 3.2). However, June through August[63], its average pace of increase was lower than in the previous three months (9.1 percent versus 11.0 percent).

Table 3.2. Annual growth rates of M3 and its components

real percentage change

	2016		2017			
	III	IV	I	II	Jul.	Aug.
	quarterly average growth					
M3	13.3	11.8	10.3	9.7	8.9	10.4
M1	26.4	24.7	21.2	20.0	19.1	21.1
Currency in circulation	19.2	18.3	17.3	16.4	14.2	16.0
Overnight deposits	30.1	27.9	23.1	21.6	21.4	23.4
Time deposits (maturity of up to two years)	0.5	-1.5	-1.6	-2.2	-3.6	-2.5

Source: NIS, NBR

From the perspective of M3 components, the change in trajectory was mainly attributable to the renewed step-up in the annual growth rate of narrow money, at first only due to households' and non-financial corporations' overnight deposits, and subsequently also due to the boost from the faster dynamics of currency in circulation[64]. The higher rate of change of time deposits with a maturity of up to two years also had a similar, albeit less strong, influence July through August, yet it remained in negative territory. Against this background, M1 continued to consolidate its share in broad money, reaching 60.2 percent in July – a new high since December 1994 (Chart 3.7).

The pattern of the annual dynamics of broad money was also replicated by the 'total deposits' component: after dropping in June, its annual rate of change witnessed a recovery, mainly due to non-financial corporations, whose deposits were fuelled

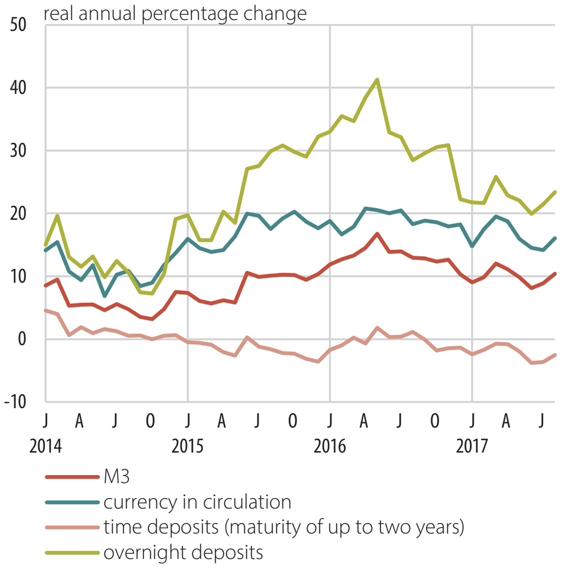
61 During the same period, the Hungarian forint and the Polish zloty weakened by 0.03 percent and 1.4 percent respectively, whereas the Czech koruna appreciated by 1.7 percent.

62 In contrast to the US dollar, gold price per ounce gained 4.4 percent in the same period.

63 Unless otherwise indicated, percentage changes refer to annual growth rates in real terms for June-August 2017.

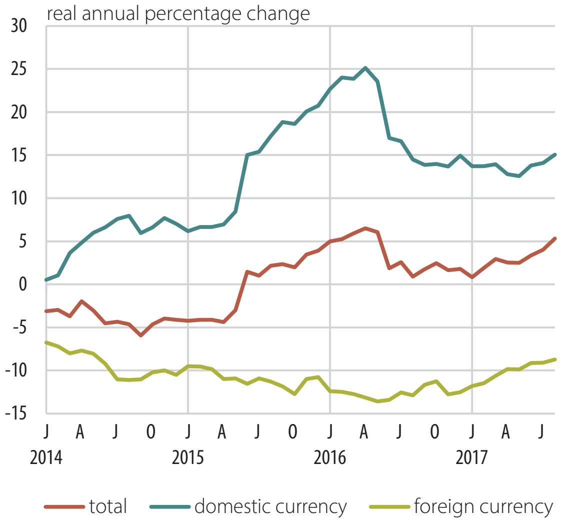
64 The pace of increase of currency in circulation was higher than that entailed by the seasonal pattern and its share in M3 reached a new high since January 1996.

Chart 3.7. Main broad money components



Source: NIS, NBR

Chart 3.8. Credit to the private sector by currency



Source: NIS, NBR

by disbursements from EU funds (especially for agriculture)[65], as well as by higher collections from sales of goods and services[66]. The increase in payments to the government budget on account of certain categories of taxes and fees[67], as well as in dividends to shareholders, had opposite, albeit weaker, effects. Looking at households, the annual dynamics of total M3 deposits regained momentum starting with July, although at a slower pace, as a result of a rise in wages in public administration[68], pensions[69] and other income categories (including dividends and payments of subsidies from EU funds).

From the perspective of broad money counterparts, the step-up in M3 annual dynamics in the last two months of the period was mainly determined by the faster pace of increase of credit to the private sector, to which added, in July, the slower rate of change of central government deposits, and, in August, the swifter growth rate of credit to the public sector. The annual dynamics of banks' net external assets and of long-term liabilities[70] had contrary effects.

Credit to the private sector

June through August 2017, the dynamics of credit to the private sector further accelerated[71] (4.2 percent, a 12-month high, versus 2.7 percent in the previous three months; Chart 3.8), amid the faster annual growth in the flow of new loans and the drop in the volume of non-performing loans removed from banks' balance sheets compared with the same year-earlier period. In terms of currency composition, this evolution was supported by the further uptrend in the dynamics of the leu-denominated component and, to a smaller extent, by the less negative dynamics of

[65] According to general government budget execution data, the annual growth rate of total expenditure for projects financed from non-repayable external loans gained traction. At the same time, according to press releases from the Agency for Payments and Interventions in Agriculture, payments were made for the coupled support scheme in the crop sector under the 2016 Campaign and for the breeders' subsidies for May 2017 (drawing up and keeping genealogy databases and services for determining breeds' genetic quality). The breakdown of these amounts by group of recipients is not possible.

[66] The annual growth rate of retail trade turnover (except motor vehicles and motorcycles) picked up in July and August.

[67] According to general government budget execution data.

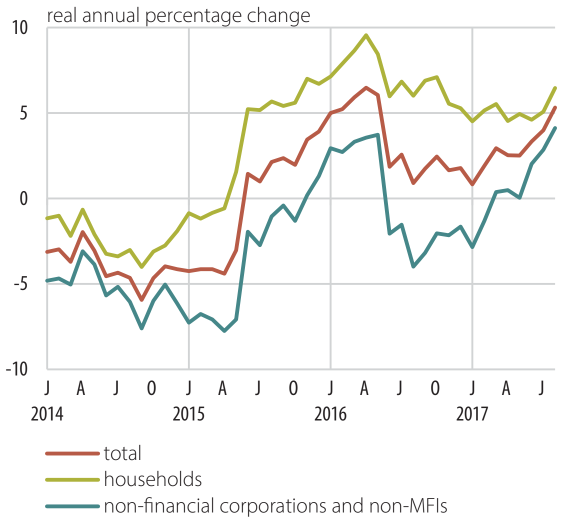
[68] Laws No. 115, 153, 137 and 152 of 2017.

[69] Government Emergency Ordinance No. 2/2017.

[70] Capital accounts included.

[71] Unless otherwise indicated, percentage changes refer to the average annual growth rates in real terms for June-August 2017.

Chart 3.9. Credit to the private sector by institutional sector



Source: NIS, NBR

the foreign currency-denominated component. The share of the domestic currency component in total private sector loans continued to widen (61.0 percent in August, a new post-1996 high).

Looking at the breakdown by customer type, the faster growth mainly stemmed from loans to non-financial corporations, whose dynamics rose steadily and re-entered positive territory after a year-long break. The increase was particularly due to short- and long-term leu-denominated loans and was driven by the relative resurgence in the flow of new loans[72] – with a more apparent recovery in loan demand[73] coming most likely from the agricultural and services sectors –, concurrently with a decline in the volume of non-performing loans removed from credit institutions' balance sheets. The rate of change of foreign currency-denominated loans (expressed in euro) to non-financial corporations headed upwards as well, under the impact of the relative pick-up in the short-term component.

Household credit also showed a higher growth rate, albeit less pronounced, primarily due to the lei component[74] (Chart 3.9). This was attributable to the faster increase in consumer credit and other loans, given the swifter rise in the volume of new loans, including credit granted to farmers[75], and the dynamics of credit card loans remaining high from a historical perspective. By contrast, the growth rate of leu-denominated housing loans continued to slow down, the effect of the relative step-up in the volume of new loans (mainly reflecting the characteristics of carrying out the "First Home" programme[76]) being more than offset by that of the likely higher volume of debt repayments.

[72] Including revolving loans.

[73] As reflected by the NBR's August 2017 *Bank Lending Survey*.

[74] Developments in household loans were influenced to a larger extent by the statistical effects of the increase in the annual inflation rate and of the exchange rates movements respectively, which had opposite impacts throughout the period.

[75] Loans granted to recipients of subsidies under the 2017 Campaign conducted by the Agency for Payments and Interventions in Agriculture.

[76] According to the MPF press release, the final disbursement, up to the guarantee ceiling for 2017, was allocated in June.

4. Inflation outlook

The annual CPI inflation rate is projected to reach 2.7 percent at end-2017, 3.2 percent at end-2018 and 3.1 percent at the forecast horizon, i.e. 2019 Q3. The path of the annual CPI inflation rate will see a significant bout in early 2018, thereby exceeding the upper bound of the variation band, amid the fading out of first-round effects of the changes to indirect taxes and non-tax fees and charges at the beginning of 2017, the anticipated evolution of inflation components beyond the scope of monetary policy, and the build-up of domestic inflationary pressures at the level of core inflation. Starting with the final quarter of 2018, after re-entering the variation band of the target, the annual CPI inflation rate will run in the upper half of the band. The expected slowdown of the growth rate will solely derive from the dynamics of exogenous components, whereas the annual core inflation rate is anticipated to further reflect a build-up of domestic inflationary pressures. On the one hand, they stem from the projected rise in excess aggregate demand, amid the pro-cyclical fiscal policy, higher disposable income of households, the stimulative nature, albeit waning, of real monetary conditions and, consequently, the progressive rise in economic agents' inflation expectations, which are seen staying inside the variation band of the target until the forecast horizon. On the other hand, they are dampened by the increasing importance of external factors for explaining the dynamics of consumer prices, their inflationary traction being less strong than that of domestic determinants. The balance of risks to the annual inflation projection is assessed to be in equilibrium relative to the path in the baseline scenario, amid the potentially opposite influences associated with the sources of risks stemming from the domestic and external environment.

1. Baseline scenario

1.1. External assumptions

The scenario for the effective EU GDP (EU-28 excluding Romania) is consistent with the assumption of a further recovery in external demand. The annual growth rates of the indicator are seen running higher than previously projected, especially in 2017 (Table 4.1). Domestic demand is further upheld by the ECB's accommodative[77] monetary policy and the ongoing improvements in labour market conditions, while exports benefit from the stimulative impulse of economic growth in major trading

[77] In its meeting of 26 October 2017, the ECB decided to continue to make purchases under the asset purchase programme at a monthly volume of EUR 60 billion until the end of December 2017 and reduce the monthly volume to EUR 30 billion until the end of September 2018. The measure will be extended subsequently, if necessary.

Table 4.1. Expectations on the developments in external variables

annual averages

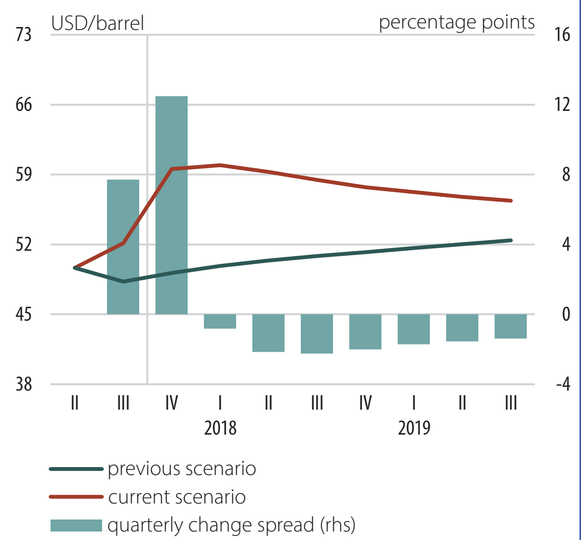
	2017	2018
Effective EU economic growth (%)	2.4	2.1
Annual inflation rate in the euro area (%)	1.5	1.3
Annual inflation rate in the euro area, excluding energy (%)	1.2	1.2
Annual CPI inflation rate in the USA (%)	2.0	1.8
3M EURIBOR (% per annum)	-0.3	-0.3
USD/EUR exchange rate	1.13	1.19
Brent Oil price (USD/barrel)	53.8	58.9

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

partners, despite the recent euro strengthening. Against the background of higher-than-expected economic growth in the recent quarters, the effective EU GDP gap is seen posting positive values as early as this year, before opening further gradually over the forecast interval.

The average annual HICP inflation rate in the euro area is forecasted to stand at 1.5 percent in 2017 and 1.3 percent in 2018, values marginally revised downwards compared to the previous *Report*, thus remaining below the ECB's 2 percent price stability benchmark. For this year, behind these developments stand chiefly the expected oil price dynamics, but subsequently, as rising wage costs feed through amid the persistent improvements in labour market conditions, core inflation is seen becoming the major determinant. The average annual HICP inflation rate excluding energy prices[78] in the euro area is forecasted to follow a stable path throughout the projection interval. Annual inflation rate in the USA is foreseen to run higher than that in the euro area and slightly above the 2 percent benchmark all through 2019.

Chart 4.1. Brent oil price scenario



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

The nominal 3M EURIBOR rate is anticipated to further register negative values almost throughout the projection interval, reflecting the ECB's accommodative monetary policy stance.

The EUR/USD exchange rate is envisaged to follow a quasi-stable path over the entire projection interval.

The scenario for the international Brent oil price is based on futures prices and foresees a slight downtrend during the projection interval, hitting USD 56.4 per barrel at the forecast horizon. The projected levels exceed the previously forecasted ones following steep oil price increases recorded in Q3 and new rises expected for Q4, amid hurricane-induced damages, geopolitical tensions in the Middle East and lower oil inventories worldwide (Chart 4.1). The outlook for the oil price is further uncertainty-ridden, as mirrored by the revised trajectories implied by futures prices in the successive projection rounds. Specifically, the future dynamics of oil price are conditional on both supply-side

[78] The inflation measure excluding energy is more relevant to the developments in the domestic adjusted CORE2 inflation rate than the aggregate index, showing a more similar structure, a better correlation with domestic core inflation and higher predictive power for the latter. The developments in the energy component of the HICP basket for the euro area are closely related to those in the international oil price, which are responsible for significant changes to annual headline HICP inflation in recent years.

factors – output cuts agreed on by the OPEC members in the context of the previously held meetings focusing on the March 2018 horizon and of a possible extension of the OPEC agreement following the meeting to take place in late November 2017 – and demand-side factors, amid rising demand at global level, particularly in China, with a view to building up strategic reserves in case of emergency situations.

1.2. Inflation outlook

The baseline scenario of the macroeconomic projection places the annual CPI inflation rate at 2.7 percent and 3.2 percent at end-2017 and end-2018 respectively. At the projection horizon, i.e. 2019 Q3, the rate is forecasted at 3.1 percent (Table 4.2). These levels are inside the ±1 percentage point variation band of the 2.5 percent flat target (Chart 4.2). The path of the annual inflation rate is largely shaped by the build-up of domestic inflationary pressures at the level of core inflation and the expected slowdown of the growth rates of inflation components beyond the scope of monetary policy starting in the second part of next year. To these factors add the fading out, at the beginning of 2018, of the first-round statistical effects exerted by indirect tax cuts in January 2017 and the scrapping of a number of non-tax fees and charges in February 2017. The annual CPI inflation rate at constant taxes will reach 3.3 percent at the end of this year, 3.1 percent at end-2018 and 2.9 percent in 2019 Q3 – values inside the upper half of the variation band of the target.

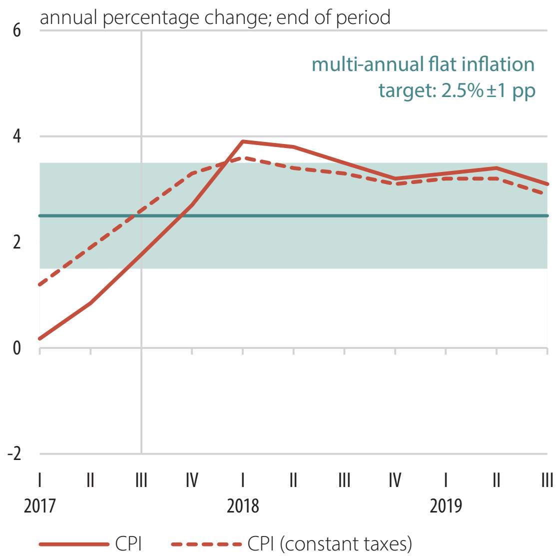
Table 4.2. The annual inflation rate in the baseline scenario

annual percentage change; end of period

	2017	2018				2019		
	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3
Central target	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
CPI projection	2.7	3.9	3.8	3.5	3.2	3.3	3.4	3.1
CPI projection*	3.3	3.6	3.4	3.3	3.1	3.2	3.2	2.9

*) calculated at constant taxes

Chart 4.2. Inflation forecast



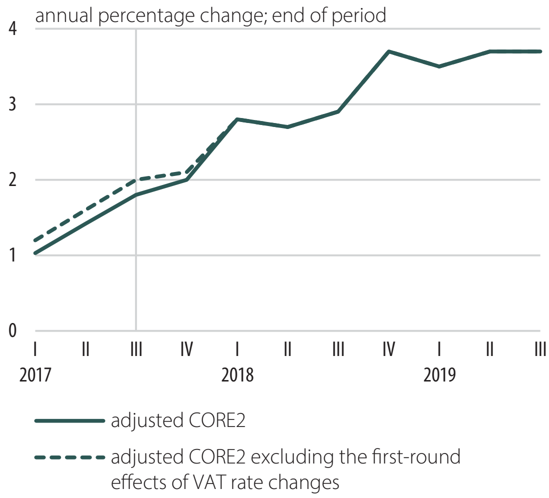
Source: NIS, NBR projection

Compared to the August 2017 *Inflation Report*, the forecasted annual CPI inflation rate has been revised upwards by 0.8 percentage points at the end of 2017, amid larger projected contributions from administered prices, fuel prices and tobacco product prices, dampened by lower contributions from the adjusted CORE2 index and the prices of VFE. For the end of 2018, the indicator is seen at a relatively similar level as in the previous *Inflation Report*, given the projected slower annual dynamics of the adjusted CORE2 index and of fuel prices, counterbalanced by higher expected increases in administered prices.

The annual adjusted CORE2 inflation rate is expected to trend upwards during the forecast interval, reaching 2.0 percent at end-2017 and 3.7 percent at end-2018 and at the projection horizon. Core inflation rate will run above the upper bound of the variation band of the target starting the end of 2018, as a result of the build-up of inflationary pressures associated with domestic fundamental factors

(Chart 4.3). This evolution is projected despite the further favourable influences coming from import price dynamics, which supported evidence on the weakening of the relationship between inflation and output gap in recent periods. Domestic inflationary pressures are induced by the increase in excess demand in the economy – amid both the pro-cyclical fiscal policy stance, together with higher disposable income of households, and stimulative real broad monetary conditions, which are, however, seen abating over the projection interval – and, hence, by the return and persistence of economic agents' inflation expectations inside the variation band of the target until the forecast horizon. Adding to these fundamental factors is the anticipated increase in production costs of firms, mainly amid the expected further strong pressures coming from wage hikes. Markedly lower inflationary pressures than those associated with the domestic environment, following a relatively stable projected path, come from the anticipated evolution of leu-denominated import prices. The fading out, at the beginning of 2018, of the first-round statistical effect of the standard VAT rate cut on 1 January 2017 will contribute by approximately 0.15 percentage points to the annual core inflation rate (Table 4.3).

Chart 4.3. Annual adjusted CORE2 inflation and adjusted CORE2 excluding the first-round effects of VAT rate changes



Source: NIS, NBR projection

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

annual percentage change; end of period

	2017	2018				2019		
	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3
Adjusted CORE2	2.0	2.8	2.7	2.9	3.7	3.5	3.7	3.7
Adjusted CORE2*	2.1	2.8	2.7	2.9	3.7	3.5	3.7	3.7

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

Compared to the previous *Inflation Report*, the annual adjusted CORE2 inflation rate was revised downwards by 0.4 percentage points and 0.3 percentage points at the end of 2017 and 2018 respectively. Expectations of a slower-than-previously-projected rise in core inflation stem from the ongoing incorporation into the forecast model of the evidence on the relatively higher importance of external factors to the detriment of domestic factors for explaining the dynamics of domestic consumer prices[79], given that the former exert a significantly lower inflationary impact than the latter.

The cumulative contribution of components exogenous to the monetary policy influence, namely administered prices, volatile food prices, fuel prices and tobacco product and alcohol prices, to the annual CPI inflation rate is envisaged to reach 1.5 percentage points at end-2017 and 1 percentage point at end-2018, being revised upwards from the previous *Inflation Report*, more significantly in 2017 (by 1 percentage point) compared to the end of next year (by 0.1 percentage points) (Table 4.4).

79 In the May 2017 forecast round a change to the model for analysis and medium-term forecasting (MAMTF), resulting in a decline in the sensitivity of core inflation to the output gap, was implemented (for details, see Box 2 titled "The relationship between economic activity and inflation" in the May 2017 *Inflation Report*). Subsequent empirical evidence pointed to a further weakening of this relationship. The analyses also indicated a recently weaker impact of economic agents' inflation expectations, particularly due to the backward-looking (inertial) component, concurrently with a higher importance of import prices for explaining the dynamics of adjusted CORE2 index.

The annual dynamics of volatile food (VFE) prices are projected to stand at 6.9 percent at the end of 2017, being revised downwards by 1.7 percentage points, chiefly amid the slower dynamics of prices for agricultural products, in the context of a worldwide favourable agricultural year. For the end of next year, these dynamics are anticipated at 3.8 percent, following a marginally downward revision of 0.2 percentage points, before reaching 2.6 percent at the projection horizon (Chart 4.4). Their growth path over the forecast interval is based on the assumption of bumper domestic crops this year and normal agricultural years in 2018 and 2019.

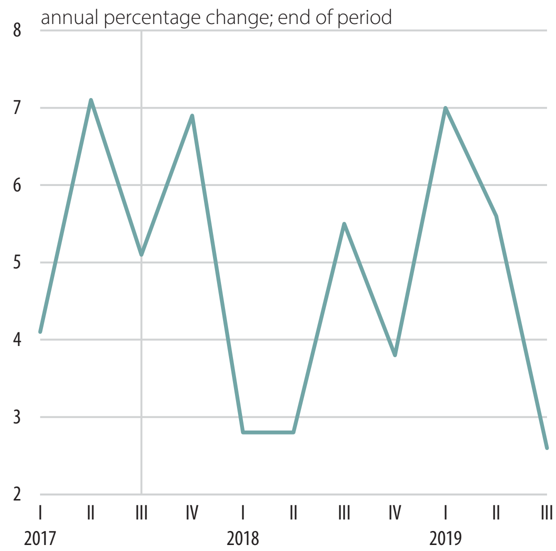
Table 4.4. Components' contribution to annual inflation rate*

percentage points

	2017	2018
Administered prices	0.5	0.6
Fuels	0.3	0.1
VFE prices	0.4	0.2
Adjusted CORE2	1.2	2.2
Tobacco and alcoholic beverages	0.3	0.1

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

Chart 4.4. VFE prices annual inflation



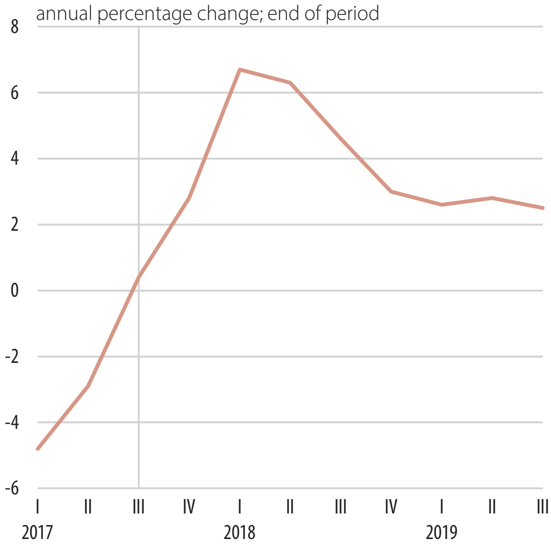
Source: NIS, NBR projection

According to the exogenous scenario for administered prices, their growth rate is anticipated at 2.8 percent, 3.0 percent and 2.5 percent at the end of 2017, 2018 and at the forecast horizon respectively (Chart 4.5). Compared to the previous forecasting round, the end-2017 and end-2018 values were adjusted upwards by 2.0 percentage points and 0.7 percentage points respectively. The projected path is affected by the removal of some non-tax fees and charges in February 2017, the recent hike in the competitive market component prices[80] (which are taken into account when calculating electricity prices), the assumption of full liberalisation of the electricity price at the end of this year and by the anticipated increases in the natural gas price in the periods ahead.

The annual dynamics of fuel prices are anticipated to reach 3.2 percent at end-2017, being revised upwards by 7.7 percentage points, 1.2 percent at end-2018, following a downward revision of 0.7 percentage points, and 1.8 percent at the projection horizon (Chart 4.6). The path of this component is affected by the removal of the special excise duty on motor fuels and by the standard VAT rate cut to 19 percent, from 20 percent (both measures being implemented in January 2017 and assessed to have contributed -0.4 percentage points to the annual CPI inflation rate), as well as by the two-step increase in excise duties, on 15 September and 1 October, announced after the August projection round was completed (assessed to have a contribution of +0.3 percentage points to the annual CPI inflation rate). A quicker rise in the oil price in 2017 Q3 that is envisaged to persist into 2017 Q4 also contributed to the upward revision of this component in the first part of the projection interval.

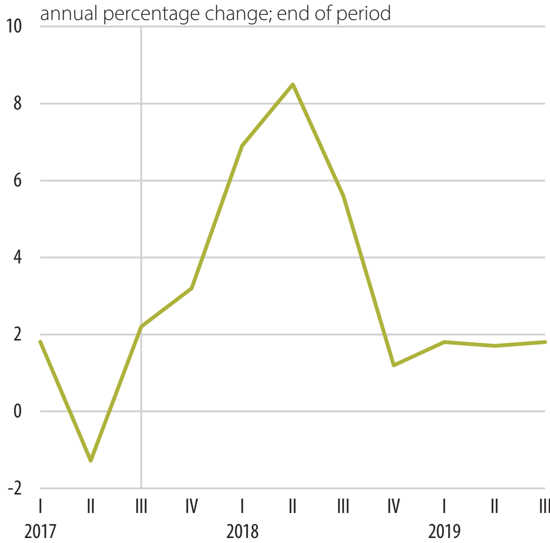
80 At the meeting of 26 September 2017, the Regulatory Committee of the Romanian Energy Regulatory Authority decided to raise the competitive market component prices by lei 0.03 per kWh. For further details, see the Romanian Energy Regulatory Authority press release of 26 September 2017 available at: http://www.anre.ro/ro/presa/comunicate/comunicat-26-09-2017-avizare-tarife-cpc-trimestrul-iv.

Chart 4.5. Administered prices annual inflation



Source: NIS, NBR projection

Chart 4.6. Fuel prices annual inflation



Source: NIS, NBR projection

The annual price dynamics projected for tobacco products and alcoholic beverages are envisaged at 3.6 percent, 0.9 percent and 2.3 percent at end-2017, end-2018, and at the projection horizon respectively. Their path is marked by the standard VAT rate cut in January 2017 and hikes of the specific excise duties in April and July 2017, as well as by those anticipated for April 2018 and April 2019, based on the legislation in force setting the levels of excise duties on such goods. Compared to the previous forecasting round, their annual dynamics were revised upwards by 1.2 percentage points for 2017 in light of the recent developments and are expected to display similar levels for the end of next year.

1.3. Demand pressures in the current period and over the projection interval[81]

Output gap

In 2017 Q2, real GDP rose by 1.7 percent[82] versus the previous quarter and by 6.1 percent compared with the same year-ago period. For 2017 Q3 and Q4, real GDP is anticipated to record lower quarterly growth rates than in the first half of the year. The near-term forecast is based on broadly favourable signals from monthly indicators (primarily the turnover volume of retail trade, excluding motor vehicles and motorcycles, and the economic sentiment indicator – Chart 4.7, in contrast to the modest evolution of industrial production)[83]. In this context, the quarterly GDP growth is anticipated to be further driven by domestic demand, while the

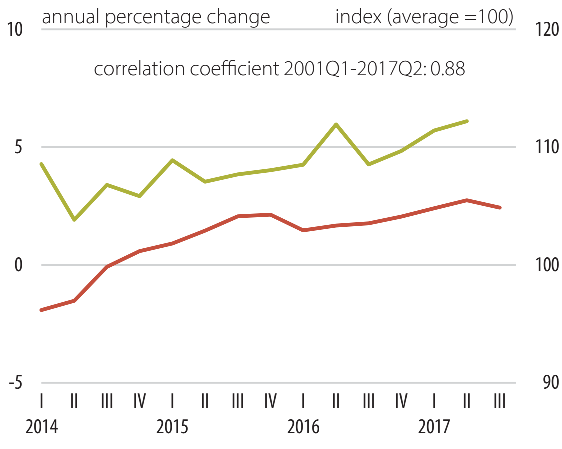
81 Unless otherwise indicated, percentage changes are calculated based on the seasonally adjusted data series. Source: NBR, MPF, NIS, Eurostat, EC-DG ECFIN and Reuters.

82 NIS Press Release No. 256 of 10 October 2017.

83 Compared to the 2017 Q2 average, the turnover volume of retail trade, excluding motor vehicles and motorcycles, added 4.4 percent and industrial production shed 0.2 percent July through August 2017. Even though the economic sentiment indicator went down 0.6 points in 2017 Q3 versus a quarter earlier, it still stands above its historical average.

contribution of net exports of goods and services is expected to remain negative on account of imports, fuelled by developments in domestic absorption, as well as in exports.

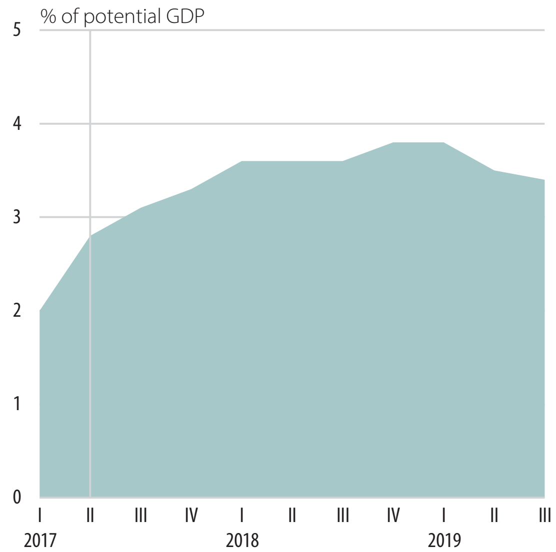
Chart 4.7. Economic sentiment indicator* and economic growth



*) seasonally adjusted data

Source: NIS, EC-DG ECFIN

Chart 4.8. Output gap



Source: NBR calculations based on NIS data

Over the forecast interval, potential GDP growth is projected to pick up slightly. Labour is seen to have a slightly positive contribution, mainly on account of the rise in employment trend (the increase in the activity rate of working-age population and the downward ILO unemployment trend more than offset the multi-annual demographic decline), as a result of the rising number of employed persons economy-wide in the context of recent developments and the positive economic outlook. Capital stock accumulation is expected to benefit, over the analysed interval, from the favourable developments in gross fixed capital formation (GFCF) since the beginning of the year, anticipated to continue. The positive dynamics of the total factor productivity (TFP) trend are associated with the effects of the recent and persistent annual growth rates of economic activity, accompanied by increases in labour productivity. An additional favourable impact comes from prospects of improved absorption of EU structural and investment funds. Adverse long-term influences on the TFP trend stem from the relatively low level of investment in infrastructure, with a lingering impact also on capital and labour mobility, as well as from the still modest allocation of resources for bridging the gap vis-à-vis the EU average as regards the degree of innovation in the economy.

Recent assessments point to the emergence of a positive output gap as early as in the course of 2016, displaying a widening tendency ever since. Box 5 presents some corroborative evidence on the degree of overheating of the economy. The positive output gap is projected to widen until the end of 2018 (Chart 4.8), indicating stronger inflationary pressures from aggregate demand[84]. Higher excess demand is brought about by: (i) developments in the real disposable income, underpinned by the impact of income policy measures, and (ii) the external demand gap advancing into positive territory, while the stimulative impact exerted by the discretionary component of the fiscal policy and by

[84] Recent evidence points to a weaker pass-through of inflationary pressures associated with domestic aggregate demand to core inflation – for more details, see Box 2 in the May 2017 *Inflation Report*.

real broad monetary conditions is on the wane. The effect of the latter two factors is seen prevailing over the former in 2019, thus dampening excess demand. Compared to the August 2017 *Inflation Report*, the size of the output gap is larger both in 2017 and in 2018. The upward revision is primarily due to underestimating real GDP dynamics in 2017 Q2, to which adds the favourable revision, throughout the forecast interval, of the effects exerted by the economic activity of the main trading partners[85], while the impact of the discretionary component of the fiscal and income policy stance (i.e. fiscal impulse) is expected to be softer. From the perspective of aggregate demand components, the output gap is projected to widen primarily on account of the larger consumption gap and, to a lesser extent, of the GFCF gap. In turn, the gaps of exports and imports of goods and services are assessed at positive values, yet 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 depending on the frequency and size of the revisions of historical series, and also on their volatility (in this respect, the GFCF seasonally adjusted historical series deserves mention).

Compared to the 2016 reading, in 2017 GDP growth is projected to record a faster pace, before witnessing a slowdown in 2018, due to a less strong impact of the discretionary component of fiscal policy (i.e. fiscal impulse). Domestic demand is seen to remain the driver of economic growth, owing primarily to private consumption and, to a lesser extent, to GFCF. The advance in domestic demand is anticipated to fuel imports of goods and services to rise faster than exports and, although the latter's dynamics are expected to be extremely favourable, the contribution of net exports to GDP growth is forecasted to be negative, albeit diminishing.

Box 5. Corroborative evidence on the degree of economy overheating

Overheating of an economy occurs when short-term aggregate demand exceeds long-term aggregate supply. In other words, in the case of the economy as a whole, the output gap is positive, with the ensuing excess demand exerting, *ceteris paribus*, inflationary pressures. At the same time, overheating implies imbalances across most of the economic sectors. This box presents a statistical analysis[86] corroborating the analyses relying on macroeconomic models regarding the current cyclical position of the economy used by NBR. According to these models, there are signals of overheating of the Romanian economy at this moment.

Corroborative assessment rests on a portfolio of relevant variables. The signal strength is set by the position of the signal value for each variable relative to a number of thresholds, using the following classification: (i) lack of signals from the indicator when the signal value is below the historical average; (ii) moderate signals from the indicator when it is placed between the mean and the first threshold;

85 The revision is due to more favourable prospects in 2017 for economic growth in the majority of European states. Euro area countries (primarily Germany, Italy, Netherlands and Austria) have the largest contribution, followed by that of non-euro partners (Czech Republic, Poland and Sweden in particular).

86 The methodology used herein is similar to that implemented by the IMF in its *World Economic Outlook* (April 2013). A comprehensive set of indicators is also monitored in the scoreboard for the surveillance of macroeconomic imbalances – *Macroeconomic Imbalance Procedure Scoreboard,* MIP – developed and updated by the EC.

(iii) strong signals from the indicator when it lies between the two thresholds; and (iv) severe signals when the indicator exceeds the second threshold. The signal value is calculated as a mean of the four latest available quarterly values[87] and the two thresholds result from adding 0.5 and 1.5 standard deviations respectively to the historical average[88]. Hence, a probability distribution for each indicator is displayed, its reference values being the historical average and the two thresholds respectively, placed on the right side of the historical average for most of the variables. For the unemployment rate, risk premium and the percentage of firms citing insufficient demand as a factor limiting production in industry and services, the thresholds are symmetrical, being calculated on the left side of the historical average. Looking at the deviations from target of CPI and adjusted CORE2 inflation rates, net of the first-round effects of VAT rate cuts, the thresholds were set at +1 percentage point and +2 percentage points respectively. For the general government deficit, the first threshold was set at 3 percent, i.e. the reference value for the relevant nominal convergence criterion concerning the sustainability of public finances, as stipulated by the Maastricht Treaty.

Table A shows how the strength of overheating signals evolved over time. The current assessment reflects intensifying signals from output gap, industrial production, the percentage of firms citing insufficient labour force as a factor limiting production in the services sector and the composite index of economic activity[89]. At the same time, worth noting is the density of moderate or strong overheating signals coming from the following sectors: labour market (in particular, the degree of its tightening, the public sector gross wage), real sector (industrial production, residential property prices[90], economic sentiment indicator – ESI, the percentage of firms citing insufficient demand as a factor limiting production in industry and services[91]), and fiscal policy. Concurrently, the new all-time low in unemployment rate (ILO definition) is indicative of labour market tightening and, in turn, overheating signals.

The assessments deriving from the NBR's model for medium term analysis and projection point to an overheating trend, reflected by the output gap performance. As early as 2016, the output gap was estimated in positive territory and was subsequently strengthening. Against this backdrop, the signal value in 2017 Q2 was slightly higher than the first threshold.

From 2016 Q3 to 2017 Q2, the deviations from target of annual CPI and adjusted CORE2 inflation rates, net of the direct effects of VAT rate cuts, were negative at -1.7 percentage points[92] and -1.2 percentage points respectively, and below their

87 For the variables expressed as a percentage of nominal GDP (4-quarter cumulated values), the signal value is the latest available figure.

88 For most of the variables, the historical average is calculated for the period 2005 Q3 – 2017 Q2, i.e. after inflation targeting was introduced. Residential property prices and new loans are, however, available for a shorter period.

89 It captures information on the cyclical components of certain macroeconomic variables such as the number of employees in the economy, industrial production or net real wage.

90 In 2017 Q2, residential property prices climbed at a quarterly rate of 4.9 percent (a post-crisis high).

91 Over the past two years, the percentage of firms citing insufficient demand as a factor limiting production in industry and services witnessed a decline.

92 Over the past four quarters, a similar position had also the deviation from target of the annual CPI inflation rate recalculated at constant taxes (-1.5 percentage points).

historical averages. Core inflation net of VAT rate cuts followed a downward path over the past years, reflecting the developments in external prices, economic agents' inflation expectations, and the negative output gap (until 2016). Its deviation from the target stayed in negative territory in 2016 Q3 and Q4, a trend that persisted into 2017, in spite of the incipient, albeit gradually rising, excess demand[93].

Table A. Developments in signals relative to overheating indicators

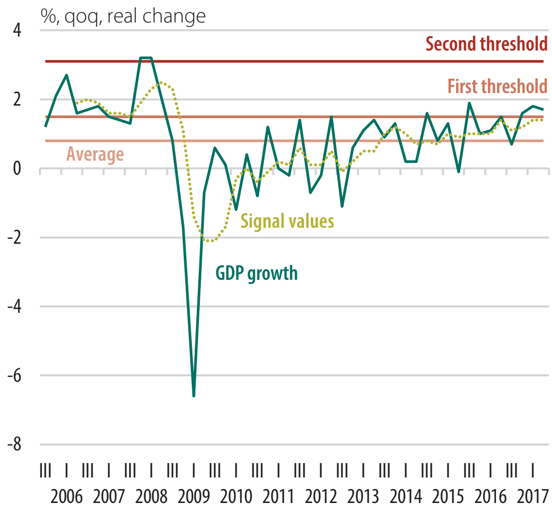
	Indicator	2016			2017	
		Q2	Q3	Q4	Q1	Q2
	Output gap (% of potential GDP, NBR assessment)					
	Deviation from target of annual CPI inflation, net of VAT effect (pp)					
	Deviation from target of annual adjusted CORE2 inflation, net of VAT effect (pp)					
Real sector	GDP (%, qoq, real change)					
	Industrial production (%, qoq, real change)					
	Capacity utilisation in industry (%)					
	Turnover volume of retail trade, excluding motor vehicles and motorcycles (%, qoq, real change)					
	Construction works (%, qoq, real change)					
	Residential property prices (%, qoq, real change)					
	Economic sentiment indicator - ESI (points)					
	Percentage of firms citing insufficient demand as a factor limiting production in industry					
	Percentage of firms citing insufficient demand as a factor limiting production in services					
	Percentage of firms citing insufficient labour as a factor limiting production in industry					
	Percentage of firms citing insufficient labour as a factor limiting production in services					
Labour market	Labour market tightness indicator					
	ILO unemployment rate (%)					
	Gross wage, private sector (%, qoq, real change)					
	Gross wage, public sector (%, qoq, real change)					
	Unit wage costs in industry (qoq, nominal change)					
Fiscal policy	General government deficit (% of nominal GDP)					
	Fiscal impulse (NBR assessment)					
Financial sector	Credit to private sector (% of nominal GDP)					
	New consumer credit, households (% of nominal GDP)					
	New housing loans, households (% of nominal GDP)					
	New loans to non-financial corporations (% of nominal GDP)					
	Bucharest Stock Exchange index, BET (%, qoq change)					
	Risk premium, OAS (basis points)					
External position	Current account deficit (% of nominal GDP)					
	Deficit on trade in goods (% of nominal GDP)					
	Financial account (% of nominal GDP, "+" inflows)					
Composite indices	Composite index of economic activity (NBR assessment)					
	Business conditions indicator (NBR assessment)					

lack of signals moderate signals strong signals severe signals

93 At present, the weakening relationship between inflation and the positive output gap is one of the factors behind the cited development. For further details, see Box 2 titled "The relationship between economic activity and inflation" in the May 2017 *Inflation Report*.

In 2016 as a whole, real GDP dynamics hit a post-crisis high of 4.8 percent and continued to expand at a swift tempo in 2017 Q1 and Q2 (1.8 percent and 1.7 percent respectively). The signal value of real GDP growth still points to moderate overheating, exceeding the historical average, but merely 0.1 percentage points below the first threshold (Chart A).

Chart A. Signal value of quarterly GDP growth against the thresholds



Source: NIS, NBR calculations

Turning to the labour market, an overheating trend in all of the reviewed indicators is taking shape. The new all-time low in ILO unemployment rate in 2017 Q2 sends a severe signal, while the labour market tightening points to a strong signal. Gross wages (in the private and especially public sectors) have recently seen their average quarterly rates increasing faster than the historical average, having the potential to boost the wage-productivity differential and, implicitly, to exert inflationary pressures.

The fiscal consolidation trend initiated in the aftermath of the global financial crisis was reversed in 2016, when the general government deficit widened to 3 percent of GDP. The position taken by the signal value for the aforesaid indicator, corroborated with that for the fiscal stimulus[94], indicates that fiscal policy played a sizeable part in fuelling the degree of economy overheating.

The developments in financial indicators are usually seen as leading indicators in shaping real sector imbalances, carrying the potential to boost the business cycle noticeably. During 2015-2016, the volume of new loans tended to go up, particularly on the back of mortgage loans ("First Home" programme). As for consumer credit, the share of the annual flow of borrowings in GDP was close to the historical average in 2017 Q2. On the other hand, new loans to non-financial corporations saw their share in GDP stuck at relatively steady, low levels after the post-crisis decline that lasted until 2012. Risk perception associated with investment in the local economy (approximated based on the option adjusted spreads, OAS), negatively correlated with economic activity dynamics, may, given the low readings recorded over the past quarters compared to the historical average, augment economic agents' buoyancy and, in turn, the degree of economy overheating.

The variables of the external position (i.e. the deficit on the trade in goods, current account deficit and the balance on financial account, as shares of GDP) do not show signs of economy overheating at this moment. Signal values are well below historical averages, the latter being however affected by the major imbalances

94 It quantifies the impact of discretionary fiscal policy measures on the economy. In light of the positive output gap in 2017 Q2, fiscal policy is assessed as having a pro-cyclical nature.

that had built up in the pre-crisis years. Nevertheless, current account deficit widening on the back of a larger government deficit and the spike in consumption can jeopardise macroeconomic equilibria, even though the current financing structure (consisting extensively of non-debt-creating flows, mostly foreign direct investment, equity, as well as structural and investment funds) is materially different from that seen during the previous economic boom.

The assessment of economic growth and cyclical position based on the output gap can be corroborated with a series of composite indices. The fact that the business conditions indicator[95] stood, over the recent periods, at positive readings, above the first threshold, helps propel economic activity and, in turn, expand excess demand. Moreover, the composite index of economic activity is above the first threshold, hinting at stronger excess demand.

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Aggregate demand components

In 2017 Q2, the actual final consumption continued to rise in quarterly terms, although at a slower pace (3 percent against 4.3 percent in the previous quarter)[96]. For 2017 Q3 and Q4, the forecast points to decelerating, but further positive dynamics of this component. The main drivers include developments in the average net wage economy-wide and in new consumer credit, which went up in real terms by 1.9 percent and 3 percent respectively July through August versus their Q2 averages. In parallel, during Q3, most subcomponents of the consumer confidence indicator (unemployment, general economic context and evolution of savings) declined compared to the previous quarter readings.

In 2017 as a whole, the actual final consumption is forecasted to further step up its pace of increase, before witnessing a relative slowdown over the next year. The projected trajectory mirrors the anticipated decelerating dynamics of households' real disposable income, as the public wage growth measures and the pay rises expected to be awarded amid ongoing labour market tightening are partly offset by the projected dynamics of the annual CPI inflation rate throughout the forecast interval.

The quarterly dynamics of GFCF remained positive in 2017 Q2 as well, although slowing against the previous quarter (3.4 percent from 4.2 percent). The forecast for GFCF growth over the next two quarters is based on the positive dynamics of

95 For further details, see Smădu *et al*. (2016).

96 For details on drivers of GDP components in 2017 Q2, see Chapter 2, Section 1. Demand and supply.

industrial output of capital goods and of the construction volume respectively (compared to the 2017 Q2 average, the rates of change of the said indicators stood at 4.8 percent and 1.4 percent respectively in July-August).

GFCF is expected to increase in both 2017 and 2018, with a number of factors further weighing, however, on its dynamics. The projection mirrors capital investments that accompanied the remarkable developments in industrial output witnessed in 2017 H1 (for example, in sub-sectors such as the manufacture of motor parts and related products), the prospects of higher direct investment flows (in the context of favourable forecasts of economic activity domestically and in the main countries of origin[97]), as well as the anticipated improvement in the absorption of EU structural and investment funds. Nevertheless, the dynamics of investment flows could be affected by incidental factors, such as the significant cut (according to the budget revision) in investment spending for this year (compared with the initial planning), or by fundamental ones, such as the poor quality of infrastructure or the skilled labour shortage.

In 2017 Q2, exports of goods and services increased by 1.8 percent quarter on quarter. The forecast for the next two quarters shows this component to record positive quarterly growth rates, given the prospects on the continuing recovery of external demand[98].

Over the remainder of the forecast interval, exports of goods and services are anticipated to rise further, reflecting, on one hand, the expected improvement in external demand – amid favourable developments in the main trade partners – and in sales of sectors integrated in global value added chains (such as the manufacture of transport equipment and related sub-sectors), as well as the stimulative influence of the real effective exchange rate (albeit diminishing during the projection interval). The prospects for ongoing recovery of effective external demand notwithstanding, export dynamics are expected to decelerate in the years ahead, owing to pressures on the price competitiveness of Romanian products generated by the hike in unit labour costs, as well as to a number of slow-in-progressing structural features of the economy[99].

Rises in domestic absorption and exports led imports of goods and services to increase significantly in 2017 Q2 as well (+2.8 percent versus the previous quarter). Over the projection interval, imports of goods and services are seen further expanding at a faster pace than exports, against the background of the ongoing advance in domestic demand. In this context, net exports are anticipated to make a negative contribution, on the wane, to GDP growth over the entire projection interval.

97 The main countries of origin of foreign direct investment flows are euro area developed economies (i.e. Netherlands, Austria, Germany, Cyprus, France and Italy), where capital yields are generally less attractive than in emerging economies, Romania included.

98 For further details, see Chapter 4, Section 1.1. External assumptions.

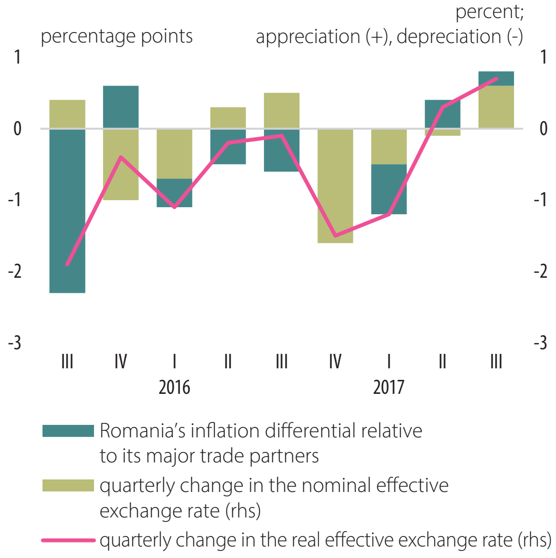
99 In 2017, according to the Global Competitiveness Index of the World Economic Forum, Romania has seen a worsening in its position, ranking 68 out of 137 economies (down from 62 of 138 economies in 2016), while scoring virtually the same as a year earlier. Slow-in-progressing features refer to the quality of institutions and infrastructure, the financial market development, the level of innovation and sophistication of production processes.

In 2017 Q2, the balance-of-payments current account deficit[100] continued its widening trend, primarily on account of the larger deficit on trade in goods (4-quarter cumulative data). Over the forecast interval, the current account deficit is expected to widen further, largely reflecting the dynamics of imports of goods and services, underpinned by the advance in domestic demand, and to post values slightly above 3 percent of GDP in the medium run. At the same time, despite the lower coverage in recent periods of the current account deficit by stable and non-debt-creating capital flows – foreign direct investment, the equity component, and the capital transfers associated with EU structural and investment funds –, their share is foreseen to remain above 100 percent, albeit declining in 2017 and 2018, given the expected reduction in the EU funds absorption rate. Nevertheless, the widening of the current account deficit, due to swifter consumption and a larger fiscal deficit, 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 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 real effective exchange rate[101] 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[102].

Chart 4.9. Quarterly change in the effective exchange rate



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

The average nominal interest rate on new loans in lei is forecasted to decline in 2017 Q3, before witnessing an increase in the closing quarter of the year. Looking at new time deposits, the average nominal interest rate is seen on the rise in both 2017 Q3 and Q4. In real terms, however, lending and deposit rates on new business are anticipated to go down in 2017 Q3 and Q4, amid the faster pick-up in inflation expectations compared with the nominal values. Thus, for the aforementioned quarters, the real interest rates continue to exert a stronger cumulated stimulative impact on the economic activity in the periods ahead.

[100] In 2017 Q2, the current account deficit-to-GDP ratio stood at 2.5 percent (4-quarter cumulative data), compared with 2.4 percent in Q1 and 2.1 percent in 2016 respectively.

[101] The relevant exchange rate for the NBR's macroeconomic analysis and forecasting model 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.

[102] 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 higher rise in leu-denominated flows than in forex ones.

In 2017 Q3, the domestic currency posted an appreciation in nominal effective terms, on account of its developments versus the US dollar, while weakening in relation to the euro. During the same interval, the leu is assessed to have appreciated in real effective terms (Chart 4.9), due both to the dynamics in nominal effective terms and the higher domestic inflation than that reported by Romania's trading partners. Against this background, the real effective exchange rate is 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 Q3 and Q4 continues to exert stimulative influences on the output gap in the future periods, mostly on account of the real foreign interest rate standing below the medium-term trend (strongly negative gap, although narrowing). Romania's risk premium, approximated based on the option adjusted spread[103] (OAS), remained on a slightly downward trend in 2017 Q3. The medium-term prospects for the risk premium are influenced by a wide range of domestic factors, as well as by global factors, which reflects the high degree of uncertainty surrounding the evolution of this variable.

Overall, in 2017 Q3 and Q4, real broad monetary conditions are assessed to exert a stimulative impact (via all components) on aggregate demand in the following quarters. However, the impact is softening, with the reductions in stimulative contributions from the undervaluation of the leu in real terms and of the wealth and balance sheet effect being partly offset by the estimated strengthening of the stimulative impact of real interest rates, amid rising inflation expectations.

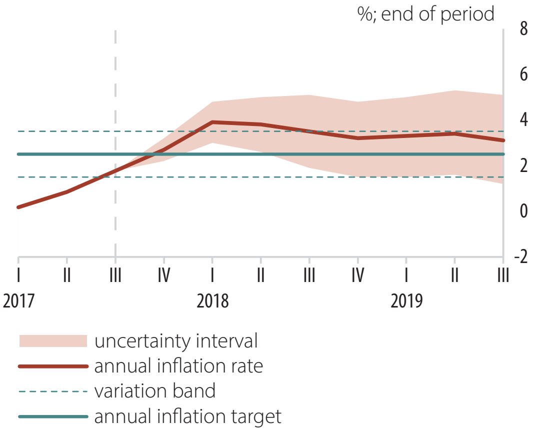
Over the forecast interval, real broad monetary conditions are anticipated to continue to exert a stimulative impact on economic activity, albeit further on the wane almost throughout the period. Positive contributions are associated with all subcomponents in the first part of the projection interval, whereas during 2019 the overvaluation of the real effective exchange rate is anticipated to exert a restrictive impact on economic activity via the net export channel, in the context of higher domestic inflation than that reported by Romania's trading partners. 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.

1.4. Risks associated with the projection

The balance of risks to the annual inflation rate projection is assessed to be relatively in equilibrium. At the current juncture, the fiscal and income policy stance continues to be relevant, as it is deemed to carry the potential to exert additional inflationary pressures, whereas opposite influences are associated with changes in the external environment (Chart 4.10).

[103] The relevance of CDS (credit default swap) quotes diminished in recent periods, amid the shrinking of market liquidity.

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 2005-2016. The magnitude of forecast errors is positively correlated with the time horizon they refer to.

Source: NIS, NBR calculations and projections

On the domestic front, uncertainties persist with regard to the consistent implementation of an adequate macroeconomic policy mix and to the acceleration of structural reforms required for preserving macro-stability and ensuring lasting, sustainable economic growth. Among the components of this mix, the fiscal and income policy stance remains a matter of concern especially regarding the final form in which the measures in the Governing Programme will be applied and the impact they will have on the macroeconomic projection. In addition to the provisions of Framework Law No. 153/2017 on wages for staff paid from public funds, the implementation of new measures in the area of taxation and/or the additional rises in wages and social payments are likely to lead in time to a wider increase in the positive output gap and, implicitly, to higher demand-driven inflationary pressures. These are anticipated to be compounded by pressures stemming from the dynamics of wage costs of firms in the private sector, on the one hand, amid the demonstration effects of wage hikes in the public sector, and, on the other hand, against the background of a persistent labour market tightening, *inter alia* in the context of an increasing mismatch between skills and labour market needs. Accommodating forward the expansion of consumption to an increasing extent from the imports of goods rather than from domestically-produced goods, with an adverse impact on the external balance, might lead to reassessments by foreign investors of the risks posed by financial investments in the domestic economy, with implications on the stable capital flows to the Romanian economy. Furthermore, if the implementation of corrective fiscal measures to ensure compliance with the budget deficit targets primarily implied public investment spending cuts, the economy's growth potential would risk being dampened, amid, *inter alia*, the already manifest delays in the absorption of EU structural and investment funds.

Under such circumstances, a lasting and sustainable economic growth, without prejudice to the objective of price stability, is conditional mainly on a sped-up implementation of structural reforms, as well as on the need to rebalance and enhance the consistency of the macroeconomic policy mix. The latter requires a fiscal policy stance that should not endanger external stability and that supports the consolidation of the post-crisis progress in removing imbalances.

Global developments continue to be a sizeable source of risks to the coordinates of the baseline scenario. Specifically, given the evidence on growing relative importance of external factors to the detriment of domestic ones in explaining consumer price changes, a stronger persistence than that projected in the baseline scenario of relatively subdued price dynamics worldwide, in general, and in the euro area, in particular, may cause the annual inflation rate to post downward deviations from the forecasted path. In addition, 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 geopolitical tensions. Other risk sources associated with the external environment that continue to be relevant in the current projection round refer to the future evolution of global economic activity, given the traction on growth coming from emerging economies, especially China. The materialisation of some of these risks could entail portfolio reallocations in the region and/or worldwide, in the context of stronger global risk aversion, with implications on the future path of the leu exchange rate and, implicitly, on the projected inflation rate, which is expected to be also affected via the indirect channel of external demand from trading partners.

Turning to the CPI basket components beyond the scope of monetary policy, the balance of risks to the annual inflation rate projection is assessed to be relatively in equilibrium. However, uncertainties still linger over the future administered price adjustments – in the absence of clear-cut signals from the relevant authorities regarding future price changes – and, inherently, over weather conditions, which may either boost or squeeze the farm produce supply and, in turn, domestic food prices.

The balance of risks posed by international commodity prices (especially energy) also appears to be relatively in equilibrium. Uncertainties persist, however, with regard to the oil price dynamics, given that the agreement on oil supply capping until March 2018, signed by OPEC and some non-OPEC producers, did not lead to a significant price rise, amid persistent global overproduction.

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

Tables

Charts