

Inflation Report May 2016

Year XII, No. 44

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

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

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Foreword

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

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

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

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

The Inflation Report was approved by the NBR Board in its meeting of 5 May 2016 and the cut-off date for the data underlying the macroeconomic projection was 22 April 2016.

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

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SUMMARY

Developments in inflation and its determinants

In 2016 Q1, the annual CPI inflation rate moved considerably deeper into negative territory, falling by 2.1 percentage points from -0.9 percent at end-2015 to -3 percent at the end of the quarter, as forecasted in the February 2016 Inflation Report. The annual inflation rate turned negative in June 2015, under the impact of broadening the scope of the 9 percent reduced VAT rate to all food items, non-alcoholic beverages and food service activities. The renewed decline seen in 2016 Q1 was attributable to the cut in the standard VAT rate in January from 24 percent to 20 percent. The overlapping of the effects of the two measures in the first half of this year accounts for the current magnitude of the temporarily negative annual inflation rates. Under the impact of the same measures, the average annual HICP inflation rate¹ edged down to -1.1 percent in March.

The annual inflation rate excluding the transitory first-round effects of the VAT rate cuts has remained positive, albeit on a downward path in the course of 2016 Q1. Specifically, it went down from 1.9 percent in December 2015 to 1.2 percent in March – below the lower bound of the ±1 percentage point variation band of the 2.5 percent flat target. Behind this trend stood supply-side factors, in particular further low international commodity prices concurrently with the recent favourable evolution of the leu exchange rate against the euro and the US dollar, and the fiercer competition amid the oversupply of agri-food commodities on the EU market as a result of Russia's import ban. Turning to the CPI index components, the dynamics of volatile prices (fuels and VFE) and those of administered prices exerted downward pressures on the annual inflation rate, apart from the effects of the VAT rate cut. Their cumulative contribution more than offset the opposite contributions coming from developments in tobacco product and alcohol prices and from core inflation.

At end-2016 Q1, the annual adjusted CORE2 inflation rate² stepped down to -3.9 percent, from -3.1 percent at the end of the previous year. Unlike the aggregate index, core inflation net of the first-round effects of the VAT rate cuts indicates a marginally upward trend, from 1.2 percent in December 2015 to 1.3 percent in March 2016. The explanation for the different path lies with the influence exerted on core inflation by the rapid narrowing of the negative output gap under the impact of fast-paced wage rises in the course of 2015 and of the fiscal easing in the second half of the same year. This influence was largely offset in Q1 by the slower annual growth rate of import prices and the temporary downward adjustment, at the beginning of the year, of inflation expectations, mimicking the impact of the standard VAT rate cut. However, the latest surveys on inflation expectations hint at their re-entering an upward trend, on account of incorporating the information regarding the pick-up in household incomes.

The annual dynamics of unit wage costs in industry saw a strong acceleration in 2015 Q4 which persisted into the first two months of 2016. The main driver behind this evolution was the significant decline in labour productivity during the same period. At the same time, wages continued to

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

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

rise at the same sustained pace as over the last two years, when their annual growth steadily exceeded 6 percent. October 2015 through February 2016, gross wages recorded a significantly faster increase across the domestic economy too. The persistent mismatch between pay rises and labour productivity gains points to a build-up of increasingly stronger latent inflationary pressures from wage costs.

Monetary policy since the release of the previous Inflation Report

In its meeting of 5 February 2016, the NBR Board decided to keep the monetary policy rate at 1.75 percent per annum. The new quarterly forecast reconfirmed the prospects for the annual inflation rate to become more negative in the course of the first five months of 2016, as well as to return inside the variation band of the target in early 2017 and subsequently remain therein. The initial volatility and the subsequently upward trend of the projected inflation rate were accounted for by the transitory effects of the successive indirect tax cuts in 2015-2017, the fiscal policy easing and the increase in unit wage costs.

The risks associated with the projection stemmed primarily from the domestic environment. These were generated by uncertainties about the fiscal and wage policies, as well as the implementation of the structural reforms, in the context of the elections to be held this year and of the absence of agreements with the international financial institutions. The external environment was surrounded by uncertainties on the prospects for major emerging economies (especially China), the international oil price evolution, and the higher volatility of the international financial markets, amid the increasingly diverging monetary policy stances of the world's major central banks.

Subsequent to the decision made in early February, the statistical data confirmed a more negative annual inflation rate in the first two months of the current year, in line with expectations. At the same time, the annual GDP dynamics remained relatively fast in 2015 Q4 too, bolstered by the swift expansion of household consumption and investment. Consequently, in 2015, the Romanian economy posted the fastest average growth rate in the recent years (3.8 percent).

In its meeting of 31 March 2016, the NBR Board reviewed the reassessment of the near-term inflation rate outlook, which anticipated further negative readings until June 2016 following the cuts in the standard VAT rate and other indirect taxes. The risk assessment revealed the persistence of risks associated with the domestic environment, primarily posed by the expansionary impact of the fiscal and income policies, ahead of the 2016 elections. On the external front, the uncertainties had become more pronounced relative to the economic recovery of the euro area on account of the same risk factors identified in the previous meeting. In this context, the NBR Board decided to keep the monetary policy rate at 1.75 percent per annum.

Inflation outlook

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

Under the current baseline scenario, the annual CPI inflation rate is projected to run below the path described in the previous Inflation Report over the entire reference interval but, similarly, will follow an uptrend. It will remain in negative territory until mid-2016, return to positive levels beneath the lower bound of the variation band of the inflation target in the latter half of the year, re-enter the variation band in 2017 Q1 and stay there until the projection horizon (2018 Q1), when it is seen reaching 3.3 percent. The alternative measure of the annual CPI inflation rate calculated by excluding the transitory first-round effects of the successive VAT rate cuts highlights the underlying inflationary pressures more accurately. It is projected to stick to an upward path, remaining though inside the variation band of the inflation target from 2016 Q3 until the reference period ends. The two inflation measures will overlap in 2018 Q1, once the transitory effects of fiscal measures have faded.



The baseline scenario envisages a marginal slowdown of economic growth in 2016 and 2017 as against 2015, amid expectations of still fastpaced domestic demand, driven by the expansion in consumption and investment, but their cumulated impact is foreseen to abate after the Law on debt discharge takes effect. The fast-paced increase in individual consumption of households will be fuelled by their higher real disposable income, on the back of recent and planned fiscal easing measures, as well as of pay rises already implemented or anticipated over the reference interval. Moreover, considering also the rates of increase seen in recent months, gross fixed capital formation is expected to contribute significantly to economic growth, due mainly to strengthening investment in the private sector as economic activity of Romania's trade partners gradually gains momentum and the effects of supply-boosting

fiscal measures become manifest³. The projection of favourable investment dynamics is, however, conditional on the assumption that absorption of structural and cohesion EU funds will continue to gain traction. Both consumption and investment are anticipated to benefit from a set of stimulative real monetary conditions throughout the reference interval, the influence of which is seen however waning somewhat in the latter half of that period.

The growth rate of domestic demand is projected to slow down in the second half of the projection interval, but the expected step-up in external demand will prevent the pace of increase of aggregate demand from decelerating over the same period. Net exports are therefore seen having a negative contribution to GDP growth in 2016 and a neutral one afterwards. Against this background, the current account deficit-to-GDP ratio is projected to edge up during the reference interval, before stabilising somewhat around 2.5 percent over the medium term. In the short run, international reserves and, generally, the anticipated sources for current account deficit financing are deemed to be adequate and favourably distributed in terms of the shares of non-debt-creating versus debt-creating flows. Nevertheless, the reopening of the negative current account balance due to a wider fiscal deficit and the speed-up in consumption could amplify Romania's vulnerabilities to higher capital volatility affecting the emerging economies and thus jeopardise domestic macroeconomic equilibria.

The forecast envisages a shift in the cyclical position of the Romanian economy in 2016 from a negative to a positive output gap, with the latter being expected to build up until the projection horizon. Against the February 2016 round, the output gap was reassessed at levels implying weaker inflationary pressures over the projection interval. The reassessment took into account, besides revisions of historical GDP data, a revaluation of the effects of the expansionary fiscal and income policies, a reshaping of the influence of real monetary conditions, and the estimated impact,

³ E.g. the cut in dividend tax and the removal of tax on special constructions.

albeit marked by inherent uncertainty, that the Law on debt discharge may have on the economy following its enactment.

The baseline scenario of the projection sees the 12-month CPI inflation rate at 0.6 percent at end-2016 and 2.7 percent at end-2017, i.e. 0.8 percentage points and 0.7 percentage points respectively below the previously-forecasted levels. The reassessment is ascribed to lower contributions from the adjusted CORE2 index, administered prices and volatile food (VFE) prices. By contrast, the contributions of fuel prices and, marginally, tobacco product and alcohol prices are envisaged to be higher than previously projected in the first part of the forecast interval.

The successive VAT rate cuts (as of 1 June 2015, 1 January 2016 and 1 January 2017), entailing transitory first-round effects on inflation rate, are largely accountable for the recent and expected volatility over the projection interval, adding to the inherent uncertainty regarding forecast accuracy. Sharp shifts in the inflation path occur when firstround effects materialise and when they drop out of the annual inflation calculation. Thus, the CPI inflation rate is envisaged to post negative levels until mid-2016 and witness two more, albeit less steep, shifts in its path, in January of 2017 and 2018, before rising to 3.3 percent at the end of 2018 Q1.

Annual adjusted CORE2 inflation rate is also expected to remain in the proximity of its end-March reading until May 2016, stay just under +1 percent in the latter half of 2016, and subsequently embark on a gradually upward trend, reaching 3.7 percent at the end of 2018 Q1. This inflation measure is seen coming in at 0.9 percent and 3.4 percent at end-2016 and end-2017 respectively. The core inflation rate which excludes the direct effects of VAT rate cuts is projected to come in at 1.8 percent and 3.6 percent at end-2016 and end-2017 respectively. The upward trend during the projection interval owes to stronger underlying inflationary pressures: an expected rise in excess demand after the reversal of the cyclical position of the economy, along with the swifter increase in unit wage costs; the upward adjustment of inflation expectations, as first-round effects of VAT rate cuts fade out and second-round effects abate; and the gradually faster dynamics of import prices, amid the movements foreseen in external prices.

Over the entire reference interval, the projected path of the adjusted CORE2 inflation rate lies below that described in the February projection. The reassessment reflects mainly weaker demand-pull inflationary pressures, due also to the anticipated effects of the Law on debt discharge, as well as the downward revision of import price pressures.

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

In a highly uncertainty-ridden environment, the balance of risks to the annual inflation rate projection is assessed as being tilted to the downside compared to the path in the baseline scenario. Risks to the current projection stem from both domestic and external sources.

On the domestic front, the uncertainty about the configuration of an adequate mix of macroeconomic policies and the fast implementation of structural reforms is deemed relevant, considering the busy electoral schedule during the projection interval. The assessment of fiscal and income policy outlook reveals a number of risk sources: uncertainty surrounding the adequate financing, in terms of size and costs, of the envisaged significant widening of the general government deficit this year; a possible additional worsening of the fiscal parameters following pay rises in the public sector, including those associated with the implementation of the unified wage law for the public sector; the risk that such additional increases might induce demonstration effects on private sector wage dynamics that would only aggravate the mismatch between pay rises economy-wide and labour productivity gains and thus fuel additional inflationary pressures.

Such risks could become even more relevant should structural reforms and public investment be deferred, or should EU funds be insufficiently capitalised upon, triggering unfavourable effects on the growth potential and competitiveness of the Romanian economy. An additional risk source is the coming into effect of the Law on debt discharge, in terms of the inherent uncertainty⁴ surrounding the assessment of its impact on the domestic macroeconomic environment.

On the external front, significant risks to the inflation outlook are related to: the uncertainty surrounding the effects generated by the diverging monetary policy stances of the world's major central banks; the economic prospects for euro area countries and major emerging economies, China in particular; a possible exit of the United Kingdom from the European Union; and the management of the Greek sovereign debt over the long term. In the event of one or several factors materialising, the Romanian economy could be affected mostly via indirect channels, through the impact on external demand from the EU, Romania's main trading partner, or via portfolio shifts regionally and/or globally and, implicitly, leu exchange rate swings. For these reasons, in the context of the expiry of the agreements Romania concluded with the European Commission and the IMF, it is necessary to maintain and strengthen the progress achieved over the last years in rooting out major macroeconomic imbalances and improving the resilience of the domestic economy by adequately implementing consistent macroeconomic policies.

Turning to the CPI components mainly driven by supply-side shocks, the following assessments of risks to the current projection round are noteworthy. Lacking any clear information from the authorities relative to the scale and timing of future adjustments in natural gas and electricity prices for end-users, the balance of risks is tilted to the downside with respect to the baseline scenario, given the possibility that these categories of prices may be in the future subject to cuts similar to those recently implemented. Similarly, the balance of risks induced by the projected dynamics of the international commodity and energy prices is seen to be tilted to the downside, considering a potential delay of a sizeable rebound in global demand.

Monetary policy decision

Considering the diverging nature of the projected path of the annual inflation rate and its major determinants, as well as the accompanying risks induced by the potential fiscal and income policy stance, the changes to financial legislation, and by the uncertainty about global economic growth and the recovery of the euro area economy, the Board of the National Bank of Romania decided, in its 5 May 2016 meeting, to keep unchanged the monetary policy rate at 1.75 percent per annum. Moreover, the Board decided to further pursue adequate liquidity management in the banking system and to maintain the existing levels of minimum reserve requirement ratios on both leu- and foreign currencydenominated liabilities of credit institutions.

⁴ Stemming from the novelty of the law, which makes assessments impossible to substantiate by drawing on similar historical episodes. For further details on the expected impact of this law taking effect on the macroeconomic environment, see the April 2016 Financial Stability Report.

1. INFLATION DEVELOPMENTS

In 2016 Q1, the annual inflation rate moved deeper into negative territory, to -2.98 percent, mirroring the overlapping of two major changes in indirect taxation, i.e. the broadening of the scope of the 9 percent reduced VAT rate to all food items in June 2015 and the cut in the standard VAT rate from 24 percent to 20 percent in January 2016 (Chart 1.1). The annual consumer price dynamics would have followed a downward path in the first months of 2016 even in the absence of the transitory first-round effects of the VAT rate cuts, dropping to approximately 1.2 percent in March, slightly below the lower bound of the ± 1 percentage point variation band of the 2.5 percent flat target. Behind this trend stood mainly the lower import price inflation (impacting domestic volatile prices in particular), driven by both external price developments and exchange rate movements. At the same time, the rapid narrowing of the negative output gap led core inflation (excluding the first-round effects of the VAT rate cuts) to return on a slightly upward trend, from roughly 1 percent, a level around which it hovered in the last two years, to 1.3 percent in March 2016.





January 2016 saw new changes in indirect taxation, the most significant being the lowering of the standard VAT rate to 20 percent, from 24 percent, which covered around half of the CPI basket – mainly non-food items and services. The impact on the annual inflation rate was estimated at -1.4 percentage points, corresponding to an aggregate pass-through coefficient of 71 percent (Chart 1.2). In the case of goods and services with administered prices, it stood marginally above 90 percent, while core inflation and fuel prices mirrored the tax cut to a lesser extent (60 percent and 40 percent respectively), depending on the level of competition perceived by operators on each market segment.



The very high pass-through of the standard VAT rate cut pushed the annual change in administered prices into negative territory (-1.8 percent at end-2016 Q1), a downtrend underpinned also by market operators' reluctance to subsequently increase prices (as observed historically), most probably in the context of this year's elections. January 2016 also saw a new stage in the electricity

Chart 1.2. Estimated First-Round Impact of VAT Rate Cuts*

market deregulation process (market openness increased up to 60 percent), its impact on the final price being however offset by lower distribution tariffs.

Tobacco and alcoholic beverages are the sole component which further posted markedly positive readings (with an annual growth rate of 3.7 percent in March). Although cigarette prices fully incorporated the VAT rate cut on 1 January 2016, their annual rate of increase remains very high (4.7 percent in March). This reflects the impact of changes in excise duties (particularly given that, according to the new Tax Code, the hike normally due in April was performed in January this year), as well as the low degree of competition on this market (a price increase of similar magnitude to that of the VAT rate cut had already been made two months before the new VAT rate came into effect).

In 2016 Q1, volatile prices reported a faster decline in annual terms (from -0.6 percent in December 2015 to -4.6 percent in March) owing to both components. The fall in fuel prices attributable to the VAT rate cut was steepened (to -6.7 percent) by a further drop in the crude oil price expressed in lei, given that the impact of the upward movement in international prices seen in the closing two months of Q1 (amid signals of an output contraction in the US and of a possible agreement between the OPEC members to freeze production) was offset by the favourable evolution of the leu exchange rate against the US dollar. Volatile food prices also witnessed a decrease in annual terms (-2.2 percent in March 2016 versus 1.7 percent at end-2015), amid greater oversupply on the EU market. This was the result of Russia extending the import ban against Turkey (starting with 1 January 2016) and of Mediterranean countries recording bountiful crops thanks to warm winter temperatures.

With the changes in indirect taxation covering most goods and services included in the adjusted CORE2 index, this indicator – devised to allow for a better assessment of demand-side inflationary pressures – saw its annual dynamics come in the reviewed period under the marked impact of the signal distortions entailed by the two VAT rate cuts, i.e. -3.9 percent in March 2016 (Chart 1.3). Conversely, core inflation net of the transitory first-round effects of the VAT rate cuts indicates a slight acceleration of the positive annual dynamics – from about 1.0 percent in H1 2015 to 1.2 percent at end-2015 and 1.3 percent in March 2016 respectively, on account of the rapid narrowing of the negative output gap driven by the above-mentioned fiscal measures and the fast-paced wage rises. However, the level is still low compared with the historical average (around 3 percent), due to stronger competition in the domestic market amid the aggressive expansion of trade chains, as well as to the decline in the prices of major commodities in recent years.



The breakdown by subgroup shows that prices of both non-food items and services mirrored the cut in the VAT rate, their annual dynamics nearing 0 percent (0.2 and 0.1 percent respectively), the strengthening of the domestic currency against the euro during 2016 Q1 also acting towards disinflation. The pass-through to prices was higher for tradables (over 40 percent) and fairly low (about 20 percent) for market services (except for telephony services, where competition is intense). Overall, the pass-through was less high than that in the previous rounds of VAT rate cuts - about 90 percent in September 2013 and in June 2015. Apart from the different cyclical position of the economy in the three instances, among the determinants of the pass-through coefficient stood the degree of competition (enhanced, in the case

of food producers, by the extent of tax avoidance in this sector, as well as by the external environment) and the share of the goods in question in the CPI basket (larger for food items), with a direct impact on price adjustment visibility.

Turning to processed food prices, their annual dynamics witnessed marginal changes in 2016 Q1, the pressures from the poor outputs of certain crops (corn, sunflower) being offset by the enhanced import competition amid the oversupply in milk and meat at EU level.



The change in the standard VAT rate marked the path of inflation expectations in early 2016. Subsequently, economic agents adjusted their expectations upwards, the steep hike in those of retail traders standing out (Chart 1.4). Financial analysts' inflation expectations also followed an upward trend, the pick-up in household income accounting for the main driver of the increase in short-term inflation outlook (12 months ahead).

The average annual HICP inflation rate fell deeper into negative territory in the 2016 Q1, due to the gradually higher influence of the statistical effect associated with the June 2015 fiscal measure on calculating the average rate, to which added the impact of the cut in the standard VAT rate from 24 percent to 20 percent in January 2016. Thus, the negative differential versus the EU average broadened to -1.2 percentage points (Chart 1.5).



The annual rate of change of consumer prices at end-2016 Q1 stood at the level forecasted in the February 2016 Inflation Report.

2. ECONOMIC DEVELOPMENTS

1. Demand and supply

In 2015 Q4, real GDP further posted swift annual dynamics, even slightly faster than in the previous three-month period, i.e. 3.8 percent versus 3.6 percent. In 2015 as a whole, Romania's economy witnessed a higher growth rate compared to the previous year (3.8 percent), in spite of poor agricultural output. Similarly to the previous quarters of 2015, domestic absorption was the main driver of economic growth. Both private final consumption and investment advanced at record paces for the post-crisis period, which were reflected, on the supply side, by substantially faster rates of increase of trade and construction. By contrast, in the context of a global economic slowdown, the external demand component further eroded GDP dynamics, thus abating the activity of the local industrial sector (Chart 2.1).



Private final consumption stepped up its annual dynamics to 6.8 percent (a new post-crisis record high), due to the strengthening of households' purchasing power, as well as to the improvement of bank financing conditions. Specifically, nominal wage maintained its uptrend in 2015 Q4 as the effect of gradual labour market tightening during 2015 was doubled by the hike in the minimum wage and by pay rises for certain public sector employees. Furthermore, consumer prices saw favourable changes, mainly stemming from the broadening of the scope of the 9 percent reduced VAT rate to all food items, non-alcoholic beverages and food service activities (June 2015), as well as from the continued decline in oil prices. The faster pace of increase of retail purchases of both nondurables and durables (including motor vehicles) was also boosted by supply-side factors, particularly the expansion of retail networks and the wider promotions of large supply chains (the Black Friday phenomenon which took place in 2015 Q4 is a good example, given the higher revenues recorded compared to the previous year, especially in the electronic appliances-IT segment).

As expected, lowering the standard VAT rate from 24 percent to 20 percent since 1 January 2016 further drove up consumption, the annual growth rate of retail trade turnover nearing 19 percent in January and February 2016, compared to an already swift pace, i.e. 14 percent, in 2015 Q4. However, consumer goods industries have not benefitted as much from this development, the recent increase in demand being covered mainly by imports, while local producer sales continued to record modest growth rates (Chart 2.2). One possible explanation lies in the greater import competition fuelled, on the one hand, by the oversupply of food products (especially meat and milk) created on the European

market following the ban on the Russian market in 2014, and on the other hand, by a change in consumer preference towards more sophisticated products. The impact via this channel is enhanced by the drag on the Romanian producers' capacity to withstand foreign competition put by the rising pressures from labour costs, due to the successive increases in the minimum wage in recent years and to the large percentage of employees paid at this level in the main non-durables sub-sectors (food industry, light industry).



In 2015 Q4, the general government budget execution resulted in a deficit of lei 16.5 billion (i.e. 2.3 percent of GDP, of which the primary deficit was 2.1 percent of GDP), significantly higher than that posted in the same year-ago period (lei 11.9 billion⁵, or 1.8 percent of GDP). This development was caused by the faster annual increase in total public expenditure (15.8 percent⁶ versus 12.5 percent in the previous quarter), which was mainly determined by the larger expenditure for projects financed from non-redeemable external loans⁷ (up 86.0 percent⁸ versus 65.2 percent), as well as, to a smaller extent, the swifter annual growth of capital expenditure and of subsidies and other transfers⁹. Their impact was only slightly offset by the quicker pace of increase of budget revenues (10.9 percent against 8.1 percent), reflecting primarily the stronger rises in VAT receipts (13 percent against 3.7 percent), social security contributions (5.6 percent as compared with 0.1 percent) and the corporate income tax (20.6 percent versus 10.1 percent).

Chart 2.3. Investment



Gross fixed capital formation saw a considerably faster annual growth rate compared to the previous quarter (from 2.1 to 17.6 percent; Chart 2.3). The key driver was the rebound in technology investments, means of transport included (+27.8 percent), also supported by a more extensive use of borrowed funds, i.e. bank loans for equipment and lease purchases of motor vehicles – which are mostly made by the corporate sector. Civil engineering works posted similar growth, yet this was attributed mainly to the buoyant public works in December 2015. Over the year as a whole, the volume of this type of investment remained below the post-crisis

⁵ Operational data were used for 2015 and final data for 2014, as published by the MPF in the report on the December 2015 budget execution.

⁶ Unless otherwise indicated, percentage changes refer to the annual growth rates in real terms.

⁷ Also due to the fact that 31 December 2015 was the final eligibility date for expenditure covered by beneficiaries for projects in the 2007-2013 multiannual financial framework.

⁸ The pace also reflects the impact of the (limited) amounts related to the projects financed from non-redeemable external loans in the 2014-2020 financial framework.

⁹ An opposite influence was exerted by the slowdown in the annual growth of government spending on goods and services (5.4 percent from 15.2 percent), as well as that in the annual dynamics of the public wage bill (-2.4 percent versus 9.7 percent in the previous quarter). The latter, which occurred as a result of the wage increase of healthcare staff in October 2015, mainly reflected a base effect determined by advance payments made in December 2014 for 2015, provided for in the writs of execution issued to budgetary sector staff with regard to salary rights.

average, insufficient and poor-quality infrastructure further being an obstacle to capitalising on the national economic potential.

End-2015 saw no improvements to the building construction sector, and recent developments indicate a possible recovery only in the nonresidential sector (authorised building areas resumed their upward trend in January and February 2016). As for the residential sector, the entry into force of the Law on the discharge of mortgage-backed debts through transfer of title over immovable property (already reflected by the expectations on tightening lending standards in 2016 Q1¹⁰) will likely weigh on investment demand. Additionally, private investment dynamics may decelerate in the case of equipment, as suggested by the slowdown in both demand for equipment loans at the beginning of 2016 and capital goods acquisitions (excluding motor vehicles) from the local and external markets. With regard to public investment, it is unlikely that construction works from public funds will repeat the performance recorded in the latter part of 2015 (data for January and February 2016 already show a substantial contraction of the volume of civil engineering works compared to the 2015 Q4 average, which eroded the annual growth rate down to -0.4 percent).

The expansion in domestic absorption was partially countered by the negative net exports, whose contribution to GDP dynamics dropped to -1.9 percentage points in 2015 Q4. Specifically, according to the national accounts data, after a slacker pace in 2015 Q3, the volume of goods exports discontinued its increase (-0.5 percent year on year), which resulted in a deceleration of imports. However, the latter saw a swift growth, i.e. 6.2 percent, supported by the higher local demand for consumer and capital goods.

Although incidental factors contributed to the downward trend of exports, namely the poor crops in the autumn of 2015, accompanied by traders' waiting for more advantageous sales prices on external markets, as well as the technical overhauls of certain refineries, the main driver of the said trend was the decline in several segments of external demand, under the influence of the economic slowdown in emerging economies. Thus, the contraction of the Russian economy over 2015 affected exports of machinery, equipment, motor vehicles and parts, while the excess supply on the metals market, generated by weaker demand from the Chinese economy, hindered the exports of specialised local industries. However, the worsening of the trade balance was also attributed to domestic reasons: on the one hand, important corporations in the chemical industry halted their activity, which affected both segments of foreign trade, and on the other hand, the construction sector gained momentum, bringing about larger imports of fabricated metal products. Concerning the major group of Romania's exports, i.e. machinery, equipment and transport means, sales to the European market maintained their swift pace, i.e. over 7 percent pick-up in real terms in 2015 Q4. Electrical equipment exports continued to record the fastest growth (about 19 percent, real annual change), which led to new market share increases.



Source: Eurostat, NBR calculations

The pressure put by the trade deficit on the external position throughout 2015 was largely countered by the wider services surplus (Chart 2.4). International transport of goods further contributed substantially, as investments undertaken so far by specialised companies for renewing vehicle fleets

¹⁰ According to the NBR Bank Lending Survey (February 2016).

and developing IT infrastructure, as well as the expansion of client portfolios, allowed this sector to join the upward trend in Romania's exports and to participate more intensely in the transport of goods between various European countries. As a matter of fact, in recent years, Romania has increasingly shaped up to be an international logistics hub and it is expected to develop favourably in this direction, given the saturation of neighbouring markets (Slovakia, Hungary, Czech Republic) and the advantage of stability in a volatile regional context. A swift growth was also recorded by revenues from ICT services to external clients, whose concern for reducing costs related to software development and IT services continued to benefit local specialised companies. Moreover, the recent signs of a focus shift from low-end support services, programming and application management to high value added product development are indicative of the market maturing and underpin a favourable outlook for the sector.

Labour productivity

Labour productivity further made a positive contribution to GDP dynamics in 2015 Q4. Nevertheless, this development was driven primarily by the fast change in the cyclical position of the economy, which led to a higher capacity utilisation rate, particularly in construction and the related industries (Chart 2.5). Looking at persistent factors (capital stock per person employed, total factor productivity (TFP) – see Box 1), the positive impact of the swift rise in gross fixed capital formation throughout 2015 is worth mentioning (Chart 2.6).

However, the weak labour productivity dynamics in industry for over a year draw attention to the structural problems dampening TFP growth. Together with the lack of infrastructure, skilled labour shortage in the areas where most major producers in key economic sectors are based is an often cited issue that may hamper new investment or the expansion of existing investment. Under the circumstances, in 2015 Q4 labour productivity in the automotive industry further declined in annual terms. In an effort to stay competitive, car manufacturers developed their own staff training facilities, widened the recruitment area or even relocated labour from other geographical areas, attracted more parts suppliers in the vicinity of car factories and increased the automation of production processes.

Chart 2.5. Capacity Utilisation Rate



Chart 2.6. Capital Intensity



The chemical industry registered even higher productivity losses in 2015 Q4 after the closure of certain fertilizer plants. The shutdown of some factories and units may exert a persistently negative impact on TFP if there are delays in the efficient reallocation of resources. Insofar as these production facilities are not used, they deteriorate and can no longer be deployed. In addition, if the laid-off workers fail to find a job fast enough, they risk staying unemployed for too long, which results in skill erosion, thus leading to their becoming less attractive to employers.

Although labour productivity in the food industry still reports positive annual growth rates, the limited competitiveness of local food producers has become apparent since the latter half of 2015, with the substantial pick-up in demand attributable to fiscal easing measures being covered particularly by imports.

Labour market developments¹¹

October 2015 through January 2016, hiring continued to be on the rise, the annual growth rate of the number of employees economy-wide reaching 3.3 percent. The recent increase was attributed to the further swift pace of hiring in construction, supported by the strengthening of this sector's activity, as well as to hiring in market services, mainly in ICT and professional and technical activities, but also in certain manufacturing sub-sectors, particularly in the automotive and electrical equipment industries (Chart 2.7).



In this context, both measures of the unemployment rate reached the lowest levels in the post-crisis period, i.e. 4.7 percent for the NEA indicator (-0.4 percentage points compared to 2015 Q3) and 6.6 percent for the ILO indicator (-0.2 percentage points), signalling the gradual labour market tightening, and, thus, paving the way for a swifter wage increase. Apart from the decrease in excess labour supply associated with the change in the cyclical position of the economy, the tightening trend is fuelled by the frictions on the labour market coming from the failure of the education system to align to the requirements of the economy (in terms of the range of skills and quality of training), from migration and from the reluctance of labour available in less developed regions to relocate to areas with high demand (Chart 2.8).



For 2016 H1, the available surveys (the Manpower Employment Outlook Survey and the NIS/DG-ECFIN survey respectively) reflect employers' intent to expand the number of employees in trade, services and several manufacturing sub-sectors: food and beverage industry, exporting industries (electrical equipment, rubber and plastic products), but also construction-related industries (manufacture of non-metallic mineral products and fabricated metal products).

¹¹ The analysis is based on seasonally adjusted data.

Box 1. Total factor productivity (TFP) from a macro- and a microeconomic perspective

Productivity is a concept that emerges naturally in the context of an economic process, being linked to the efficiency with which resources (most often labour and capital) are used in the said process to deliver a certain output. In practice, this concept is mostly measured by the labour productivity indicator, which shows the output generated (on average) by one employee and which has the advantage of being relatively easy to determine. Nevertheless, when interpreting productivity thus calculated, due account should be taken that it is also influenced by changes in the intensity of use of other production factors. In particular, both an increase in capital and improved economic efficiency (which have different implications) result, *caeteris paribus*, in higher labour productivity. Therefore, it is desirable to analyse separately the economic output component that is derived by excluding the influence of inputs and that economic theory refers to as total factor productivity (TFP).

Economic research has shown that TFP developments have significant macroeconomic implications, also in terms of price stability – as the indicator provides information about the growth capacity of the economy in the absence of inflationary pressures – or the preservation of external balance – TFP dynamics are deemed to have a major impact on competitiveness. At the same time, the rise in productivity is of the essence to ensure the sustainability of potential progress towards welfare and development. This is reflected also by recent analyses of the economic situation at the EU level (EC, 2014 or ECB, 2015), which have found that the countries with the least favourable TFP performance were the same to report weak convergence and the most significant vulnerabilities during the financial and economic crisis.

This box aims to study TFP developments in Romania and the factors that may boost or, on the contrary, dampen TFP growth. To this end, the macroeconomic approach is supplemented by an analysis of production processes at the micro level, which allows us to understand why some economic agents are more efficient and to assess to what extent the change in aggregate TFP was ascribable to within-firm efficiency variations or to a reallocation of resources from less efficient companies to more productive ones.

How is TFP measured economy-wide?

TFP at the aggregate level may be estimated using the production function approach. This method consists in specifying a relation between real GDP and the factors of production, i.e. the capital stock and labour. As previously stated, TFP is that component of economic growth that cannot be attributed to or accounted for by factors of production, being interpreted as a synthetic measure of their utilisation efficiency.

One approach to estimating the contributions of production factors – which is in line with the methodology also employed by international bodies, i.e. the European Commission – is to approximate the capital stock by cumulating investment flows and to measure labour as the total hours worked economy-wide by taking into account the population of working age, the participation rate, employment and the average number of hours worked per week¹².

¹² For details about the methodology, see the presentation entitled "Estimating potential GDP via the production function method" given at the NBR Monetary Policy Colloquia (2012).



Nevertheless, the estimates of the contributions of production factors may vary considerably depending on the approach used to quantify variables. Specifically, the variation of outcomes may stem from the definition of the investment flow, the choice of the base period for approximating the initial value of the capital stock, the calibration of the capital depreciation rate (either constant or time-varying), the impact of the capacity utilisation rate or the measure of labour (in terms of hours worked or the number of persons employed). In addition, the frequency and the magnitude of the data series revisions, which are significant in the case of emerging economies such as Romania, increase the uncertainty of estimates, which stands higher particularly in the last intervals over the reviewed period. Differences may also come from

the specification of the production function (which can be a Cobb-Douglas production function, as in the aforementioned approach, or a more flexible functional form, such as the Constant Elasticity of Substitution – CES – production function).

In 2000-2014, Romania posted substantial TFP growth as compared with other EU Member States (Chart A), which was indicative of both rising competitiveness and progress towards real convergence, even though the latter's achievement still lies rather far into the future, as GDP per capita is further markedly below the EU average. For the period spanning 2000 to 2008, amid the structural changes in the economy, the assessment results for Romania mirror the key contribution of TFP to GDP growth. The global financial crisis had major adverse effects on the dynamics of production factors and on TFP¹³, which later showed signs of a moderate recovery (Charts B and C). With a view to understanding the fundamentals that caused TFP to resume an upward path, it is important to identify the elements that are specific to efficient firms, a step facilitated by an empirical exercise at a microeconomic level.



Chart B. TFP Annual Growth Rate

Chart C. Contributions of Production Factors to Annual GDP Growth



¹³ An economic crisis usually impacts TFP through the effects of a reduction in R&D expenditure and an inefficient allocation of resources.

The profile of the productive firm in Romania

The firm-level investigation of value added creation is furthered by the available data on the individual characteristics of economic agents. Specifically, TFP was estimated for each company based on an exhaustive panel sample built using financial statements data¹⁴. Next, the productivity thus derived was linked to a set of explanatory variables constructed in compliance with the literature (Table 1). These variables originate in company financial statements, as well as in the survey on the firms' behaviour on the labour market conducted by the NBR in 2014¹⁵.

In line with the results in the literature, the analysis of the profile of the productive firm shows the latter to be a large, young, private company with majority foreign capital that is part of a group undertaking. These findings support the idea that foreign direct investment inflows played a crucial role in increasing the productivity of the economy, on the back of the superior know-how benefitting the projects thus developed. Moreover, it is plausible that the aforementioned knowledge was passed on to domestic companies as well, via the replication of technology, business methods and/or management models. In a broader perspective, it can be noted that the same pattern may be found several times in the history of the European project, being the main mechanism to achieve convergence between the emerging periphery and the developed core.

The estimations also corroborate the role of (both domestic and especially foreign) competition in boosting a company's productivity. With the intensification of competition, closely linked to the functioning of free market mechanisms, firms were increasingly compelled to admit they only had two options: either to become more efficient or exit the market. Thus, the large structural changes that helped establish a functioning market economy in mid-2000s spurred the swift growth of TFP prior to the crisis.

At the same time, the quality of human capital, i.e. the technical skill endowment of employees, is relevant from a TFP perspective, as nowadays the ever-rising difficulty to find skilled labour has already become a barrier to improving firm productivity. The estimations also show that hiring young and inexperienced workers for skilled jobs entails solely additional costs in their first year of employment. Nonetheless, it is worth mentioning that subsequently they make an increasingly large contribution to TFP growth.

The findings have also stressed the higher productivity of importers than that of companies that do not conduct such activities, i.e. 15 percent higher on average. The explanation lies in the important role of foreign, high-tech and high-yield equipment and possibly of certain inputs also from abroad in companies' activities. Consequently, the estimations emphasize the favourable impact of trade integration of the domestic economy, in that foreign trade companies¹⁶ support a higher productivity of the economy.

¹⁴ The data source is the Ministry of Public Finance, the sample covers the years between 2002 and 2014 and includes over 3 million observations. The estimation procedure was in line with the Wooldridge methodology (2009). For further details, see CompNet (2014) and Van Beveren (2012).

¹⁵ Survey details can be found in lordache, Militaru and Pandioniu (2016).

¹⁶ A firm's status as an exporter and the number of export destinations have a positive and statistically significant correlation in the estimation, import-related variables reporting however a better explanatory power.

Variable name	Possible values	Interactions ^{b)}	Estimated coefficient
	Variables from company financia	al statements	
	1 (20-49 employees)	-	
Firm size	2 (50-199 employees)	-	0.118***
	3 (>199 employees)	-	
Majority state ownership	0, 1	-	-0.278**
R&D expenditure (lei thou./employee)	any positive number	-	0.002*
Importer	0, 1	-	0.150**
Number of import partners	0, 1, 2, 3	-	0.022***
	Variables from the NBR/WDN	N Survey	
Majority foreign ownership	0, 1	-	0.240***
Autonomy	0, 1	-	-0.070*
Firm age	1, 2, 3	-	-0.006***
	0 (does not apply)	-	
	1 (weak)	-	
Domestic competition	2 (moderate)	-	0.052***
	3 (severe)	-	
	4 (very severe)	-	
Foreign competition	similar scale to that used for the "domestic competition" variable	-	0.060***
Share of employees with permanent, full-time contracts	0-1	-	0.685**
Share of employees with temporary contracts	0-1	-	0.600*
		Company is over 7 years old	-0.122*
Share of union members	0-1	Company is less than 7 years old	0.458***
		Share of employees with a job tenure below 1 year	0.259
Share of high-skilled manual workers	0-1	Share of employees with a job tenure from 1 to 5 years	0.249*
		Share of employees with a job tenure over 5 years	-0.173*
		Share of employees with a job tenure below 1 year	-0.477
Share of high-skilled non-manual workers	0-1	Share of employees with a job tenure from 1 to 5 years	0.479**
		Share of employees with a job tenure over 5 years	0.760***
Constant		YES	
Sectoral dummy variables		YES	
Number of observations		1,505	
R ²		0.6984	

Table 1. Results of the Estimation^{a)} of the Links between Firm-Level TFP and Explanatory Variables

a) The estimation was made using the method of least squares with robust standard errors.

b) Interactions help investigate whether the magnitude or even the sign of the influence of an explanatory variable on a dependent variable changes depending on the values of another explanatory variable.

*, **, *** statistically significant at the 10%, 5% and 1% levels respectively.

Source: MPF, NBR



Another key determinant of a company's productivity is the research and development activity. Nevertheless, from this standpoint, the potential is far from being properly harnessed, in light of the very little – in fact the lowest in the EU – interest in fostering business innovation in Romania (Chart D). Surprisingly, an ever larger contribution to economic growth in the past years has come from the fast-paced development of domestic high-tech services supply, which targeted however mostly foreign trading partners.

Within-firm changes versus reallocation of resources between firms

Unlike firm-level TFP, aggregate TFP developments involve an additional dimension that refers to the

manner of allocating resources. Specifically, as companies with higher-than-average productivity are allocated a larger share of resources, aggregate TFP will improve, even though firm-level TFP remains unchanged. For instance, in the case of human resources, this translates into a rise in whole-economy productivity, conditional on productive economic agents hiring additional staff, along with downsizing by less productive companies. Foster, Haltiwanger and Krizan (2001) proposed a methodology to highlight the contribution of the reallocation of resources to aggregate productivity growth, in line with the equation below:

$$\Delta \widehat{TFP} = \sum_{i \in S} p_{it-k} (TFP_{it} - TFP_{it-k}) + \sum_{i \in S} (p_{it} - p_{it-k}) (TFP_{it-k} - T\widehat{FP_{it-k}}) + \sum_{i \in S} (p_{it} - p_{it-k}) (TFP_{it} - TFP_{it-k}) + \sum_{i \in E} p_{it} (TFP_{it} - T\widehat{FP_{it-k}}) - \sum_{i \in X} p_{it-k} (TFP_{it-k} - T\widehat{FP_{it-k}})$$

Thus, a change in aggregate productivity (ΔTFP) between times *t* and *t-k* may stem from: (i) the change in firm-level productivity (the first item), this being the case of economic agents that remain on the market in both periods, the so-called "survivors", which are part of cohort S or (ii) the reallocation of resources between firms: survivors, entrants (in cohort E) and exiters (in cohort X) respectively.

The contributions to aggregate productivity growth in manufacturing calculated before and after the financial and economic crisis based on the aforementioned methodology (Chart E) show the chiefly countercyclical influence of labour repositioning to a more efficient production structure. In the pre-crisis period, the reallocation of human resources made a low contribution to TFP growth in manufacturing. However, the crisis paved the way for taking better advantage of the potential to develop efficient projects, on account of a reduction in low-yield activities. Looking ahead, this mechanism for improving aggregate productivity may exert a lower impact, as limitations related to heterogeneous regional development become more apparent, given that the distribution of investment flows conducive to productive economic processes was uneven across the country. Specifically, in certain regions there is a pool of available labour, yet not enough performing companies to use it (as the poor infrastructure adversely affects their profitability). Moreover, there is little possibility of redirecting the said labour supply to investment projects in other areas, in light of the obstacles arising from the quality of infrastructure and the perception of high



opportunity costs. In addition, as the aforementioned workers remain unemployed, they experience skill loss and become increasingly less competitive, with the current situation already calling for active policies in both education and social reintegration.

While the higher aggregate productivity and the more competitive structure of the economy have contributed to improving the economic situation over the past years, the picture in terms of jobs still compares less favourably with that in the pre-crisis period. In manufacturing, although industrial output has risen by more than 30 percent from 2008, the increase has been underpinned by a lower staffing level. From this perspective, insofar as more (particularly small- and medium-sized) firms reported

efficiency gains, two goals would be concurrently achieved: enhanced efficiency and job creation. Such a development would bring greater sustainability to economic development and prevent the emergence or widening of social imbalances.

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2. Import prices and producer prices

In 2015 Q4, the downtrend in international prices of main commodities favoured the further negative annual rate of change of both import prices and industrial producer prices on the domestic market. However, the latter mirror the build-up of pressures from wage costs. The fast improvement in the cyclical position of the economy paves the way for their pass-through to prices, particularly given that the offsetting influence of favourable supply-side shocks is likely to fade out over the next 12 months. Other pressures stemmed from the poor harvest, with vegetal production prices reporting two-digit annual growth rates. Amid further low commodity prices, the annual dynamics of both import prices and industrial producer prices are likely to remain in negative territory also in the first part of 2016.

2.1. Import prices

The deflationary impact of external prices softened October through December 2015, entailing a 0.9 percentage point rise in the unit value index (UVI) of imports to 97.9 percent (Chart 2.9). However, the pass-through of this influence to domestic prices was partly offset by the slower pace of depreciation in annual terms of the leu versus the US dollar, the domestic currency reporting a relatively stable performance against the euro.

Given the lack of consensus among OPEC members on a maximum oil output level and the US lifting of the ban on crude oil exports, the Brent oil price further followed a downward path towards end-2015. The relief of sanctions against Iran prompted an even sharper drop in international oil prices, to a 13-year low in January 2016. A similar trend was seen for metal prices, amid weaker demand from China. Looking at agri-food commodity prices, the bumper global harvest led to lower prices for corn and especially wheat, whereas sunflower seeds and sugar reported price increases due to the poor output across Europe in 2015 and the adverse weather conditions in Brazil, respectively. In line with the above-mentioned developments, mineral products, chemicals and base metals continued to make a significant contribution to a further below-one aggregate unit value index (UVI). On the other hand, food industry witnessed mixed developments yet again in 2015 Q4. Specifically, vegetal products and fats reported higher above-one unit value indices, owing to the lower output of some crops across Europe. In addition, the UVI of sugar and sugar-based products also posted increases, rising slightly above one (100.9 percent). At the same time, the UVI of animal products (meat, milk) remained below one as a result of the oversupply generated on the European market by the closing of the Russian market. Turning to non-food items, the UVI of wearing apparel stood above one and were on an increase, possibly due to consumers shifting to more expensive goods amid higher purchasing power.

Chart 2.9. Unit Value Index of Imports



Source: NIS, NBR calculations

2.2. Producer prices on the domestic market

In 2015 Q4, the annual dynamics of industrial producer prices on the domestic market remained in negative territory (-2.2 percent against -2.3 percent in 2015 Q3), the strongly negative reading further mirroring the impact of the lower average natural gas distribution prices starting 1 April 2015. Even in the absence of this administrative measure, the annual rate of change in producer prices would have been subdued (around zero), given that the drop in main commodity prices have further concealed the build-up of pressures from wage costs. Moreover, the brisk demand on the domestic market paves the way for the pass-through of these pressures to prices, which is already visible for consumer goods (+0.6 percentage points to 1.6 percent). Behind this increase stood non-durables (partly affected by the rise in agri-food commodity prices on the domestic market) and especially durables (reporting constantly higher annual growth rates throughout 2015 and in early 2016, namely 3.5 percent in 2015 H1, 4.4 percent in 2015 H2, and 4.9 percent in the first two months of 2016; Chart 2.10).



This development implies the build-up of pipeline pressures that are likely to be reflected by consumer prices in the period ahead – according to internal estimates, 75 percent of the change in producer prices for consumer goods is passed through to core inflation in the course of one year.

In 2015 Q4, the annual dynamics of agricultural producer prices soared back to positive territory (+10.4 percentage points to 9.5 percent). The significantly lower agricultural output compared with that of 2014 reported by most crops (excluding wheat) was mirrored by the stepped-up annual growth rate of prices for vegetal products to 15 percent (+14.8 percentage points). At the same time, the annual rate of change of animal product prices remained in negative territory, on the backdrop of persistent competition pressures exerted by cheap imports from EU countries (Chart 2.11).



The data available for January-February 2016 point to the annual growth rate of consumer goods prices staying on an upward trend, as the standard VAT rate cut has given a further boost to consumption. However, at aggregate level, the annual producer price dynamics remain in negative territory also in 2016 Q1, the said upward influence being offset by the decline in prices for the other groups of goods. Apart from main commodity prices, energy prices will further make a significant contribution, following the administrative decision to lower electricity distribution tariffs starting 1 January 2016, as well as the fall in electricity prices on the deregulated market.

Unit wage costs

The unfavourable developments in labour productivity in industry in 2015 Q4 and particularly in January-February 2016 led to stronger pressures from unit wage costs, whose annual dynamics rose to 7.8 percent and 9.8 percent respectively (practically doubling from 2015 Q3). Even though wages did not make a contribution to the above-mentioned hike, they further posted significant annual growth rates of around 7 percent on average (Chart 2.12).



Apart from the one-off influences coming from the energy sector (overhaul of some refineries), mention should be made particularly of the trends in the manufacturing sector, where the swifter increase in unit wage costs was broad based – during the reported period, only two industries (the manufacture of construction materials and tobacco) managed to generate productivity gains higher than wage dynamics (Chart 2.13). Across the industrial sector, the annual growth rate of unit wage costs exceeded 10 percent October 2015 through February 2016. Given the 19 percent increase in the minimum gross wage economywide in May 2016, this uptrend may strengthen over the current year.



Note: The circle size shows the share in total output.

Source: NIS, NBR calculations

The pass-through to prices of the pressures built up via this channel was repressed in 2015, as a result of producers having room for manoeuvre due to the cut in the social security contribution rate for employers and the low commodity prices. However, looking ahead, these pressures are likely to become manifest as the above-mentioned offsetting influences fade out, and the economy shifts, as of this year, from negative to positive output gap (in fact, producer prices of consumer goods on the domestic market already witness upward movements).

3. MONETARY POLICY AND FINANCIAL DEVELOPMENTS

1. Monetary policy

In its meetings of February and March 2016, the NBR Board decided to keep unchanged the monetary policy rate at the historical low of 1.75 percent per annum, to further pursue adequate liquidity management in the banking system, as well as to maintain the minimum reserve requirement ratios on both leu- and foreign currency-denominated liabilities of credit institutions¹⁷. The measures were aimed at ensuring price stability over the medium term, in line with the flat target of 2.5 percent ± 1 percentage point, in a manner conducive to achieving sustainable economic growth.

Behind the NBR Board's decision of 5 February 2016 to preserve the policy rate status quo stood the increasing divergence in the forecasted path of the annual inflation rate, as highlighted by the new guarterly projection of medium-term macroeconomic developments. Specifically, the forecasted annual inflation rate was seen moving deeper into negative territory in the early months of 2016, to readings similar to previously-projected ones¹⁸ (under the impact of the standard VAT rate cut¹⁹), before rising at the beginning of 2017 to a level markedly higher than that previously forecasted – amid the fading out of the transitory impact of the cuts in indirect taxes implemented during 2016 –, although remaining marginally below the upper bound of the band of the flat

target by the end of the forecast horizon²⁰ (see Box 2).

The change in the longer-term inflation outlook was driven by the relatively stronger inflationary pressures anticipated to emerge from the action of fundamental factors, given the perspective of a faster-than-previously forecasted advance in excess demand during 2017²¹ and the inflation expectations reaching higher levels; to these added the influences coming from the relative acceleration of the expected dynamics of import prices, as well as from the protracted steady increase in unit wage costs. The drivers and premises underlying this outlook were: (i) the relatively more pronounced easing of fiscal and income policies; (ii) the larger hike in the economy-wide gross minimum wage in 2016; (iii) the preservation of stimulative real monetary conditions and the consolidation of lending; and (iv) the slight improvement in the medium-term prospects for economic growth in the euro area/the EU. The new inflation forecast was surrounded by heightened two-way risks, stemming mainly from the potential fiscal and wage policy stance in the context of this year's elections and from the increased uncertainty about global economic growth and world trade amid the weakening of China's economy and of other major emerging economies.

¹⁷ At 8 percent and 12 percent respectively.

¹⁸ The 12-month inflation rate was expected to decline to -3.0 percent in March 2016.

¹⁹ The standard VAT rate was lowered to 20 percent, from 24 percent, starting 1 January 2016, after the scope of the reduced VAT rate had been broadened to all food items, non-alcoholic beverages and food service activities as of June 2015.

²⁰ The annual CPI inflation rate was expected to stand at 1.4 percent at the end of 2016, 0.3 percentage points above the previously-projected figure, and at 3.4 percent at end-2017, versus the earlier forecast of 2.8 percent for the end of 2017 Q3. The projected annual inflation rate recalculated by excluding the anticipated one-off impact of the cut in the standard VAT rate from 24 percent to 19 percent came in at 3.7 percent at end-2017.

²¹ As the prospects on the reversal of the cyclical position of the economy in 2016 H1 were reconfirmed.

Box 2. Monetary policy and exogenous shocks to inflation

Over the medium and long term, inflation is essentially determined by the relationship between aggregate demand and the capacity to supply goods and services in an economy. Monetary policy has the key role in ensuring and maintaining price stability at this horizon. With a view to achieving this objective, the central bank uses its available tools to influence aggregate demand, seeking to bring and maintain it in a relative balance with potential output. In the short run, however, exogenous shocks – usually on the supply side (e.g. fluctuations in agri-food and energy commodity prices or changes in indirect taxes) – can cause temporary deviations of inflation from the central bank's objective.

In the context of the inflation targeting strategy adopted in 2005, the NBR's primary objective of ensuring and maintaining price stability²² was quantitatively transposed into inflation targets, whose level was gradually lowered in a first stage²³ from 7.5 percent ±1 percentage point to 3 percent ±1 percentage point. Since 2013, with the overall completion of the disinflation process that had started in 2000, fundamentally underpinned by the prudent tailoring of the monetary policy stance, the central bank has adopted a flat inflation target of 2.5 percent ±1 percentage point, compatible with the quantitative definition of price stability for the Romanian economy.

Chart A. Impact of Supply-Side Shocks on Inflation Rate



Source: NIS, NBR calculations

Monetary policy has been consistently geared towards ensuring price stability over the medium term, in line with the inflation targets. Over the short term, however, numerous and sizeable supply-side shocks, occurring successively or simultaneously, on the domestic and external fronts, mainly after the breakout of the global financial and economic crisis, caused temporary deviations of the annual inflation rate from the target. These shocks were largely inflationary in nature prior to 2012 – a period marked globally by abrupt hikes in oil prices in 2008 and 2011 and in agri-food commodity prices in 2007-2008 and 2010-2011, and domestically by significant adjustments in indirect taxes (the rise in the standard VAT rate from 19 percent to 24 percent in 2010 and successive excise duty increases), to which added the poor harvest of 2012 owing to adverse weather conditions. Over the past around

three years, supply-side shocks have become predominantly disinflationary, further stemming from both external sources (the sharp drop in global oil prices in the period from 2014 to 2016, the steady decline in agri-food commodity prices manifest since 2013, the larger supply of agri-food products on the European market under the impact of Russia's trade embargo) and domestic ones (cutting the VAT rate applied to some bakery products from 24 percent to 9 percent as of 1 September 2013, broadening the scope of the reduced VAT rate to all food items in June 2015, lowering the standard VAT rate from 24 percent

²² Set through Law No. 312 of 2004 on the NBR Statute.

²³ Given that the Romanian economy was in a process of disinflation, a typical feature of the monetary policy strategy in a first stage consisted in gradually decreasing annual (Dec./Dec.) inflation targets set for two-year horizons; they were lowered from 7.5 percent ±1 percentage point in 2005 to 3.0 percent ±1 percentage point in 2011; the annual inflation targets for 2010 and 2012 were left unchanged from a year earlier, i.e. 3.5 percent ±1 percentage point and 3 percent ±1 percentage point respectively.

to 20 percent as of January 2016, expansion of the agricultural product supply on account of the 2014 bumper crop). Against this background, the annual inflation rate peaked at 9.0 percent in July 2008, while it reached a post-1990 low of -3.0 percent in March 2016 (Chart A).

The high inflation volatility was by no means a peculiarity of the Romanian economy. It was manifest worldwide during this period, including in advanced economies, reflecting both the increased intensity of the aforementioned global shocks and the impact of country-specific ones. For instance, in the period from 2008 to 2016, the annual inflation rate fluctuated between 4.1 percent and -0.7 percent in the euro area, between 4.2 percent and -1.2 percent in the US, and between 5.2 percent and -0.1 percent in the UK.

Most supply shocks are usually transitory in nature. They lead to a one-off adjustment of the CPI level – with the annual inflation rate being affected only temporarily, typically over a one-year period – and may exert an opposite influence on economic activity than on inflation (e.g. a drop in oil prices may have a stimulative effect on economic activity and a reduction in indirect taxes entails an increase in households' disposable income, thereby fostering consumption). These shocks are often unanticipated, the only potential way of incorporating them *ex ante* into the monetary policy decision-making process being via the risk scenarios associated with central bank forecasts. However, some supply-side shocks may be known and incorporated beforehand into central bank projections, such as the authorities' decisions on changes in indirect taxes.

Nevertheless, irrespective of the circumstances, in the event of severe exogenous shocks, the central bank's attempt to counteract their "first-round" effects would be not only ineffective²⁴, but even counterproductive. It would imply sudden and sizeable adjustments of the monetary policy stance, aimed at "forcing" the inflation rate back close to the target as soon as possible, which would generate undesirable fluctuations in economic activity and unemployment.

Therefore, there is a consensus in the literature that the adequate response to such exogenous shocks is their accommodation, at least in part, by monetary policy, while any countering response would be warranted only by a significant risk of de-anchoring of medium-term inflation expectations (Bernanke and Mishkin, 1997; Rosengren, 2011). Due to its features, inflation targeting strategy constitutes a particularly flexible framework for monetary policy response to these shocks (for the benefits of this approach, see for instance Bernanke *et al.*, 2001; Svensson, 2000, 2010)²⁵.

In line with theory, as well as with central banks' practice in the field, the NBR accepted temporary deviations from the inflation target caused by supply-side shocks, while steadily acting towards countering the risk of their second-round effects, i.e. of altering medium-term inflation expectations and hence the price- and wage-setting behaviour.

As a matter of fact, the direct inflation targeting adopted by the NBR is characterised by the *ex ante* definition, similarly to established practice in the field²⁶ (Bernanke et al., 2001), of a narrow set of circumstances ("exceptional circumstances") that are beyond the control of monetary policy and condition the monetary authority's responsibility for attaining the inflation target. These escape clauses

²⁴ Given that the maximum impact of monetary policy measures on the economy is usually manifest with a lag of up to 2 years, by which time the effect of the said shocks on the annual inflation rate has already dissipated.

²⁵ Mervyn King, governor of the Bank of England until 2013, even coined the term "inflation nutters" referring to central bankers that focus exclusively on stabilising the inflation rate, whatever the circumstances.

²⁶ Many central banks (e.g. New Zealand, Canada, Czech Republic) reconcile their commitment to inflation targeting with the required flexibility in the face of supply-side or transitory shocks by defining *ex ante* the so-called "escape clauses", which stipulate exceptional circumstances that limit the responsibility for attaining the target.

were announced ever since the adoption of the strategy and refer to: (i) marked increases/decreases in external prices of raw materials, energy-producing materials and other commodities; (ii) natural disasters and other similar exceptional events that induce cost-push or demand-pull inflationary effects, as well as unpredictable changes on the agricultural produce market; (iii) large fluctuations of the exchange rate of the leu that are decoupled from domestic economic fundamentals, as well as from the monetary policy pursued by the National Bank of Romania; (iv) major deviations from the administered price adjustment programme announced by the Government, in terms of both magnitude and proposed calendar; (v) divergence of the fiscal and income policies, in terms of implementation and outcomes, from the programmed coordinates.

The central bank has not resorted to escape clauses as such. However, the NBR has systematically explained in-depth the causes/factors underlying the temporary deviations of the annual inflation rate from the target, as well as the monetary policy decisions and actions meant to bring inflation back onto a compatible path with the set targets. This communication has a key role in safeguarding price stability over the medium term and minimising fluctuations in economic activity.

Such an approach has characterised the monetary policy conduct in the recent period as well, given that current developments in inflation and its short-term outlook have been temporarily – yet strongly – impacted by the successive indirect tax cuts and by the drop in international oil prices, while fundamentals were expected to resume exerting inflationary pressures starting in the latter part of 2016, owing mainly to the easing of the fiscal and income policies.

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Subsequently-released statistical data confirmed the outlook for the annual inflation rate to go deeper into negative territory in the early months of 2016²⁷. The data also showed a further pick-up in annual GDP growth in 2015 Q4 (3.8 percent from 3.6 percent a quarter earlier) – exclusively on account of the main components of domestic absorption –, as well as the likely persistence of the robust growth of consumer demand in 2016 Q1, following the new fiscal easing round and the rise in household incomes, to which added the ongoing advance in lending to households. At the same time, the onset of 2016 brought about slower growth in the industrial and construction sectors, somewhat weaker confidence in the economy, as well as still diverging growth rates of labour productivity and wages in industry.

Furthermore, the new assessments pointed to the annual inflation rate staying negative until June 2016, as a result of the cut in the standard VAT rate and other indirect taxes, as well as to

²⁷ The 12-month inflation rate successively dropped in January and February 2016 to -2.13 percent and -2.68 percent respectively, from -0.93 percent at end-2015, primarily under the impact of lowering the standard VAT rate from 24 percent to 20 percent.

the persistence of mixed risks to future inflation developments stemming from the potentially more expansionary fiscal and income policies in the context of the forthcoming elections, on one hand, and from the rising uncertainty about the euro area economic growth²⁸, on the other. Against this background, the NBR Board decided in its meeting of 31 March 2016 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 (Chart 3.1).

Chart 3.1. NBR Rates percent per annum 10 8 6 4 2 0 Jan. Jan. Jan. Jan. 2013 2014 2015 2016 policy rate lending facility rate deposit facility rate

New leu-denominated loans to the private sector rose at a faster pace January through February 2016, so that the annual dynamics of private sector credit²⁹ edged up further (5.1 percent versus an average of 3.1 percent in the previous three months), despite the slightly steeper rate of decline of the foreign currency component (based on EUR-expressed values), i.e. -12.4 percent from -11.5 percent in the earlier three months³⁰. Developments across customer categories were correlated only to a certain extent with the results of the February 2016 Bank Lending Survey conducted by the NBR, which showed expectations of an increase in the demand for corporate and housing loans in 2016 Q1, along with an outlook of tightening - for the first time in the past four quarters – of credit standards for mortgage loans, while leaving unchanged those on other types of credit. As a confirmation of this outlook, several credit institutions increased the share of the down-payment on mortgage loans. Hence, the annual dynamics of loans to non-financial corporations accelerated to 2.1 percent from -0.5 percent in 2015 Q4, primarily due to the stepped-up growth in short-term leu-denominated loans. The annual pace of increase of household credit also gained momentum to 7.5 percent versus 6.4 percent in Q4, prompted by the faster advance of housing loans and by the ongoing deceleration in the annual rate of decline of consumer credit and other loans (amid the swifter growth of the domestic currency component).

In turn, the uptrend in the annual dynamics of narrow money (M1) persisted into January and February 2016 (28.5 percent against 26.4 percent in 2015 Q4); this time around, behind these developments stood only the performance of household and corporate overnight deposits, which was correlated with the faster increase in the net average wage and in retail trade turnover and, possibly, with the protracted decline in the remuneration of time deposits. Looking at time deposits with a maturity of up to two years, this decline seems to have impacted only household deposits - with their rate of change posting slightly more negative readings January through February, i.e. -0.4 percent from -0.3 percent in 2015 Q4 -, whereas corporate deposits saw an improvement in their annual dynamics. Under the joint influence of these developments, the annual growth rate of broad money also picked up, to 12.3 percent against 10.0 percent in $Q4^{31}$.

January through March 2016, the NBR continued to pursue adequate liquidity management in the banking system, mopping up excess liquidity via its

²⁸ Amid the worsening outlook for the Chinese economy and other emerging economies, stronger geopolitical tensions, and heightened global financial market volatility.

²⁹ Unless otherwise specified, indicators are calculated as average annual changes expressed in real terms.

³⁰ A similar, albeit weaker, effect had the lower volume of loans removed from credit institutions' balance sheets.

³¹ Partly reflecting the statistical influence of the more negative annual inflation rate.

deposit facility. The average volume of funds thus parked at the central bank tripled in January, given the massive liquidity injections brought about by Treasury operations at the turn of the year. However, the liquidity surplus shrank February through March – amid the reversal of the impact of autonomous liquidity factors, coupled with the higher reserve requirements³² –, albeit remaining markedly above the levels recorded in the last part of 2015. As a result of the relative change in liquidity conditions and especially the central bank's forward guidance, longer-term ROBOR rates saw their downtrend come to a halt and stabilised somewhat thereafter.

2. Financial markets and monetary developments

The average interbank money market rate continued to shrink in 2016 Q1, albeit at a slower pace, while the EUR/RON exchange rate witnessed a sizeable downward adjustment in the first part of February, before tending to stabilise. Liquidity in the economy stepped up its growth, spurred primarily by the faster contraction in government deposits, as well as by the private sector credit dynamics sticking to an upward path.

2.1. Interest rates

The daily average interbank money market rate inched up in the latter part of Q1 to stay at the lower bound of the corridor defined by interest rates on the central bank's standing facilities around the policy rate, averaging out at 0.28 percent in March, after having temporarily fallen below 0.25 percent in the first part of the period under review. Hence, the quarterly average interbank deposit rate continued to shrink, reaching 0.21 percent, down 0.23 percentage points from a quarter earlier. Developments in overnight rates reflected the progressive narrowing of the net liquidity surplus in the banking system, which had widened considerably December 2015 through January 2016 under the impact of injections associated with Treasury operations.

Against this backdrop, longer-term (3M-12M) ROBOR rates remained on a downward path until towards the end of the first 10-day period of February, before tending to stabilise at the newly-hit historical lows³³, also as a result of the central bank's forward guidance. Consequently, in March the average 3M ROBOR stood 0.25 percentage points lower than in December 2015, at 0.78 percent, while 6M and 12M rates shed 0.31 percentage points (to 1.03 percent) and 0.32 percentage points (to 1.20 percent) respectively (Chart 3.2).





Under the influence of the same factors, government bond yields followed a similar path. In particular, the yield on one-year Treasury certificates shed approximately 0.3 percentage points in March versus December 2015 both on the primary market (with the average accepted rate coming in at 0.68 percent at the March auction) and on the secondary market (Chart 3.3). Yields at longer maturities, which are somewhat more sensitive to the influence of global factors, witnessed a decline until the first part of February that was partly corrected afterwards. These developments were largely correlated with those of bond yields in the US and the euro area, which posted a drop, prompted by heightened investor concerns over

³² Reflecting the autonomous rise in the reserve base.

³³ Data series available since August 1995.

the global economic slowdown and, thereafter, by the additional easing of the ECB's monetary policy and by the Fed's cautious approach to monetary policy tightening (see Section 2.2. Exchange rate and capital flows). Under the circumstances, the average accepted rates at the March auctions for 5- and 10-year³⁴ bonds respectively edged down 0.14 percentage points (to 2.66 percent) and 0.33 percentage points (to 3.38 percent) respectively against the December readings. In turn, average benchmark rates on the secondary market in March also stood below the December 2015 levels by up to around 0.3 percentage points.

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



During the reported quarter as a whole, developments on the primary market point to investors' slightly keener appetite for leudenominated government securities than in 2015 Q4, given that the net volume of issues exceeded that seen October through December 2015³⁵, the demand-to-supply ratio and the ratio of the value of issues to the announced value rose marginally, while the average maturity of issued securities extended somewhat^{36,37}. December 2015 through February 2016, the average remuneration of new time deposits shrank further, down 0.34 percentage points to 0.76 percent, whereas the average lending rate on new business added 0.37 percentage points to 5.90 percent, mainly as a result of developments in household loans (Chart 3.4). Specifically, the average interest rates on new time deposits fell gradually for both non-financial corporations and households, reaching in February 0.46 percent (down 0.31 percentage points) and 1.22 percent³⁸ (down 0.37 percentage points) respectively versus December 2015. By contrast, the average lending rates on new business posted monthly fluctuations, also as a result of changes in the composition of the credit flow. In particular, the average interest rate on new loans to non-financial corporations remained almost unchanged at 4.35 percent, while that on new loans to households edged up 0.22 percentage points, to 6.85 percent. However, the latter development owed exclusively to the larger share of new consumer credit in total new business to households, since the average interest rates on new consumer loans and housing loans dwindled.



Chart 3.4. Bank Rates

2.2. Exchange rate and capital flows

The EUR/RON exchange rate continued to rise in January, posting, however, in mid-Q1 a significant downward correction (Chart 3.5), and subsequently

³⁴ With a residual maturity of around nine years.

³⁵ Lei +3 billion in 2016 Q1 versus lei -0.8 billion in 2015 Q4.

³⁶ The average maturity of government securities issued during 2016 Q1 was of around 4 years, as compared with an average of 3.7 years in 2015 Q4.

³⁷ Moreover, the MPF partly renewed during this period the maturing EUR-denominated securities on the domestic market, by putting into circulation – via the issue launched in January and reopened in February – bonds worth a total of EUR 775 million, with a 5-year maturity and at a 1 percent rate.

³⁸ Thus hitting new post-1990 lows.



tending to stabilise above the prevailing level in the latter half of 2015.

The EUR/RON exchange rate continued to follow an upward path in January, although much less steep than in December 2015, given that international financial markets, regional ones included, were further affected by the investor sell-off, reflecting renewed concerns over the global economy outlook³⁹ in this period. These were triggered by an additional worsening of several indicators of the Chinese economy (which involved a rekindling of tensions on the Chinese capital market) and of other emerging economies, as well as by the ongoing decline in the international prices of oil and other commodities.

The RON exchange rate witnessed an abrupt decline in the first half of February, which fully offset the increase accumulated December 2015 through January 2016⁴⁰. Behind the stronger domestic currency stood the improved investor sentiment vis-à-vis the economies/financial markets of several countries in the region, Romania included⁴¹ (Table 3.1), under the influence of the ECB's forward guidance on further monetary policy easing in the euro area in March. To this may have also added the somewhat more favourable data regarding GDP growth in 2015 Q4 (flash estimate), hinting at a relative resilience of the domestic economy to developments in China and in other emerging countries⁴².

Table 3.1. Key Financial Account Items

EUR millio							
	2	mos. 20 ⁻	15	2 mos. 2016			
	Net acquisition of financial assets*	Net incurrence of liabilities*	Net	Net acquisition of financial assets*	Net incurrence of liabilities*	Net	
Financial account	-1,081	-2,227	1,196	393	-690	1,083	
Direct investment	318	515	-197	7	327	-320	
Portfolio investment	-239	-376	136	119	174	-54	
Financial derivatives	8	0	8	17	0	17	
Other investment	1,183	-2,416	3,599	1,593	-1,190	2,783	
 currency and deposits 	690	-116	806	1,022	-875	1,896	
– Ioans	330	-2,150	2,480	321	-171	491	
– other	163	-150	313	250	-144	396	
NBR's reserve assets, net	-2,351	0	-2,351	-1,343	0	-1,343	
*) "+" increase / "-" decrease							

However, external influences gained a heterogeneous nature beginning with the second half of February, as a result of the increase in the degree of the ECB's monetary accommodation exceeding expectations and of the temporary upward revision of market expectations on the Fed's policy rate path. At the same time, investor sentiment on the risk associated with the local economy/financial market saw an adjustment, likely due to the recent/expected fiscal and income policy stance and to certain legislative initiatives. The residents' demand for foreign currency remained relatively high, possibly fostered by the rise in

³⁹ The World Bank and the IMF revised downwards the global economic growth projections for 2016 and 2017.

⁴⁰ The balance of non-residents' transactions re-entered positive territory, in correlation with a possible increase in their holdings of leudenominated government securities, while the interbank forex market turnover picked up considerably.

⁴¹ In this context, the MPF raised EUR 1.25 billion on the external market on 18 February, by reopening the Eurobond issues maturing in 2025 and 2035 respectively.

⁴² Unlike the EUR/RON, the exchange rates of the currencies in some emerging economies went up in this period, in the context of renewed concerns regarding the developments in China and on the oil market; against this background, market expectations on the Fed's policy rate trajectory posted a temporary downward adjustment, leading to a significant, yet short-lived, appreciation of the euro versus the US dollar.

imports. Against this background, the EUR/RON discontinued its decline and then stabilised above the prevailing level in the second half of 2015 (Chart 3.6).



January through March, the leu appreciated against the euro by 0.9 percent in nominal terms⁴³ and depreciated by 0.1 percent in real terms. In relation to the US dollar, the leu strengthened by 3.0 percent in nominal terms and by 2.0 percent in real terms, given the former's significant weakening against the euro. Looking at the average annual exchange rate dynamics in 2016 Q1, the domestic currency saw its nominal depreciation versus the euro increase slightly, but diminish considerably against the US dollar.

2.3. Money and credit

Money

December 2015 through February 2016, broad money (M3) dynamics⁴⁴ re-embarked on an upward path and peaked at a 7-year high of 11.7 percent (from 10.0 percent September through November 2015). The key driver of higher liquidity in the economy was the marked increase in budget expenditures in the closing month of 2015⁴⁵, also on account of the use of EU funds⁴⁶.

The M3 composition continued to change, with the prevailing share of narrow money widening further to a 7-year high of 52.3 percent on average, given that the pace of increase of M1 picked up, thus keeping a wide differential vis-à-vis the dynamics of time deposits with a maturity of up to two years (Table 3.2; Chart 3.7). The performance of M1 (28.1 percent December 2015 through February 2016, versus 26.2 percent in the previous three months), amid the stepped-up economic activity and the ongoing decline in interest rates on time deposits, was ascribable to the faster growth rate of overnight deposits (33.6 percent against 29.9 percent), whereas the annual rate of change of currency in circulation witnessed a decline during the said period. The annual dynamics of time deposits also rose, albeit at a much slacker pace and without re-entering positive territory, as a result of the slightly swifter rate of increase of corporate deposits⁴⁷.

Table 3.2. Annual Growth Rates of M3 and Its Components

	real percentage change					
		201	15		20	16
	I			IV		E 1
	quarterly average growth			owth	Jan.	Feb.
M3	6.4	7.5	10.1	10.0	11.9	12.7
M1	16.3	20.1	25.6	26.4	28.1	28.9
Currency in circulation	14.8	16.8	18.8	18.9	18.8	16.7
Overnight deposits	17.1	22.0	29.4	30.4	33.0	35.5
Time deposits (maturity of up to	-0.6	-15	-17	-3.0	-17	-1.0
Source: NIS, NBR	0.0	1.5	1.7	5.0	1.7	1.0

⁴⁵ According to budget execution data, the average annual growth rate of monthly capital expenditure peaked at a 12-month high, while the volume of capital expenses and that of goods and services-related expenditures in December 2015 hit 7-year highs.

⁴³ In this period, the Hungarian forint and the Polish zloty appreciated against the euro by 1.0 percent and 0.1 percent, respectively.

⁴⁴ Unless otherwise indicated, percentage changes refer to the average annual growth rates in real terms for December 2015 – February 2016.

⁴⁶ The average annual dynamics of monthly spending on external grantfunded projects peaked at a 5-year high in December 2015. Moreover, in the closing month of 2015 the MPF earmarked fresh amounts for reimbursing the expenses incurred by recipients of structural funds (Government Decision No. 963/2015) and, according to press releases from the Agency for Payments and Interventions in Agriculture, disbursements were made under the Single Area Payment Scheme and state subsidies were granted for diesel fuel.

⁴⁷ A favourable influence also had the statistical effect of the lower annual inflation rate.



Chart 3.7. Main Broad Money Components

In turn, the dynamics of total M3 deposits regained momentum in the period from December 2015 to February 2016 and peaked at a post-2008 high, after having decreased slightly in the previous three months. Looking at the breakdown by customer type, the period under review saw a renewed step-up in the annual growth rate of corporate deposits and the further reduction in the dynamics of household deposits, under the joint impact of higher public capital expenditure⁴⁸ (also on account of the use of EU structural funds) and the faster rise in households' purchases of goods⁴⁹, due *inter alia* to the swifter annual increases in real average wage earnings⁵⁰ and the volume of workers' remittances from abroad⁵¹ respectively.

From the perspective of M3 counterparts, broad money developments reflected the faster decline in

government deposits and, to a smaller extent, the pick-up in the dynamics of private sector credit, to which added the contraction in the rate of change of long-term financial liabilities⁵²; an opposite impact had the weaker growth rates of banks' net foreign assets and of government credit.

Credit to the private sector

December 2015 through February 2016, the annual growth rate of credit to the private sector⁵³ remained on an upward path and peaked at a 4-year high of 4.7 percent. Behind this performance stood the leudenominated component, whose pace of increase hit a post-2008 high, while the dynamics of forex loans (expressed in euro) remained stable at a very low level from a historical perspective⁵⁴ (Chart 3.8). Against this backdrop, the prevailing share of domestic currency loans in total credit to the private sector widened, averaging out at an 8½-year high.



Chart 3.8. Credit to the Private Sector

Source: NIS, NBR

The key drivers of these developments were the larger volume of new business⁵⁵, the slowdown in the operations to remove non-performing loans from credit institutions' balance sheets⁵⁶, as well as the rise in loan acquisitions by banks.

⁵⁶ Calculated based on monetary statistics data.

⁴⁸ Its impact more than offset that exerted by the pick-up in the average growth rate of the monthly profit tax, which recorded the highest value since 2012 Q2.

⁴⁹ NIS data show that the average annual pace of increase of the retail trade turnover volume hit a post-2008 high.

⁵⁰ According to NIS data, the real average annual growth rate of the net average wage economy-wide peaked at a new post-crisis high, prompted also by the pay rises in public administration, education, healthcare and social work activities (Law 293/2015 approving GEO 35/2015 amending and supplementing GEO 83/2014 on the public sector wage policy for 2015). Furthermore, according to the Government's press release of 9 December 2015, certain amounts established by enforceable court rulings were paid to staff in the pre-university education sector funded from the local budgets and in the special education sector funded from county budgets.

⁵¹ According to balance-of-payments data, the average volume of workers' net monthly remittances from abroad rose in the period from December 2015 to February 2016.

⁵² Capital accounts included.

⁵³ Unless otherwise indicated, percentage changes refer to the average annual growth rates in real terms for December 2015 – February 2016.

⁵⁴ The annual dynamics of forex loans expressed in domestic currency posted less negative readings.

⁵⁵ Data on new loans have been taken from interest rate reports.

Both major institutional sectors contributed to the pick-up in the pace of increase of credit to the private sector (Chart 3.9). Specifically, the faster growth rate of household credit was further attributable to the swifter dynamics of the leu-denominated component, which peaked at an 8-year high. This resulted from the ongoing step-up in the rate of change of consumer credit and other loans⁵⁷ – due to the low interest rates, higher income, and to the simplified procedure for checking applicants' income⁵⁸ –, to which added the further high pace of increase of housing loans. At the same time, the dynamics of foreign currencydenominated household credit (expressed in euro) went deeper into negative territory; hence, the share of the leu-denominated component in total credit to households exceeded that of forex loans in February for the first time since November 2007.

Looking at loans to non-financial corporations, the faster rate of change – which re-entered positive territory for the first time in the past three years⁵⁹ – was also driven by the upward trend of the domestic



currency component (whose growth rate peaked at a 7-year high) and, to a smaller extent, by the less negative readings of the dynamics of corporate forex credit (expressed in euro), largely reflecting banks' purchases of foreign currency loans during this period. In both cases, the rise was prompted by short- and long-term loans.

⁵⁷ Consumer credit, other loans and business development loans have been analysed as a single indicator with a view to eliminating the effect of statistical methodological changes introduced in January 2015.

⁵⁸ Given the protocol signed by the Romanian Banking Association and the National Agency for Fiscal Administration with a view to checking loan applicants' income, whose objective is – according to a press release issued by the former – "more efficient lending and the drop of bank fraud based on forged documents".

⁵⁹ In nominal terms, the dynamics of loans to non-financial corporations remained slightly negative, yet posted the highest reading in the past year.

4. INFLATION OUTLOOK

The 12-month CPI inflation rate is projected at 0.6 percent and 2.7 percent at end-2016 and end-2017 respectively, its path being shaped by the fiscal easing and income policy measures, as well as those concerning the Law on debt discharge⁶⁰. At the forecast horizon, i.e. March 2018, inflation rate is expected to near the upper bound of the variation band of the target, largely as a result of the gradual build-up of underlying inflationary pressures mirrored by the adjusted CORE2 index and the fading-out, in early 2018, of the direct and temporary impact of indirect tax cuts to be introduced in January 2017. The path of the annual core inflation rate reflects the persistent influences of the emergence and subsequent projected widening of a positive output gap, along with a pick-up in the growth rate of unit wage costs, gradually rising inflation expectations, as well as the return of import prices to higher rates of increase from the current very low levels. The balance of risks to the annual inflation rate projection is tilted to the downside from the path described in the baseline scenario, with potential sources of risk stemming from both domestic and external sources.

1. Baseline scenario

1.1. External assumption

The scenario for external demand, as proxied by the effective EU GDP (EU-28 excluding Romania), envisages its gradual recovery, at growth rates marginally lower than those projected in the February 2016 Inflation Report for most of the projection interval (Table 4.1). The relative slowdown is ascribed to less favourable prospects on the developments in some emerging economies and somewhat higher uncertainty about financial market developments. Euro area economic growth will further be underpinned by the ECB's standard and non-standard monetary policy measures, such as the cut in the interest rate on the main refinancing operations to zero, in the deposit facility rate to negative levels and the expansion of the quantitative easing programme. Private consumption, the main contributor to the recovery of economic activity, will continue to be supported by higher disposable income (upheld by the steady advance in employment and an improvement in labour market conditions, on the one hand, and weak energy prices, on the other hand) and low funding costs. The effective EU GDP gap⁶¹ is still in negative territory, but is expected to narrow gradually over the projection interval.

Table 4.1. Expectations on the Developments in External Variables

	annua	l averages
	2016	2017
Effective EU economic growth (%)	1.86	2.04
Annual inflation rate in the euro area (%)	0.24	1.45
Annual CPI inflation rate in the USA (%)	1.27	2.28
3M EURIBOR interest rate (% per annum)	-0.24	-0.25
EUR/USD exchange rate	1.10	1.10
Brent oil price (USD/barrel)	40.0	45.4

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

Compared with the previous Inflation Report, amid the lingering external disinflationary environment stemming from oil price developments as well, the annual HICP inflation rate in the euro area was revised marginally downwards for most of the forecast interval, being anticipated to embark on a gradual upward course. At the projection horizon

⁶⁰ Law No. 77/2016 on the discharge of mortgage-backed debts through transfer of title over immovable property.

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

however, it is expected to remain below the ECB-defined 2 percent price stability benchmark. Annual inflation in the USA is foreseen recording marginally lower levels than in the previous projection, albeit higher than those expected in the euro area.

The nominal 3M EURIBOR rate is anticipated to further witness negative levels almost throughout the forecast interval, reflecting the ECB's persistently accommodative policy stance. The path of the EUR/USD exchange rate envisages the euro softening in the first part of the projection interval to around USD 1.09 per euro, before strengthening in the latter half of this period.

The scenario on the international Brent oil price is based on futures prices and foresees an upward trend starting in 2016 Q2. The oil price was revised upwards from the previous round, amid the oil market rebalancing, staff redundancies across the sector, the strike of Kuwaiti workers, the phasing-out of shale hydraulic fracturing by certain companies, especially in the USA, and a possible resumption of talks between OPEC and non-OPEC producers (Russia in particular) on an oil output freeze ahead of the organisation's meeting scheduled for next June. Nevertheless, starting 2016 H2, the quarterly dynamics of the oil price are expected to be slower than those in the previous Inflation Report (Chart 4.1).



Chart 4.1. Brent Oil Price Scenario

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

1.2. Inflation outlook

The baseline scenario of the macroeconomic projection places the annual CPI inflation rate at 0.6 percent at end-2016 and 2.7 percent at end-2017, which are below the lower bound and inside the upper half of the ± 1 percentage point variation band of the 2.5 percent flat target, respectively (Table 4.2). The projected path of the annual inflation rate is markedly affected by the fiscal easing measures, especially those concerning the successive indirect tax cuts⁶², the income policy measures, as well as the estimated effects of the enactment of the Law on debt discharge, the assessment of which is however riddled with inherent uncertainties. Therefore, the current projection sees the annual CPI inflation rate in negative territory until mid-2016, as a result of the VAT rate cuts in June 2015 and January 2016. Subsequently, in the course of 2017 Q1, it will re-enter the variation band of the target, after an additional rise in January 2017 due to the statistical base effect of lowering the standard VAT rate to 20 percent, from 24 percent, in the previous year. At that point, the combined influence of implementing a new one percentage point cut in the standard VAT rate and lowering the fuel excise duty is expected to be more than offset by the impact of a build-up of aggregate demand pressures, also as a result of fast-paced wage earnings growth. In January 2018, once the direct and temporary effect of indirect tax cuts has faded out, CPI inflation will jump again to reach 3.3 percent at the end of 2018 Q1. The enactment of the Law on debt discharge will depress aggregate demand dynamics relative to its growth potential, exerting, *caeteris paribus*, disinflationary pressures throughout the period under review.

⁶² Among these measures, significant effects on the annual CPI inflation rate stem from the broadening of the scope of the 9 percent reduced VAT rate to all food items, non-alcoholic beverages and food service activities in June 2015 and to potable water delivery services in January 2016, the two-step cut in the standard VAT rate, by 4 percentage points in January 2017, as well as the scrapping of the special excise duty on fuels in January 2017.

Table 4.2. The Annual Inflation Rate in the Baseline Scenario

		annual percentage change; end of period							
		2016			20	17		2018	
	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	
Central target	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	
CPI projection	-0.4	0.5	0.6	1.8	2.4	2.4	2.7	3.3	
CPI projection*	0.9	1.8	1.9	2.1	2.7	2.7	2.9	3.3	

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

Excluding the first-round effects of VAT rate cuts, whose direct impact on the annual inflation rate is temporary and beyond the scope of the monetary authority, CPI inflation is expected to return inside the variation band of the target starting August 2016 and to remain, amid the action of economic fundamentals, inside this band until the end of the projection interval (Chart 4.2).



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

The annual CPI inflation rate was revised downwards compared to the previous forecast, by 0.8 percentage points at the end of this year and 0.7 percentage points at the end of next year, amid smaller expected contributions from the adjusted CORE2 index, administered prices and volatile food (VFE) prices.



Starting from the recent historically-low levels, the annual adjusted CORE2 inflation rate is envisaged to revert to positive territory after May 2016 and follow an upward course to reach levels higher than 3.5 percent in early 2018 (Chart 4.3). This development is the result of several consecutive diverging influences: the VAT rate cuts in June 2015, January 2016 and January 2017 and the very slow dynamics of import prices in recent months, on the one hand, and the successive fading-out after one year⁶³ since each impact of the first-round statistical effects from these fiscal measures, and the gradual build-up of underlying inflationary pressures, on the other hand. The latter pressures are anticipated to stem from: (i) the emergence and subsequent rise of excess demand, along with a swifter increase in unit wage costs⁶⁴; (ii) the gradually faster dynamics of import prices, amid the movements foreseen in external prices, and (iii) the anticipated upturn in inflation expectations, as first-round statistical effects of VAT rate cuts fade out one after another and second-round effects abate. Under the impact of these factors, the core inflation rate net of the

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

 $^{^{63}\;}$ In June 2016, January 2017 and January 2018.

direct effects of VAT rate cuts is seen standing at 1.8 percent and 3.6 percent at end-2016 and end-2017 respectively (Table 4.3).

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

		annual percentage change; end of period								
	2016			2016 2017				2018		
	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1		
Adjusted CORE2	0.4	0.9	0.9	2.1	2.8	3.1	3.4	3.7		
Adjusted CORE2*	1.2	1.8	1.8	2.2	2.9	3.2	3.6	3.7		

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

Compared to the February 2016 Inflation Report, the projected annual adjusted CORE2 inflation rate was revised downwards by 1 percentage point and 0.8 percentage points at the end-2016 and end-2017 respectively, reflecting weaker demand-pull inflationary pressures, due also to the anticipated effects of the Law on debt discharge, as well as the downward revision of import price pressures. The latter were revised considering the significantly lower-than-previously-projected external prices both during the period since the release of the previous report and over the medium term.

The cumulative contribution of components exogenous to the monetary policy influence, namely administered prices, prices of volatile food items (VFE), fuel prices and tobacco product and alcohol prices, to the annual CPI inflation rate is marginally positive at the end of 2016 and is envisaged to reach 0.6 percentage points at the end of 2017, being revised downwards by 0.15 percentage points and 0.2 percentage points respectively against the previous projection (Table 4.4).

Table 4.4. Components' Contribution to Annual Inflation Rate*

	percentage points				
	2016	2017			
Administered prices	-0.4	0.4			
Fuels	0.1	-0.2			
VFE prices	0.4	0.4			
Adjusted CORE2	0.5	2.0			
Tobacco and alcohol	0.0	0.0			
*) end of period: values have been rounded off to one decimal place					

Volatile food (VFE) prices are projected to rise at an annual pace of 5.9 percent at the end of 2016 and 5.5 percent at the end of 2017 following a downward revision compared to the previous forecast (Chart 4.4). Their path is marked by the fading out, in June 2016, of the first-round effect of broadening the scope of the reduced VAT rate on these food items, with their quarterly profile featuring the seasonal dynamics specific to this CPI group.

Chart 4.4. VFE Prices Annual Inflation*



The exogenous scenario for administered price dynamics incorporates information from the relevant Romanian authorities and the latest developments in these prices. The projection envisages the group's annual dynamics standing at -2.1 percent at end-2016 and 2.2 percent at end-2017 (Chart 4.5), following a downward revision to the previous projection. For 2016, the revision was tantamount to 2.4 percentage points, particularly given the April contraction in the electricity price⁶⁵ and the developments in the natural gas price in the same month (the increase envisaged in the prior round for April was removed from the baseline scenario).

⁶⁵ According to the Regulatory Authority for Energy in Romania (ANRE), electricity prices are estimated to have fallen by 2.4 percent in April. For further details, see the press release dated 30 March 2016 concerning the revision of competitive market component prices http://www.anre. ro/ro/presa/comunicate/comunicat-30-03-2016-privind-tarifele-cpc (Romanian only).



The path of the annual inflation rate projected for tobacco products and alcoholic beverages is shaped by the pieces of legislation setting the levels of excise duties on such goods. The Tax Code foresees a 1.1 percent hike in the total excise duty on 1,000 cigarettes in 2017 versus a year earlier. The group's annual dynamics are, in turn, shaped by the standard VAT rate cuts in 2016 and 2017. For 2016, the annual dynamics are projected to be 0.4 percentage points higher than in the February 2016 Inflation Report and, for 2017, to stick to the level in the previous report.



The annual dynamics of fuel prices are foreseen to take negative values over most of the projection

interval, reaching 0.6 percent at the end of 2016 and -1.9 percent at the end of 2017, i.e. 5 percentage points and 0.4 percentage points respectively above the previously-forecasted levels (Chart 4.6). These reassessments were attributed to lowerthan-previously-forecasted declines in 2016 Q1, on the one hand, and to a faster projected pick-up in the international oil price in 2016 Q2, on the other hand. The two-step cut in the standard VAT rate and the removal of the special excise duty on fuels exert downward pressures on these prices over the projection interval. During 2016, in the opposite direction is expected to act the path of slightly weakening euro versus the US dollar, affecting the exchange rate of the leu against the US dollar and, implicitly, the leu-denominated prices of such goods. Positive contributions to the change in fuel prices next year come also from inflation expectations, which are projected on an upward path.

1.3. Demand pressures in the current period and over the projection interval⁶⁶

Output gap

According to the NIS⁶⁷, in 2015 Q4, seasonallyadjusted real GDP saw a 1.1 percent rise compared to the previous quarter. In 2015, the real GDP growth stood at 3.8 percent. The analysis of high-frequency macroeconomic indicators points to the quarterly real GDP growth remaining in positive territory in 2016 Q1, albeit on the wane, i.e. retail trade turnover (excluding motor vehicles) and market services to households increased by 4.6 percent and 5.5 percent, respectively, January through February 2016 compared to the preceding quarter average, while industrial production decreased by 1.8 percent over the same period. The economic sentiment indicator fell slightly in 2016 Q1, but further reports high values (Chart 4.7).

The developments in the capital stock and labour for this year and the next are projected to include recent and expected increases in investment and employment, respectively, with favourable

⁶⁶ Unless otherwise indicated, percentage changes are calculated based on seasonally-adjusted data series. Source: NBR, MPF, NIS, Eurostat, EC-DG ECFIN and Bloomberg.

⁶⁷ NIS Press Release No. 88 of 8 April 2016.

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



The negative output gap in 2015 Q4 is assessed to have been smaller than that estimated in the previous forecasting round, implying, *caeteris paribus*, weaker disinflationary pressures. The output gap was revised based on the higher-than-expected GDP growth in 2015 Q4 and the revision by the NIS of historical data series for seasonally-adjusted real GDP. In 2016 Q1, the output gap is assessed at less negative levels than that in the previous quarter (Chart 4.8), on the back of the stimulative influence exerted mainly by the discretionary component of the fiscal policy (the fiscal impulse) amid the fiscal easing measures envisaged for this quarter, and also by the real broad monetary conditions. External demand is estimated to have a restrictive, yet marginally smaller, impact on the output gap. The narrowing of the negative output gap starting 2015 H2 is also underpinned by the favourable developments in the capacity utilisation in industry, which rose steadily in the past three quarters.

Chart 4.8. Output Gap



Under the impact of fiscal easing and public wage policy measures, the current forecast envisages a reversal of the cyclical position of the economy in the course of 2016 via the progressive closing of the negative output gap and the build-up of excess demand seen to rise gradually until the projection horizon. This implies upward pressures on consumer prices coming from the real economy starting as early as 2016. The gradual recovery in external demand and the stimulative set of real monetary conditions will also make a marginal contribution to the developments in the output gap. Compared with the February 2016 Inflation Report, the reassessment of the projected output gap mirrors: (i) the near-term forecasting error and the NIS revision of the GDP historical data series; (ii) the revaluation of the effects of the expansionary income and fiscal policies on the economic activity; (iii) the estimated impact, albeit marked by the inherent uncertainty surrounding its assessment, that the Law on debt discharge may have following implementation, as well as (iv) a reshaping of the influence of real monetary conditions.

The baseline scenario envisages a marginal slowdown of economic growth in 2016 and 2017 from 2015, amid expectations of still fast-paced domestic demand driven by the expansion in consumption and investment, whose cumulated impact is however foreseen to abate after the Law on debt discharge takes effect. Given the significant advance in domestic demand, imports of goods and services are expected to rise faster than exports, with the contribution of net exports to GDP growth being forecasted as negative, but on the wane over the projection interval.

Aggregate demand components

The actual individual consumption of households picked up 5.9 percent in 2015 and is expected to further grow at a swift pace in 2016 Q1 as well. Household consumption dynamics are supported by the rise in real disposable income, under the impact of recent wage hikes (real increase of 3.5 percent in the average net wage economy-wide in January-February 2016 versus the 2015 Q4 average), as well as by the cut in the standard VAT rate to 20 percent, from 24 percent, starting 1 January 2016. Retail trade (excluding motor vehicles) and market services to households, which advanced by 4.6 percent and 5.5 percent respectively in January-February 2016 as compared with the previous quarter's average, also underpin the assessment on household consumption growth. The consumer confidence indicator continued to decrease in 2016 Q1, yet it remained at levels close to the post-crisis high. Under the impact of fiscal and income policy measures with stimulative effects on consumption, in the first guarter of 2016, the positive gap of this aggregate demand component is assessed to widen further.

Over the forecast interval, the actual individual consumption of households is anticipated to grow at a fast pace, on the back of the rise in the real disposable income. This will be bolstered by the fiscal easing measures implemented and scheduled by the new Tax Code, by the minimum wage increase, as well as by the wage hikes scheduled in the public sector and by those entailed by the expected favourable economic and labour productivity developments in the private sector. In parallel, the implementation of the Law on debt discharge is assessed to adversely influence the dynamics of actual individual consumption of households, weighing on household disposable income, given the changes foreseen to be made by financial institutions to the lending conditions applicable to this category of borrowers.

The actual collective consumption of general government is forecasted to be on a rise in 2016 Q1 versus the prior quarter, yet its rate of change is assessed to remain consistent with keeping the budget deficit within the target agreed with the European Commission for the current year⁶⁸. Over the forecast interval, the actual collective consumption of general government is anticipated to see negative average annual dynamics in 2016 (owing largely to a carry-over effect) and a slight rise in 2017.

Gross fixed capital formation (GFCF) saw an 8.8 percent increase in 2015 and is foreseen to post favourable, yet moderate, developments in 2016 Q1. This assessment relies on the mixed signals that were manifest in January-February 2016 as compared with the previous guarter – the rise in the output of capital goods and in the volume of new construction works (up by 0.4 percent and 0.6 percent respectively) on the one hand and the lower stock of loans to non-financial corporations (down by a real 1.1 percent) on the other. The slower growth of GFCF is also suggested by the confidence indicator in construction (down 3.4 points in 2016 Q1 from the post-crisis high recorded a quarter earlier). As a result, the positive gap of GFCF is assessed to narrow in 2016 Q1.

Over the forecast interval, gross fixed capital formation is expected to see positive growth rates, due to the anticipated strengthening of private investment and the recovery of corporate lending. The gradual pickup in the economic activity of Romania's trading partners is also likely to have stimulative effects on GFCF developments. In addition, the rise in GFCF is forecasted to

⁶⁸ The 3 percent threshold is also provided by the nominal convergence criteria in the Maastricht Treaty.

be supported by some of the fiscal measures scheduled over the forecast interval (e.g. the cut in dividend tax and the removal of the tax on special constructions), which could lead to the potential reallocation of resources for productive purposes. In parallel, the enforcement of the Law on debt discharge, despite the uncertainty surrounding the assessment of its effects, is foreseen to depress the future dynamics of GFCF. Moreover, the favourable projected investment dynamics are conditional on the absorption of structural and cohesion funds, particularly those having the potential to act as a catalyst on the investment sector. The magnitude of successive revisions made by the NIS to this component is indicative of the high uncertainty surrounding the future evolution of GFCF.

In 2015, the average annual growth rate of exports of goods and services slowed down to 5.5 percent, while that of imports picked up to 9.1 percent. The guarter-on-guarter dynamics of exports of goods and services are estimated to stay in positive territory in the first quarter of 2016. This is due to the higher industrial output in the euro area (up 1.1 percent in January-February 2016 versus the 2015 Q4 average) and the relatively favourable prospects for economic growth of Romania's trading partners, under the influence of factors such as the persistence of the ECB's quantitative easing measures and the low oil price. These prospects occur, however, in an international environment plaqued by uncertainties surrounding the magnitude of the slowdown in the growth of emerging economies (with possible spillover effects on the euro area developed economies). Imports of goods and services are estimated to report positive dynamics in 2016 Q1, amid the significant increase in domestic demand and the upward effect generated by the anticipated favourable export developments (given their import content). Against this background, the deviation from the medium-term trend is assessed to be further negative for exports and see positive values for imports.

The annual growth rate of exports of goods and services is projected to stay positive over the forecast interval, assuming the persistence of structural gains recorded in recent years⁶⁹. The forecasted annual rate of increase of exports reflects the gradual recovery of external demand, while in the medium run it might see a slowdown, as the domestic production nears and might even reach full capacity utilisation. Given developments by the cut-off date of this Report, the slower growth pace of emerging economies (China, in particular) is not deemed likely to pose a major risk to Romania's future dynamics of exports, considering the low direct exposure of our country via the trade channel (small shares of Romania's exports to China). Conversely, indirect spillover effects on the external demand of Romania's trading partners (of some euro area countries, in particular) could have an unfavourable impact on export dynamics. The swift annual growth rate of imports of goods and services is projected to outpace that of exports in 2016, on the background of the anticipated increase in domestic demand. The annual dynamics of imports are expected to slow down slightly in 2017, in line with domestic demand developments, yet to remain at a level close to those of exports.

In 2015, the balance-of-payments current account deficit rose, accounting for 1.1 percent of nominal GDP, amid the wider deficits on primary income and trade in goods. Over the forecast interval, the current account deficit is expected to follow an upward path. The main determinant of the current account deficit widening is the fast-paced dynamics of domestic demand, supported by measures targeting fiscal easing and income increases. In this context, the current account deficit-to-GDP ratio is forecasted to stand at around 2.5 percent over the medium term. In the short run, international reserves and, generally, the anticipated sources for current account deficit financing are deemed to be adequate and favourably distributed in terms of the nature of capital flows, i.e. non-debt-creating versus debt-creating flows. However, the reopening of the negative current account balance owing to a wider fiscal deficit and the speed-up in consumption

⁶⁹ The share of machinery, apparatus, equipment and transport means in Romania's total FOB exports stayed at levels of at least 40 percent in the post-crisis period. In the medium run, the performance of this sector is conditional upon factors such as the expansion of productive capacity, the improvement in infrastructure and external demand developments.

could augment Romania's vulnerabilities to a potential rise in the volatility of capital flows to the emerging economies, thus jeopardising domestic macroeconomic equilibria.

Broad monetary conditions

Broad monetary conditions capture the impact exerted on future developments in aggregate demand by the dynamics of real interest rates in lei applied by credit institutions to their non-bank clients and by the real effective exchange rate⁷⁰ of the leu. The exchange rate exerts its influence via the net export channel, as well as via the effects on wealth and balance sheets of economic agents.

The average nominal interest rates applied by credit institutions to non-bank clients decreased further in 2016 Q1 in the case of leu-denominated new time deposits and rose marginally in that of leudenominated new loans. The cumulative impact on economic activity in 2016 Q2 generated by deviations of real interest rates from their trends is assessed to be further stimulative.



In quarter-on-quarter comparison, in 2016 Q1 the domestic currency depreciated in nominal effective terms, as a result of developments versus both the euro and the US dollar (Chart 4.9). The effective exchange rate also depreciated in real terms, given

that the cut in the standard VAT rate as of 1 January 2016 widened the quarterly inflation differential in Romania versus trading partner countries.

Therefore, the impact of the real effective exchange rate on aggregate demand (via the export price competitiveness) in 2016 Q2 is assessed to remain stimulative.

The CDS (Credit Default Swap) spreads for the national economy remained relatively unchanged in the first quarter of 2016 (Chart 4.10). The uncertainties related to the global economic outlook and the protracted decline in world oil and commodity prices prompted a relatively tense behaviour of financial investors in January 2016. Subsequently, the improved sentiment of financial investors towards the economies in the region, followed by the higher-than-expected monetary policy easing in the euro area in March partly offset the unfavourable developments at the beginning of the quarter. In this context, the sovereign risk premium (determined based on Option Adjusted Spread) is assessed to stay slightly below the medium-term trend. In terms of the wealth and balance sheet effect, in 2016 Q1 stimulative influences on future aggregate demand come from the real foreign interest rate standing below the equilibrium levels, from the risk premium and from the anticipated dynamics of the real effective exchange rate.



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

⁷⁰ The relevant exchange rate for the NBR's quarterly projection model implies EUR/RON and USD/RON exchange rates, according to the weights of the two currencies in Romania's foreign trade.

Overall, real broad monetary conditions in 2016 Q1 are assessed to exert a stimulative impact on economic activity in the following quarter, thus contributing to the mitigation of disinflationary pressures generated by the negative output gap. Looking at their structure, the stimulative impact stemming from the real effective exchange rate (via export price competitiveness) is prevalent. To this add the smaller contributions from the wealth and balance sheet effect and the gaps of real interest rates on leu-denominated loans and deposits.

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

1.4. Risks associated with the projection

The balance of risks to the annual CPI inflation rate projection is assessed as being tilted to the downside compared to the path in the baseline scenario (Chart 4.11), with potential risks stemming from both the domestic and external sources.

On the domestic front, in the context of the busy electoral schedule during the interval under review and given the expiry of agreements Romania concluded with the international institutions in the economic field, the consistent implementation of an adequate macroeconomic policy mix necessary for speeding up structural reforms and achieving sustainable economic growth remains a reason for concern.



Source: NIS, NBR calculations and projections

The expected significant increase in the fiscal deficit in 2016 compared to 2015, following the implementation of the set of fiscal measures provided for by the Tax Code, creates specific uncertainties associated also with its financing. Thus, the implications that the public sector wage hikes implemented at the end of last year or other possible future pay rises might have on the future configuration of the fiscal parameters remain a cause for concern. Furthermore, the possible demonstration effects of these hikes on private sector wage dynamics could increase the recent mismatch between pay rises economywide and labour productivity gains and thus generate stronger inflationary pressures than those anticipated in the baseline scenario. These risks become more relevant should structural reforms and public investment be deferred or should EU funds be insufficiently capitalised upon, triggering unfavourable effects on the growth potential and competitiveness of the Romanian economy. An additional source of risks to the projected inflation, which has already emerged in the course of the previous months, is the implementation of the Law on debt discharge and, in the context of the quarterly projection, the inherent uncertainty⁷¹ surrounding the assessment of its influence on the domestic macroeconomic environment.

⁷¹ Stemming from the novelty of the law, which makes assessments impossible to substantiate by drawing on similar historical episodes.

The external environment continues to pose further significant risks to the CPI inflation path in the baseline scenario, with the following being relevant: the uncertainty surrounding the effects generated by the diverging monetary policy stances of the world's major central banks; the economic prospects for euro area countries and major emerging economies, especially China; the possible exit of the United Kingdom from the European Union; the management of the Greek sovereign debt over the long term. In the event of scenarios related to these sources of risks materialising, the Romanian economy could be negatively affected mostly via indirect channels, through the impact of such developments on external demand from the EU, Romania's main trading partner. At the same time, the adverse consequences on investor confidence might lead to portfolio shifts regionally and/or globally and, implicitly, to leu exchange rate swings with unpredictable consequences, particularly in case of a deterioration of domestic macroeconomic fundamentals. For these reasons, it is necessary to maintain and strengthen the progress achieved over the last years in rooting out major macroeconomic imbalances and improving the domestic economy's resilience to shocks, by adequately implementing consistent macroeconomic policies.

Lacking any clear indications from the authorities relative to the scale and timing of future adjustments in end-user natural gas and electricity prices, the balance of risks is tilted to the downside, given the possibility that these categories of prices may be in the future subject to cuts similar to those recently implemented. Domestic food price developments are surrounded by inherent uncertainties arising from weather conditions which carry the potential to influence the agricultural produce supply in both ways.

The balance of risks induced by the future path of the international commodity and energy prices to the inflation outlook is seen to be tilted to the downside, considering the subdued inflation these categories of goods have witnessed worldwide, which may persist in the future amid sluggish global demand. At the same time, depending on the direction and magnitude of the reconfiguration of the future monetary policy stances pursued by the world's major central banks, the EUR/USD exchange rate developments could have unforeseen effects on the USD/RON exchange rate and, hence, on the oil price expressed in domestic currency.

2. Policy assessment

The annual inflation rate resumed its decline in January 2016 and then moved again increasingly deeper into negative territory, to -3 percent⁷² in March – the same as forecasted⁷³, thus hitting a new historical low in the post-1990 period. Amid a slightly lower-than-expected pass-through of the standard VAT rate cut⁷⁴, the decline reflected also the effects exerted by the fall in the annual dynamics of volatile prices and those of administered prices, as well as by the deceleration of inflation in the euro area, partly counterbalanced by the opposing influences arising from the narrowing of the negative output gap. Affected to a larger extent by the latter, the annual core inflation rate saw a considerably lower decrease, falling to -3.9 percent from -3.1 percent in December 2015. At the same time, net of the one-off impact of the cut in the standard VAT rate, the annual adjusted CORE2 inflation rate went up marginally (to 1.3 percent, from 1.2 percent in December 2015), whereas the annual headline inflation went down from 1.9 percent to 1.2 percent, when recalculated in a similar manner.

In the context of updating some of its major assumptions, based on the latest developments and information, the new forecast of medium-term macroeconomic developments reconfirms the divergence between the anticipated short-term inflation rate evolution and its longer-term outlook, amid a broad-based downward revision of the forecasted annual inflation rate path, particularly on the medium-term segment of the projection horizon.

⁷² From -0.93 percent at end-2015.

⁷³ The February 2016 Inflation Report.

⁷⁴ Starting 1 January 2016, the standard VAT rate was cut from 24 percent to 20 percent.

The new projection sees the slightly upward path that the forecasted annual inflation rate enters in Q2 extending its stay in negative territory beyond mid-2016 and remaining comfortably below the lower bound of the variation band of the flat target until December 2016 and thus below the previously-projected level (0.6 percent, compared to 1.4 percent). At the beginning of 2017, once the transitory impact of the first round of the standard VAT rate cut has faded out, the annual inflation rate posts a large upward correction, returning inside the variation band of the target – albeit below the previously-forecasted levels - before exceeding the mid-point of the target in December (2.7 percent⁷⁵, compared with 3.4 percent in the previous projection); furthermore, following the new upward adjustment in 2018 Q1 – stemming from the dissipating influence of the additional indirect tax cuts⁷⁶ and from the base effects associated with the previous fuel price developments -, the forecasted path of the annual inflation rate reaches a level of 3.3 percent at the end of the projection horizon. In line with the updated developments, the average annual inflation rate is expected to fall to -1.0 percent (from -0.7 percent) and to 2.2 percent (from 3.1 percent) in 2016 and 2017 respectively.

Underlying the divergence in the forecasted annual inflation rate path are the inflationary pressures anticipated to emerge from the reversal of the cyclical position of the economy in the second half of 2016 – only slightly later than previously forecasted⁷⁷ –, as well as from the upward readjustment of inflation expectations and the sustained increase in unit wage costs, having as major premises and assumptions: (i) the recent and expected easing of the fiscal and income policy stances; (ii) the further hike in the economy-wide gross minimum wage in 2016; (iii) the rise in the household real disposable income also following the successive indirect tax cuts and the persistently

low oil price and (iv) the preservation of the stimulative real monetary conditions and the consolidation of lending. The pressures stemming from fundamentals become gradually visible, as the transitory effects of the indirect tax cuts made in 2015 and 2016 fade away.

Under the circumstances, the lower projected trajectory of the annual inflation rate owes primarily to the downward revision of the expected administered price and import price dynamics, as well as to the relatively slower increase, compared to the previous projection, in the forecasted excess demand subsequent to the closing of the negative output gap, also as a result of the entry into force of the Law on debt discharge and of the worsening economic growth outlook for the euro area/the EU. Against this background, although posting relatively lower levels, the upward trend that the forecasted annual adjusted CORE2 inflation rate enters starting in June 2016⁷⁸ reaches 3.4 percent in December 2017 (4.3 percent in the previous forecast), and 3.7 percent at the end of the projection horizon.

The characteristics of the new macroeconomic forecast, as well as the heightened uncertainty affecting it, call for a prudent tailoring of the monetary policy stance with a view to ensuring price stability over the medium term, in a manner conducive to achieving sustainable economic growth, relatively consistent also with the monetary policy cycles of central banks in the region and the euro area. At the current juncture, the relevance of uncertainties derives from the increase in two-way risks to the inflation outlook posed by fundamentals - in terms of both their number and the difficulty to assess their likelihood -, also in the context of the electoral year and in the absence of agreements with the international financial institutions, and amid the persistence of high uncertainty regarding global economic growth and the economic recovery of the euro area.

⁷⁵ Recalculated net of the anticipated one-off impact of the standard VAT rate cut expected for the beginning of 2017, the forecasted annual inflation rate comes in at 2.9 percent, versus 3.7 percent in the previous projection.

⁷⁶ The new Tax Code sets forth the cut in the standard VAT rate to 19 percent and the removal of the special excise duty on fuels, as of 1 January 2017.

⁷⁷ The previous projection anticipated the reversal of the cyclical position of the economy in 2016 H1.

⁷⁸ Once the direct effects of broadening the scope of the reduced VAT rate to all food items, non-alcoholic beverages and public food services as of 1 June 2015 have faded out.

From this standpoint, particular reasons for concern for the central bank are further the risks stemming from the recent/potential measures aimed at increasing the incomes of some categories of households, including social benefits, and especially from the configuration and implementation uncertain for the time being - of the future wage law for the public sector that could augment the fiscal policy easing and generate demonstration effects on private sector wages through the size of public sector wage hikes. The relevance of these risks is enhanced by the sluggishness in the sustainable recovery of public investment and in structural reforms, as well as by a foreseeable weaker absorption of EU funds at the start of the multiannual financial framework, carrying the potential to have a lasting impact on the growth potential and competitiveness of the Romanian economy.

The inflationary potential of such a context stems primarily from a possible additional increase in the positive output gap over the medium term, as well as in the mismatch between pay rises and labour productivity gains, and hence in companies' unit costs. To these may add a larger widening of the current account deficit – including on account of the faster rise in imports of consumer goods –, and implicitly a deterioration of foreign investors' perception of the outlook for the Romanian economy and financial market, entailing adverse consequences on the sovereign risk premium, the foreign financing costs and the behaviour of the leu exchange rate.

However, the probability that some of these risks may materialise is diminished especially in the longer run by the constraints to the future fiscal policy conduct emerging from the present EU fiscal governance framework, as well as from Romania's commitments to comply with the requirements of the Stability and Growth Pact and of other fiscal rules over the medium-term, together with the significant easing already seen by the public deficit target for this year. At the same time, the possibility is not ruled out for the aggregate demand dynamics to be more severely affected by the contractionary effects stemming from the Law on debt discharge, as well as from other legislative initiatives designed to regulate the banking and financial areas through a retroactive intervention on the contracts concluded by banks and clients, should these initiatives be passed.

The external environment continues to be a source of mostly disinflationary risks, owing to the persistence of elevated uncertainties about the global economic growth and the euro area's economic recovery, fuelled primarily by the economic weakness of China and other major emerging economies, the geopolitical tensions, the situation of Greece, as well as by the risk posed by the exit of the United Kingdom from the European Union. The persistence/worsening of the related developments could affect the behaviour of domestic inflation primarily through import prices, as well as through the effects exerted on the cyclical position of the economy⁷⁹ by the likely slackening, against this background, of the economic growth in the euro area/the EU and, possibly, worldwide. At the same time, however, through their influences on the global risk appetite and the relative attractiveness of investments on various financial markets, these factors might trigger considerable portfolio shifts worldwide/across the region in the short term or occasionally, and implicitly fluctuations with an inflationary impact in the leu exchange rate, particularly in case of a deterioration of domestic fundamentals.

Uncertainties continue to surround also the future developments in the international oil price and in other commodity prices, with potentially divergent effects on the national economy and inflation, especially on different time horizons. Their relatively sluggish increase, alongside a possibly weakerthan-expected appreciation of the US dollar against the euro could amplify the direct and indirect disinflationary influence of supply-side factors in the short run, as well as spur both domestic demand – through the increase in household real disposable income and the corporate profit –, and external demand for Romanian products in the longer run. A higher-than-expected rise in the external

⁷⁹ Mainly through the foreign trade, financial and confidence channels.

component of aggregate demand could also stem from a more vigorous recovery of the European economies amid the monetary policy measures implemented by the ECB and the depreciation of the euro against the US dollar.

Considering the diverging nature of the projected path of the annual inflation rate and its major determinants, as well as the accompanying risks induced by the potential fiscal and income policy stance, the changes to financial legislation, and by the uncertainty about global economic growth and the recovery of the euro area economy, the Board of the National Bank of Romania decided, in its 5 May 2016 meeting, to keep unchanged the monetary policy rate at 1.75 percent per annum. Moreover, the Board decided to further pursue adequate liquidity management in the banking system and to maintain the existing levels of minimum reserve requirement ratios on both leu- and foreign currency-denominated liabilities of credit institutions.

Abbreviations

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

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