NATIONAL BANK OF ROMANIA

Inflation Report

November 2024

Year XX, No. 78

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N O T E S

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* provides the National Bank of Romania's quarterly projection on inflation over an eight-quarter horizon, including the associated uncertainties and risks, and an assessment of 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 8 November 2024 and the cut-off date for the data underlying the macroeconomic projection was 29 October 2024.

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

Contents

Summary

Developments in inflation and its determinants

The annual CPI inflation rate went down to 4.62 percent at the end of 2024 Q3, i.e. 0.32 percentage points below the June level. Behind the downward path stood the mainly exogenous components of the consumer basket, amid some favourable statistical effects, but also benign oil market developments. Conversely, factors such as the severe drought or some incidental problems affecting the regional electricity market, alongside fast wage dynamics that fuel cost pressures, led to a slower disinflationary process. The slowdown was particularly visible in core inflation, with the annual rate of the indicator standing at 5.6 percent in September versus 5.7 percent three months before. The average annual inflation rate remained on a downward trend in Q3, with the indicator calculated based on the national methodology (CPI) falling to 6.1 percent and the indicator calculated in accordance with the harmonised structure (HICP) going down to 6.4 percent. Thus, during Q3 the correction was approximately 1 percentage point for each indicator. However, the differential against the EU average came in at 3.6 percentage points, only 0.1 percentage points lower than at the end of the previous quarter, reflecting further a slightly slower disinflation in Romania.

After rising to 5.8 percent in August, the annual adjusted CORE2 inflation rate resumed its decrease in September, when it stood at 5.6 percent. Thus, for the quarter as a whole, the indicator recorded a modest decline of only 0.1 percentage points. Q3 witnessed divergent developments in core inflation sub-components, with visible decelerations in the annual inflation rate of non-food and services, whereas the annual pace of increase of food prices recorded a slight re-acceleration. However, the differential between the levels of the three sub-components has remained significant. While the annual growth rates of non-food and services prices have continued to be close to or even exceed 7 percent, that of food prices, i.e. 3.4 percent, stayed inside the variation band of the target in September. For services and non-food sub-components, this reflects still elevated wage inflationary pressures and only gradually abating pressures from import prices. At the same time, while economic agents' inflation expectations increased mildly in the past months, primarily over the short time horizon, pressures from excess aggregate demand eased amid the visible slowdown in economic activity in the first three quarters of the year.

The annual dynamics of unit labour costs economy-wide remain brisk from a historical perspective, although slightly decelerating to 19.5 percent in Q2 (-2.3 percentage points versus the previous quarter), mainly amid the slower pace of increase of compensation per employee (to 16.2 percent, -1.5 percentage points), as well as a more moderate decline in labour productivity (from -3.4 percent in the first three months of the year to -2.7 percent in Q2). Most economic sectors contributed to the slowing of the aggregate dynamics of unit labour costs, except for the public sector. In industry, the annual growth rate of unit wage costs accelerated to 17.6 percent July through August (from 15.8 percent in Q2), with wage dynamics remaining high (also amid the hike in the gross minimum wage in July), despite the annual contraction in the industrial output and the envisaged staff cuts.

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

In its meeting of 7 August 2024, the NBR Board decided to cut the monetary policy rate to 6.50 percent per annum from 6.75 percent per annum. The interest rates on standing facilities were also lowered, i.e. the deposit facility rate to 5.50 percent per annum and the lending (Lombard) facility rate to 7.50 percent per annum. The annual inflation rate continued to decline in June 2024, down to 4.94 percent, below the forecast, as a result of the decreases in core inflation and fuel price dynamics, which were partly counterbalanced, in terms of impact, by the increase in natural gas prices. In turn, the annual adjusted CORE2 inflation rate fell at a faster pace in Q2, also compared with the forecasts, down to 5.7 percent in June. Behind the deceleration stood, during this period as well, disinflationary base effects and downward corrections of commodity prices. Additional influences stemmed from the decreasing dynamics of import prices and the short-term inflation expectations resuming a slight downward trend. A moderate opposite impact had the hikes in unit labour costs recorded in the first months of 2024, which were passed through, at least in part, into some consumer prices, *inter alia* amid a robust demand for goods.

Heightened uncertainties and risks stemmed from the fiscal and income policy stance, given on one hand the budget execution in the first six months of the year, the public sector wage dynamics and the full impact of the new law on pensions, and on the other hand the fiscal and budgetary measures that could be implemented in the future to carry on budget consolidation, in the context of the *National Medium-Term Fiscal-Structural Plan*. Labour market conditions and wage dynamics in the economy also remained a source of sizeable uncertainties and risks. At the same time, significant uncertainties were associated with developments in energy and food prices, amid the legislative changes and the protracted drought this year, as well as with the future path of crude oil prices in view of geopolitical tensions. Uncertainties and risks to the outlook for economic activity, implicitly the medium-term inflation developments, also continued to arise from the war in Ukraine and the Middle East conflict, as well as from the economic performance in Europe. Furthermore, the absorption of EU funds, especially those under the Next Generation EU programme, is conditional on fulfilling strict milestones and targets. However, this is essential for carrying out the necessary structural reforms, energy transition included, as well as for counterbalancing, at least in part, the contractionary impact exerted by geopolitical conflicts. The ECB's and the Fed's monetary policy decisions, as well as the stance of central banks in the region, were also relevant.

Subsequently, the annual inflation rate went up to 5.42 percent in July, from 4.94 percent in June, and then fell to 5.10 percent in August. The advance from end-H1 owed to the faster rise in food and energy prices amid the severe drought and the pick-up in the distribution tariffs for natural gas, which outweighed the impact of the new decreases in the dynamics of administered prices and fuel prices, under the influence of base effects and the fall in crude oil prices. At the same time, the annual adjusted CORE2 inflation rate saw a halt in its downward trend, climbing to 5.8 percent in August from 5.7 percent in June. This was attributable to an unfavourable statistical effect in the processed food segment and to the hike in some agri-food commodity prices, as well as to higher wage costs passed through, at least in part, into some consumer prices, *inter alia* amid still high short-term inflation expectations and a robust demand for goods. These factors were largely offset by the disinflationary base effects in non-food sub-components and by the decrease in import price dynamics. In turn, in 2024 Q2 the economic activity posted a slower pace of increase compared to the expectations in the previous *Report*, probably reflecting a further narrowing of excess aggregate demand over this period, contrary to forecasts. Annual GDP growth stepped up however in 2024 Q2, to 0.9 percent from 0.5 percent in the previous quarter, mainly as a result of the surge in the annual dynamics of household consumption. At the same time, the growth rate of gross fixed capital formation remained robust, although it continued to slow down compared to the prior quarter. By contrast, net exports exerted a markedly larger contractionary influence, given that the volume of imports of goods and services recorded a faster increase, while the volume of exports continued to decline in annual terms. Consequently, the trade deficit and the current account deficit reported significantly faster dynamics, spurred in the latter case by the moderation of the favourable developments coming from the secondary income balance, reflecting the inflows of EU funds to the current account.

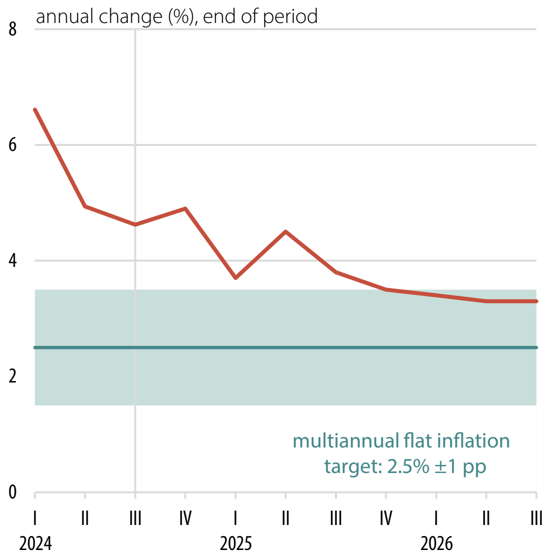
At the time of the NBR Board meeting of 4 October 2024, the latest assessments showed that the annual inflation rate would decline until end-2024 on a fluctuating and higher path than that shown in the August 2024 medium-term forecast. The decrease would result primarily from base effects and the deceleration in import price growth, whereas in the opposite direction would continue to act this year's unfavourable weather conditions and the increase in some commodity prices, mainly via the effects exerted on food and energy price dynamics. The previously identified risk and uncertainty factors remained relevant.

Based on the data and assessments available at that time, as well as in light of the elevated uncertainty, the NBR Board decided in the meeting of 4 October 2024 to keep the monetary policy rate at 6.50 percent per annum. Moreover, it decided to leave unchanged the lending (Lombard) facility rate at 7.50 percent per annum and the deposit facility rate at 5.50 percent per annum. Furthermore, the NBR Board decided to keep the existing levels of minimum reserve requirement ratios on both leu- and foreign currency-denominated liabilities of credit institutions.

Inflation outlook

Global economic activity continues to recover from multiple supply-side shocks in recent years, yet the growth rate stabilised at a rather low level. Nevertheless, developments by region were mixed – for instance, while domestic demand remained robust in the US, advanced economies in Europe face a slowdown in industrial output and high indebtedness. Additionally, economic growth is still relatively unevenly distributed across sectors, being affected in a differentiated manner by the tight financial

Inflation forecast



Source: NIS, NBR projection

conditions and significant geopolitical uncertainties. At the same time, global inflation stayed on a downward trend, benefiting from well-anchored expectations and adequate monetary policy calibration. In Europe, however, the convergence of inflation towards the target will be gradual, amid persistent supply chain disruptions and geopolitical tensions, such as the conflicts in Ukraine and the Middle East. Moreover, this convergence will be differentiated: while goods prices largely stabilised, services inflation is still elevated, especially in sectors facing labour shortages and, against this background, high wage pressures.

In Central and East European economies, Romania included, inflation dynamics were influenced by both global factors and local policies. In particular, Romania is in urgent need of fiscal consolidation to avoid the deepening of macroeconomic imbalances, especially in light of the official excessive deficit procedure. Structural reforms and a credible fiscal adjustment are of the essence to achieve a sustainable budget deficit and improve medium-term growth prospects. This would also minimise the risks of a potential volatility of capital flows in our economy, which could have an adverse effect on price developments as well. For all these reasons, a cautious approach to managing economic policies is critical to ensure sustainable economic recovery and to achieve the inflation target in the medium term.

In the first part of this year, economic activity in Romania slowed down significantly, posting annual dynamics of only 0.9 percent in Q2 (after 0.5 percent in Q1), compared with an average annual growth rate of 2.4 percent in 2023 as a whole. Looking at components, however, this performance was marked by wide divergences. Specifically, the strongly positive contribution to economic growth chiefly from household consumption and, to a lower extent, from gross fixed capital formation was almost fully offset by the unfavourable developments in net exports and the change in inventories. This reflects a very loose income policy on the part of the authorities this year, on the one hand, and a series of persistent structural problems of the Romanian economy, implying short domestic supply versus solvent demand, on the other hand. Hence, during the period under review, the bulk of domestic demand continued to be accommodated by imports; against this background, the positive output gap as well stayed on the downward trend followed also in 2023 and is seen reaching over the next two quarters similar and even slightly lower values compared to those estimated in the previous *Report*. The baseline scenario was built strictly based on information that was certain by the time of its completion. Under these circumstances, although a fiscal correction from 2025 onwards is envisaged by the authorities as well, the lack of concrete details on the package of measures to be applied prevented the introduction of this assumption into the baseline scenario. Thus, in the absence of a countercyclical fiscal policy over the next two years, the output gap will remain in positive territory.

In the first two quarters of 2024, gross fixed capital formation reported a significant slowdown from 2023 levels. Behind this deceleration stood primarily the weaker-than-expected developments in construction, as well as in industry and services to businesses, which make up large shares of gross value added in the economy. Another contributing factor to the path of gross fixed capital formation was that EU funds under the 2014-2020 financial framework were nearly used up, with an absorption rate of more than 90 percent already reached in mid-2024. This also reflected in the dynamics of public investment, mainly funded from own and borrowed sources (including NRRP loans) and, to a much lower extent, from EU funds in the form of grants, which have a neutral impact on the budget deficit. Furthermore, even though the Romanian authorities collected approximately EUR 9.4 billion from NRRP funds since the beginning of the programme, their actual use in the financing of investment programmes was rather modest at an estimated 50 percent of the total figure based on budget execution data. By contrast, foreign direct investment (FDI) remained a large funding source, yet its amount, although still substantially higher than in the pre-pandemic period, does not exceed that recorded in the similar year-ago period.

Conversely, private consumption displayed higher-than-expected quarterly and annual growth rates in 2024 H1, being envisaged to become again the main driver of economic growth in the year as a whole. Its marked boost mirrored, subsequent to the signals already visible last year, the further strengthening of households' purchasing power. Behind this stood the ongoing disinflation, the effects generated by a further relatively tight labour market, as well as the substantial contribution from public sector wage policies, from increases in the minimum wage and social transfers (pensions in particular). Even though the anticipated increase in real income will render households' consumption expenditure more flexible, looking ahead, it is essential to rebalance as fast as possible wage growth, which is already extremely strong, with productivity dynamics, as well as the solvent domestic demand with the productive capacity of the economy. Only the compliance with these correlations will allow the gradual return of inflation towards the target over the medium term, but also the preclusion of further external competitiveness losses of the economy.

After the current account deficit-to-GDP ratio narrowed by 2.2 percentage points in 2023 from the year before, statistical data indicate a new widening of the external deficit this year, with a set of less favourable contributions from most sub-components, but especially from the trade balance. Looking at the dynamics, even though recent developments in this indicator may partly be associated with incidental factors – such as, for instance, this year's more significant rises in households' purchasing power, impacting the volume of imports as well –, quantitative assessments point to the prevalence of structural causes for the external deficit. Noteworthy in this sense are both the worsening of some issues linked to the external competitiveness of Romanian products and the considerably larger payments associated with accommodating the government's financing requirements (e.g., payments related to portfolio investment). All these developments overlap a visible decline in stable external financing sources, particularly non-repayable EU funds. Obviously, the resumption of the current account deficit correction as soon as possible is conditional on a sizeable adjustment of the budget deficit, as well as on a rebound in the EU trading partners' economic activity, yet the progress made so far in both cases is insufficient.

According to the updated baseline scenario, after standing at 4.6 percent in September 2024, the annual CPI inflation rate will follow a mostly downward path, yet the pace of disinflation is expected to slow both in 2024 and especially in 2025 and 2026. In addition, until 2025 Q2, the path of the annual CPI inflation rate will be marked by some two-way swings, mainly driven by base effects. For example, the indicator will see a slight pick-up in the latter part of this year (following base effects from lower fuel prices October through December 2023) and declines early next year, as the VAT and excise duty hikes in January 2024 drop out of the calculation. Starting in 2025 Q3, the inflation rate will run below 4 percent, falling to 3.5 percent in December 2025 and in 2026 Q1 it will re-enter and then remain inside the variation band of the target (3.3 percent in both July and September 2026). For end-2024, the inflation forecast was revised upwards to 4.9 percent, given the more unfavourable developments and prospects for food items, VFE in particular, following adverse weather conditions (protracted drought), also with an impact on processed food items in the adjusted CORE2 index. Moreover, stronger-than-previously-projected pressures stemmed from faster wage dynamics in the economy and, implicitly, higher labour costs, affecting particularly prices of services, a labour-intensive component.

The above-mentioned developments resulted in the upward revision of the annual adjusted CORE2 inflation rate as well, somewhat heftier for December 2024 (5.1 percent from 4.6 percent in the prior forecast) and only moderate over the medium term (3.5 percent in December 2025 versus 3.4 percent previously). However, the adjusted CORE2 index will remain the main driver of the projected decline in the annual headline inflation rate over the next eight quarters. Unlike the CPI index, affected by the influence of exogenous components of the basket, the annual adjusted CORE2 inflation rate will follow a steadily downward path, supported by the correction of inflation expectations and the gradual waning of pressures from import prices. At the same time, as the positive output gap has already almost closed this year, its contribution to the dynamics of core inflation will narrow accordingly. In the opposite direction, wage growth economy-wide will stay high, slowly losing momentum over the projection interval, amid structural weaknesses in the labour market. The breakdown shows that the dynamics are anticipated to accelerate in 2024 versus 2023 for public sector wages and to decelerate slightly for the average net wage in the private sector (albeit at annual rates still above 10 percent this year as well). A relevant indicator of the annual CPI inflation rate is that calculated at constant taxes by removing the increases in excise duties and VAT rate introduced by the authorities. This would mean considerably lower annual inflation rates, especially for end-2024 (4 percent against 4.9 percent), while in 2025 the indicator would re-enter the variation band of the target at year-end (3.3 percent in December).

The NBR's recent monetary policy stance aimed to bring the annual inflation rate back in line with the 2.5 percent ±1 percentage point flat target on a lasting basis, *inter alia* via the anchoring of inflation expectations over the medium term, in a manner conducive to achieving sustainable economic growth.

Since the past *Inflation Report*, a number of risk factors from those identified have materialised, in particular those associated with a relative heightening of geopolitical tensions in the Middle East. On the domestic front, the rising value (and significantly higher than the initial target) of this year's budget deficit was confirmed following the September budget revision, while the influence of weather conditions on agricultural crops proved more unfavourable. Even in these circumstances, the assessed balance of risks suggests possible upside deviations of inflation from its path in the baseline scenario, particularly should new adverse supply-side shocks materialise.

The features of the labour market in Romania, with a still relatively high tightness, continue to pose a major risk to the inflation projection. The swift wage growth, fuelled by the successive increases in the minimum wage and by the significant pay rises in the public sector, entails the risk of persistent inflationary pressures, passed through via demonstration effects to the private sector as well and possibly compounded additionally in the sectors facing a more pronounced labour shortage. A detailed analysis in the *Report* indicates that, in the future, private non-financial corporations might absorb into profit margins part of the pay rises granted to their employees, *inter alia* amid the envisaged contraction of excess aggregate demand in the economy. Nevertheless, a correction of the extremely high wage dynamics in the public sector is absolutely crucial both for carrying out the budget adjustment in the period ahead and for enabling, via the demonstration effect, the realignment of labour cost dynamics to productivity growth.

In this vein, the macroeconomic policy mix should pursue an effective control and a rebalancing among the various components of domestic demand, currently dominated by the buoyancy of consumer demand. Therefore, it is of the essence particularly to start correcting the excessive budget deficit and hence to calibrate a countercyclical fiscal policy, but which should include *inter alia* the implementation of structural reforms, especially those aimed at supporting government revenue growth and, at the same time, ensuring a cut in public expenditures. By the time the baseline scenario of the projection was completed, the authorities had not explicitly announced either the dosage or the nature of the fiscal measures that could be adopted as of 2025, although a government-approved version of the *National Medium-Term Fiscal-Structural Plan* indicated a budget adjustment path over a seven-year period as highly likely. Achieving the correction over a long time horizon implies, *ceteris paribus*, that the average annual fiscal consolidation effort would diminish accordingly, whereas numerous international bodies recommend that the national fiscal space be swiftly restored to safeguard long-term stability in a complex global economic environment. Looking ahead, in the case of Romania, the budget deficit adjustment is strongly called for so that Romania should comply with its commitments to the European Commission and ensure a balanced mix between the fiscal policy stance and the monetary policy stance over the medium term.

Risks stemming from external developments are a major source of uncertainty when assessing the inflation outlook and the NBR closely monitors their impact on the economy. Geopolitical tensions, in particular the prospects for a potential escalation of tensions in the Middle East, but also the lingering war in Ukraine, may add to the volatility of energy prices, impacting the inflation rate directly through higher production and transport costs. In addition, climate change amplifies the frequency of extreme weather events, which puts lasting strains on critical markets, such as the energy and food markets. Moreover, via their effects on supply chains, both geopolitical tensions and extreme weather events can heighten inflation volatility in the EU and, implicitly, in Romania as well, calling for a prudent approach *inter alia* to economic policy formulation.

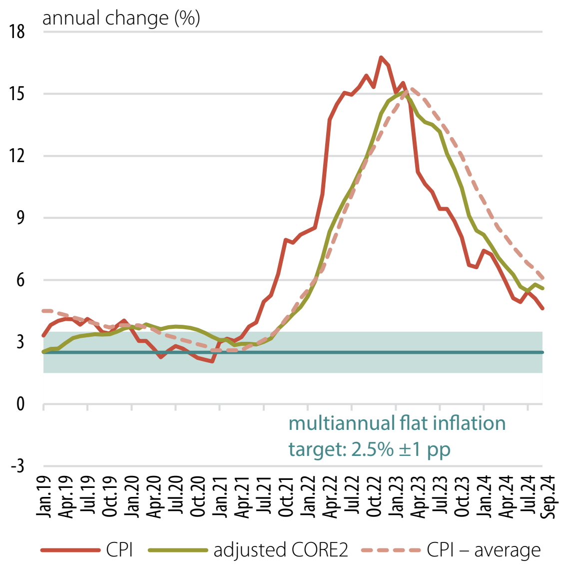
Monetary policy decision

Given the prospects for the annual inflation rate to pick up slightly in the closing months of 2024 and to stay above the variation band of the target and at higher values than previously anticipated until end-2025, and considering the associated risks and uncertainties, the NBR Board decided in its meeting of 8 November 2024 to keep the monetary policy rate at 6.50 percent. Moreover, it decided to leave unchanged the lending (Lombard) facility rate at 7.50 percent and the deposit facility rate at 5.50 percent. Furthermore, the NBR Board decided to keep the existing levels of minimum reserve requirement ratios on both leu- and foreign currency-denominated liabilities of credit institutions.

1. Inflation developments

The annual CPI inflation rate fell to 4.62 percent at end-2024 Q3, down 0.32 percentage points from the level seen three months before. Behind the downward path stood mainly the exogenous components of the consumer basket, amid some favourable statistical effects, but also benign oil market developments. Nevertheless, factors such as the severe drought or some incidental problems affecting the regional electricity market, alongside fast wage dynamics that fuel cost pressures, led to a slower disinflationary process. Against this background, core inflation saw a modest decline, standing at 5.6 percent in September versus 5.7 percent in June (Chart 1.1).

Chart 1.1. Inflation developments



Source: NIS, NBR

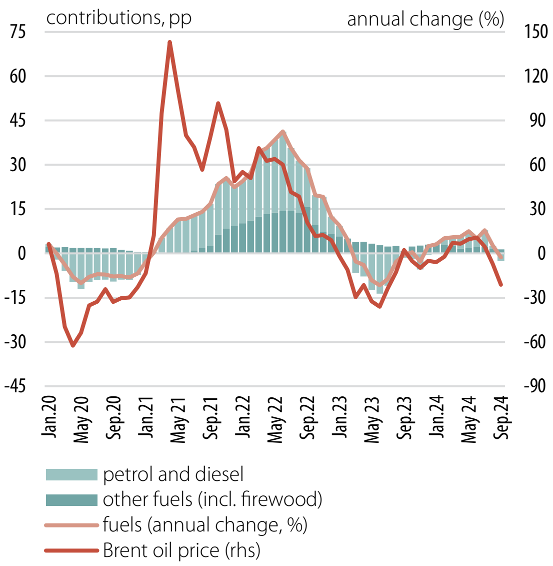
Administered prices[1] were one of the main contributors to CPI deceleration, as a result of a strong base effect associated with the August 2023 hike in medicine prices (monthly increase of over 20 percent amid the update in the National Catalogue of Prices of Prescription Medicinal Products for Human Use).

Disinflation was equally bolstered by fuel prices. After the short-lived rise in July, driven by the second stage of the increase in the motor fuel excise duty, the prices of petrol and diesel decreased in August and September, the annual inflation rate for fuels entering negative territory in the latter month, i.e. -1.3 percent. The path was attributable to the slide in the Brent oil price from approximately USD 85/barrel in early July 2024 to close to USD 70/barrel at end-Q3, in a context marked by weak demand, particularly following the slowdown in China's economy, as well as by plentiful supply, underpinned by crude oil output in countries such as the US, Brazil and Canada (Chart 1.2).

Looking at energy prices, electricity and natural gas prices acted in the opposite direction, their negative annual rate of change decelerating slightly (to -6.3 percent). The return of final electricity prices in the upper consumption bracket towards the cap levels set by law, against the backdrop of high domestic wholesale electricity prices, made a decisive contribution herein. The latter prices were, in turn, driven by the drought and heat waves of the summer months, which fostered demand and constrained supply of hydropower, the market deficit being amplified by technical works at some power plants, as well as by certain deficiencies in the integrated European energy market.

[1] Excluding electricity and natural gas prices.

Chart 1.2. Crude oil and fuel prices

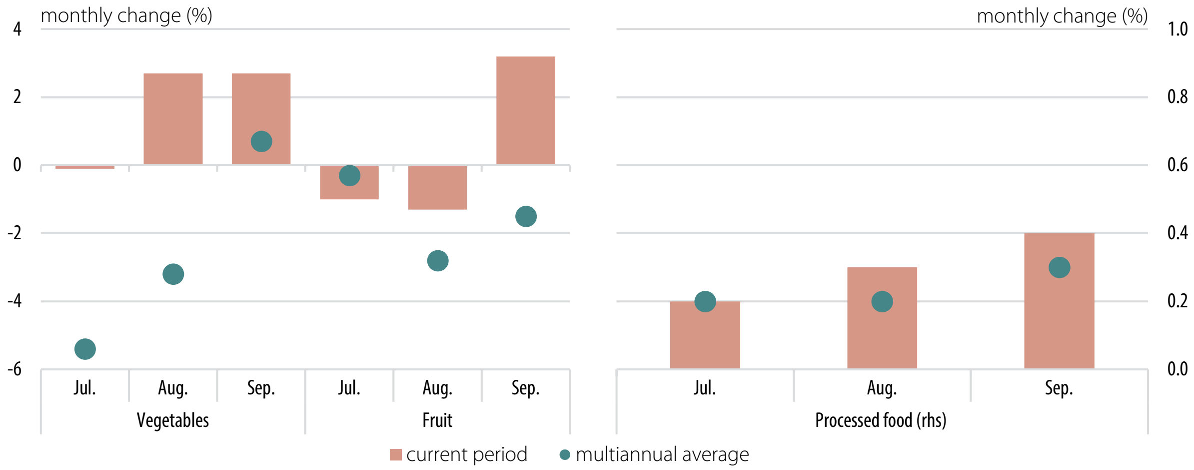


Source: NIS, Bloomberg, NBR calculations

In addition, extreme temperatures and the scarce rainfall in 2024 Q3 affected agricultural crops, the monthly growth rates of (both processed and volatile) food prices standing well above the corresponding multiannual averages (Chart 1.3).

Specifically, the annual dynamics of VFE prices (for vegetables, fruit, eggs) picked up to 10.0 percent in September (from -3.8 percent at end-2024 Q2), particularly on account of vegetables. The annual growth rate of processed food prices halted its downward trend, rising from 2.1 percent at the end of the previous quarter to 3.4 percent in September[2]. Although domestic industrial producer prices for food items reflect the impact of the severe drought only to a small extent for now, traders may have already incorporated the negative expectations on crops into final consumer prices or used this opportunity to pass through pressures from other types of costs. Thus, retailers have recently faced wage cost increases, mark-up caps, as well as costs associated with building the necessary framework for the collection of recyclable containers.

Chart 1.3. Food prices



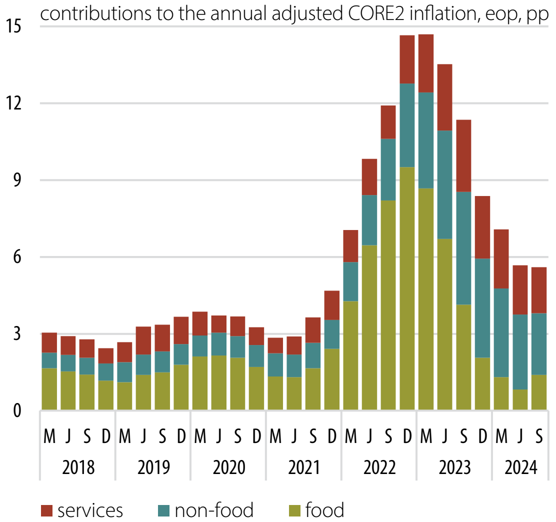
Note: The multiannual average is calculated as an arithmetic mean of the monthly changes recorded in the reviewed month, in each year from 2016 to 2023 (excluding the values for 2022, when monthly changes were outliers owing to the military conflict in Ukraine, and for August 2023, when price developments were impaired by the implementation of mark-up caps for some food items).

Source: NIS, NBR calculations

2 In addition to current developments, the annual rate of change of food prices was marked by an unfavourable statistical effect linked to the dropping out of the calculation of data for August 2023, when the measure to cap the mark-ups on some basic food products was introduced for a period of three months. At that time, the measure had a notable effect, in-house estimates suggesting that it led to a decrease by approximately 0.6 percentage points in the monthly CPI change. Subsequently however, the repeated extension of the mark-up capping scheme reflected in progressively weaker responses of retail companies, which eventually were no longer detectable. In addition, maintaining the measure for a longer period (17 months, until December 2024) seems to have had a negative impact on headline inflation, market signals indicating a pass-through of losses to the mark-ups on some products that were not subject to it.

The annual adjusted CORE2 inflation rate saw a modest decline, to 5.6 percent in September 2024, supported by the developments in prices of non-food items and market services (Chart 1.4). In the former case (where the annual growth rate of prices fell to 7 percent), imports cover a large share of final consumption, and inflationary pressures via this channel were moderate. On the one hand, euro area HICP inflation excluding energy – a proxy for imported inflation in Romania – recorded a slight adjustment in its annual rate of change (from 2.8 percent in June to 2.6 percent in September), which is indicative of a gradual dissipation of inflationary influences. On the other hand, the UVIs of the main categories of imported goods (3-month moving average) are broadly still below one, but they seem to have bottomed out, suggesting a favourable, yet progressively fading impact. Looking at market services, the annual pace of increase of prices decelerated to 7.4 percent, an important part thereto being played by the gradual weakening of demand in this segment over the past months. However, the core momentum measure (3-month annualised values of inflation) indicates that the disinflationary potential of non-food items and market services is limited, the fast dynamics of wages fuelling both cost pressures and consumption (Chart 1.5).

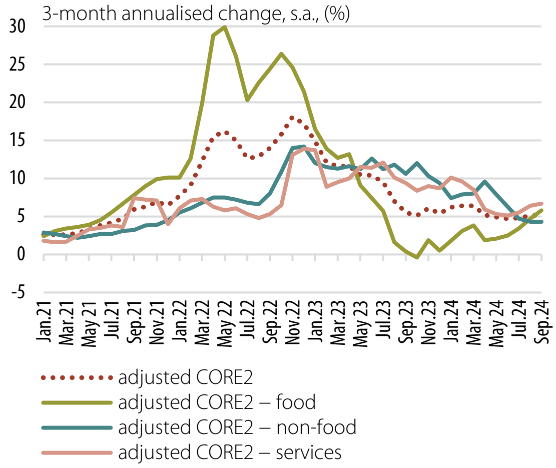
Chart 1.4. Adjusted CORE2 inflation components



Note: Contributions include VAT rate changes.

Source: NIS, NBR calculations

Chart 1.5. Developments in adjusted CORE2 inflation



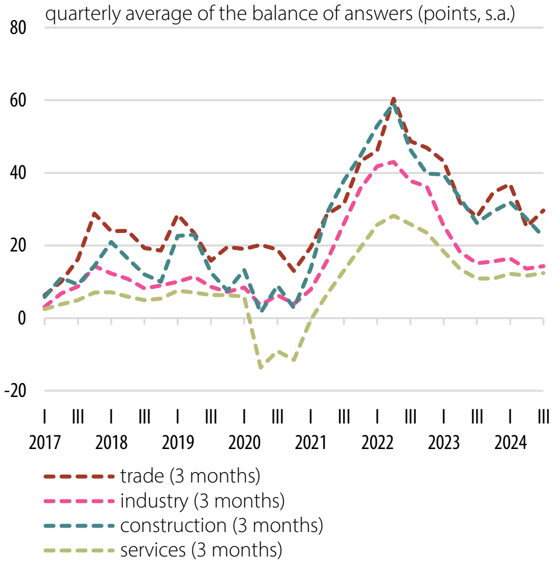
Note: The annualised rates were calculated using series that exclude the direct effects of VAT rate changes.

Source: NIS, NBR calculations

Mixed short-term expectations on price developments also contributed to the slowdown in disinflation in 2024 Q3 (Chart 1.6). On the one hand, in services and industry they remained at levels similar to those in Q2, whereas in construction they even eased[3]. On the other hand, trade companies adjusted upwards their expectations on price developments, given the rising costs they have lately faced. Nevertheless, financial analysts' expectations on the annual inflation rate over the one-year horizon remained on a downward path, standing close to the upper bound of the variation band of the target at end-Q3, while the two-year ahead indicator decreased marginally from the level seen at end-Q2, entering however the variation band of the target.

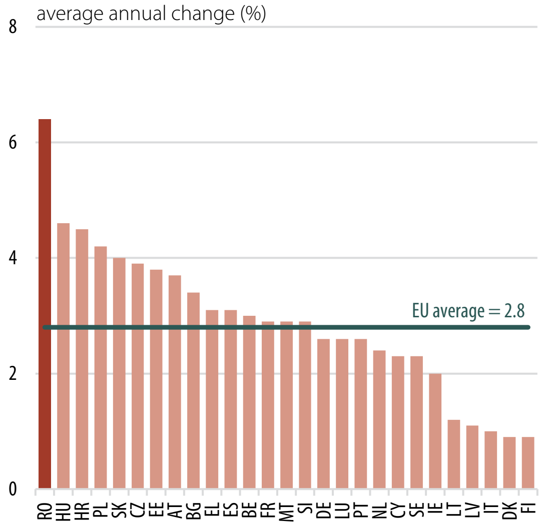
[3] Due possibly to the recent easing of pressures from costs of materials.

Chart 1.6. Expectations on price developments



Source: EC-DG ECFIN

Chart 1.7. Average annual HICP in the EU – Sep. 2024



Source: Eurostat

The average annual inflation rate was stuck to a downtrend: the indicator calculated based on the national methodology dropped to 6.1 percent, whereas that calculated in accordance with the HICP structure fell to 6.4 percent in September 2024 (-1.1 percentage points and -0.9 percentage points respectively compared to end-Q2). Nonetheless, Romania further reports the highest average annual HICP inflation rate among EU Member States, the gap to the EU average (3.6 percentage points in September) narrowing marginally from June (Chart 1.7).

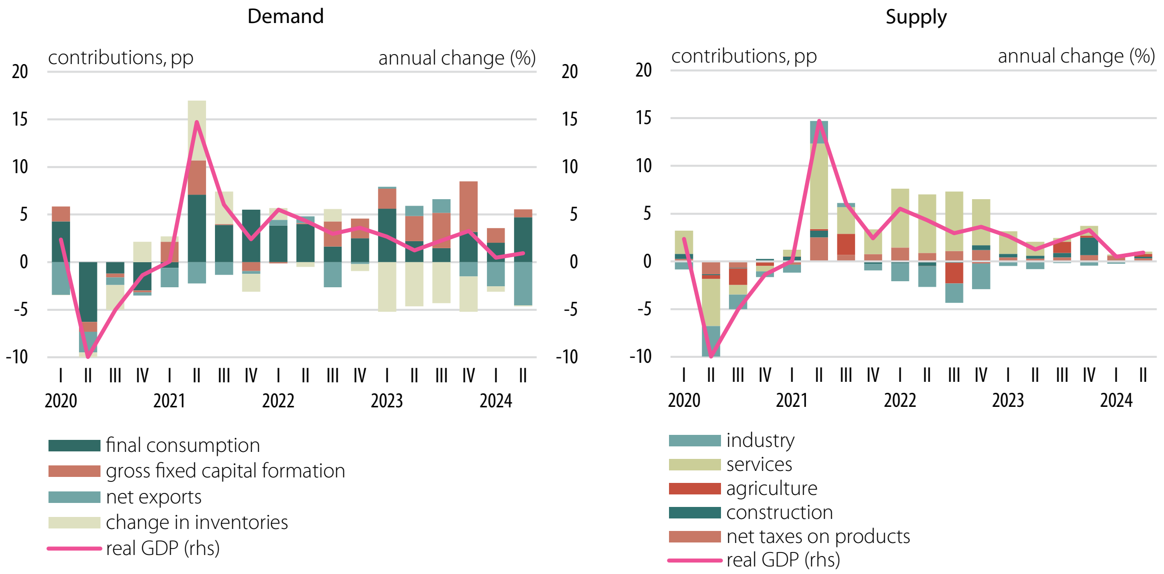
At end-2024 Q3, the actual annual CPI inflation rate stood 0.4 percentage points above the projection in the August 2024 *Inflation Report*, largely on account of developments in volatile food prices, as summer weather conditions had a stronger-than-expected adverse effect on crops. The main factor acting in the opposite direction was the decline in the Brent oil price to a lower-than-envisaged level, which underpinned the drop in motor fuel prices.

2. Economic developments

1. Demand and supply

In 2024 Q2, real GDP continued to rise at a moderate pace (0.9 percent, annual change[4]), supported by consumer demand, while investment lost momentum and net external demand made a larger negative contribution (Chart 2.1).

Chart 2.1. Contributions to economic growth



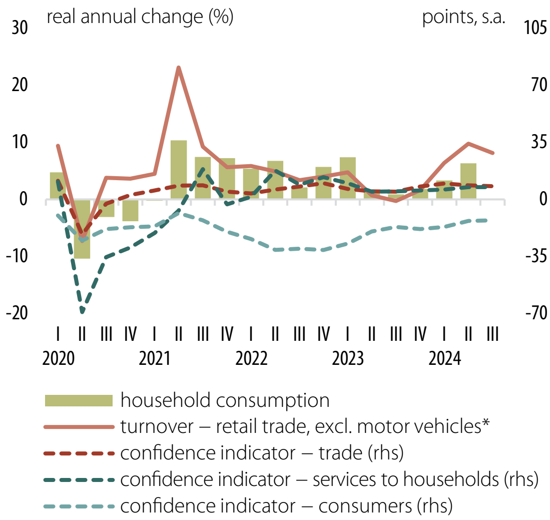
Source: NIS

Household consumption increased by 6.3 percent, amid continued rapid growth of household real income, along with a stronger interest in bank loans, fuelled by the gradual easing of financing conditions. At the same time, modern retail chains expanded further, particularly in the discount and convenience store segments. These categories benefited from the changes in household consumption behaviour in the post-pandemic inflationary environment, i.e. a downward adjustment in the quality of goods (downtrading) and an increase in purchasing frequency, along with a decrease in the quantities of goods purchased. Under these circumstances, the volume of goods purchases rose by 9.8 percent, a trend visible for both food (6.2 percent) and non-food items, with high rates recorded for do-it-yourself (DIY) products and home furnishings, as well as for wearing apparel and footwear. By contrast, sales of IT and

[4] In this section, the analysis of annual GDP dynamics relies on the volume series expressed in the prices of the corresponding quarter of the previous year.

telecommunications equipment declined by more than 10 percent for the second consecutive quarter, while the turnover volume of market services to households was 3.7 percent below that recorded in 2023 Q2.

Chart 2.2. Household consumption



*) Jul.-Aug. for the latest period

Source: NIS, EC-DG ECFIN, NBR calculations

In the near term, consumer demand will likely maintain its positive momentum, amid the continued stimulative developments in purchasing power and consumer credit. However, an acceleration in pace is seen as improbable, as indicated by the slight moderation in the DG ECFIN confidence indicators for trade companies and household services providers. Specifically, in 2024 Q3, their positive values fell by 0.5 points and 0.1 points, respectively, compared to the Q2 average (Chart 2.2). Actual data on developments in retail trade turnover in July-August 2024 overall confirm these expectations – the volume of goods purchases halted its quarterly increase, while automotive sales and receipts from market services further posted a modest performance.

In 2024 Q2, the general government budget execution led to a deficit of lei 27.8 billion (1.6 percent of GDP), almost twice as large as that posted in the same period of 2023 (lei 14.5 billion, i.e. 0.9 percent of GDP). Nevertheless, the deficit narrowed versus the previous quarter, when it atypically widened in quarterly terms[5]. The decline was attributable to the rise in budget revenues[6] – mainly on account of receipts from corporate income tax[7] and from non-tax revenues[8,9] –, which exceeded that in total budget expenditure[10], amid the increase in most current expenditure items, particularly staff costs[11,12], but also the decrease in capital expenditure[13].

5 In 2024 Q1, budget execution ended in a deficit of lei 35.9 billion (2.0 percent of GDP), higher than that in 2023 Q4 (lei 33.4 billion, accounting however for 2.1 percent of GDP).

6 The increase was lower, in terms of magnitude, than that in the same year-ago period, owing to the drop in disbursements from the EU, which had however a relatively small impact on the change in budget deficit. Against this background, the real annual growth rate of total budget revenues further slowed down, to 5.9 percent from 8.1 percent in the previous quarter.

7 These also included the additional receipts from the minimum turnover tax.

8 Also due to dividends distributed by state-owned enterprises.

9 Receipts from social security contributions, wage and personal income taxes and excise duties made lower contributions.

10 Its real annual pace of increase remained very high (13.6 percent, only marginally lower than that recorded in Q1, i.e. 14.6 percent).

11 Also as a result of the pay rises granted pursuant to GEO No. 19/2024. Against this background, the real annual growth rate of staff costs almost doubled as compared with the preceding quarter, reaching a new post-2019 high.

12 In the same direction worked the hikes in interest expenses, spending on goods and services, subsidies and other expenses, all of which posted positive and increasing real annual dynamics as compared with Q1, as well as in spending for projects financed from the lending component of the NRRP.

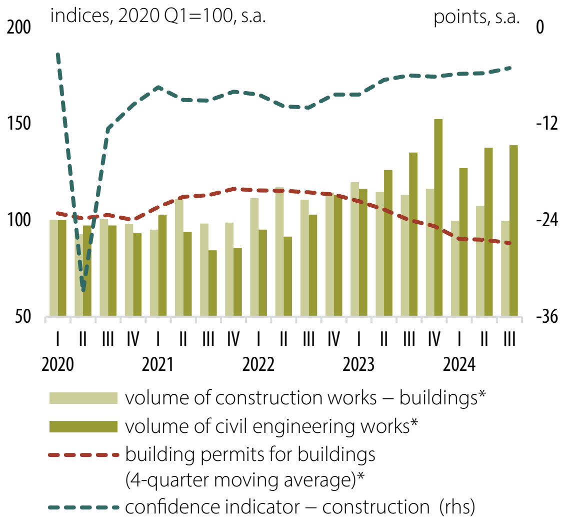
13 Nevertheless, in 2024 Q1, this expenditure was very elevated. In fact, in 2024 Q2 capital expenditure further recorded significantly faster real annual growth than total budget spending.

In 2024 Q3, budget execution further deteriorated, resulting in a deficit of lei 32.6 billion (1.8 percent of GDP) versus lei 19.2 billion (1.2 percent of GDP) in the same year-earlier period.

Under the circumstances, at the end of the January-September 2024 period, the general government deficit widened to lei 96.2 billion (5.4 percent of GDP), considerably exceeding that recorded in the first nine months of 2023, i.e. lei 56.5 billion (3.5 percent of GDP).

Gross fixed capital formation saw its annual growth rate decelerate to 3.2 percent, with both major components – investment in construction and purchases of machinery and equipment – experiencing a slowdown[14]. Its dynamics may be moderately positive in 2024 H2, with the picture of the main financing channels appearing rather bleak, characterised by the modest performance of companies' own resources (amid sluggish activity in industry and services), diminished FDI flows, and slow absorption of EU funds.

Chart 2.3. Construction



*) Jul.-Aug. for the latest period

Source: NIS, Eurostat, EC-DG ECFIN

The signal from the downturn in FDI, visible in the first eight months (with net inflows of equity and reinvestment of earnings[15] declining by approximately 21 percent year on year), aligns with the findings of AmCham Romania's latest survey[16], showing that investors' expectations for turnover and investment growth in 2024 have moderated compared to the previous year. The dampening of optimism is significantly driven by concerns over the fiscal consolidation package to be implemented in the coming years. At the same time, the effective use of EU funding allocated to Romania under the two multiannual financial frameworks fell short of expectations, with the structural and cohesion funds taken up in the first nine months amounting to just over one-third of the estimates for 2024[17]. Challenges also weigh on the use of funds allocated under the NRRP, both in terms of absorption (at the end of 2023, Romania was below the EU-27 average for EC disbursements and the fulfilment of milestones and targets[18], while January through October 2024 no major inflow of funds was recorded) and the limited administrative capacity to manage investment projects.

14 According to national accounts data on gross fixed capital formation (GFCF).

15 Estimated data in the latter case.

16 *2024 AmCham Romania Business Barometer* – AmCham Romania's Annual Survey on the Quality of the Investment Climate in Romania, 6th edition, conducted in April-May 2024.

17 Source: Ministry of Finance, *Developments in financial flows between Romania and the European Union as of 30 September 2024*.

18 According to *Special Report 13/2024: Absorption of Funds from the Recovery and Resilience Facility*, published by the European Court of Auditors, Romania received 21 percent of the allocated funding and fulfilled 14 percent of its milestones and targets (compared to the EU-27 average of 37 percent and 19 percent, respectively).

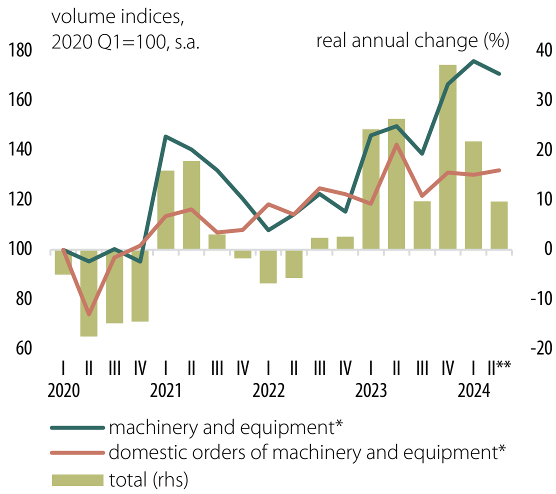
Investment in construction stood at a level similar to that of 2023 Q2, continuing to display diverging trends across its two segments – an expansion in civil engineering works (focused on public transport and utilities network projects) and a contraction in the construction of buildings, still impacted by adverse supply-side factors, particularly in the market for new residential projects (Chart 2.3). These constraints stem from the renewed increase in the costs of materials since the beginning of the year (albeit at a somewhat slowing pace more recently), from uncertainty related to the protraction of legislative issues regarding building permits, and from a shortage of skilled labour, driven in part by the high demand for workers for infrastructure projects. The dichotomous profile of construction investment is likely to persist in the short term. Thus, the positive dynamics in civil engineering works (possibly also spurred by the government starting to settle overdue invoices to contractors to move domestically-funded investments forward) are seen to be partly offset by the weakness of the residential buildings segment, where the useful floor area approved in building permits decreased by 18 percent from September 2023 to August 2024.

Purchases of machinery and equipment rose by approximately 12 percent in annual terms; however, quarterly growth rates this year were less than half of the 2023 Q1-Q4 average. The slower trend, coupled with persistently low capacity utilisation rates in industry and services (both standing below historical averages), and the quasi-stagnant portfolio of domestic orders to capital goods manufacturing sub-sectors (except for the automotive industry) in the first eight months of the year point to prospects for limited investment in 2024 (Chart 2.4).

In 2024 Q2, the negative contribution of net external demand to economic growth widened to -4.5 percentage points, as the volume of goods exports contracted slightly, while imports rose at a faster pace of 8.1 percent year on year (according to national accounts data). The trade imbalance will continue to weigh on GDP dynamics in the near future as well (Chart 2.5).

The main contributor to the increase in goods trade deficit (in volume terms) was the decline in the trade surplus of agri-food commodities, amid the fading positive effect ascribable to the relatively large crops in 2023. Additionally, as the outlook for this year's global agricultural output worsened in April-May, expectations of rising prices likely

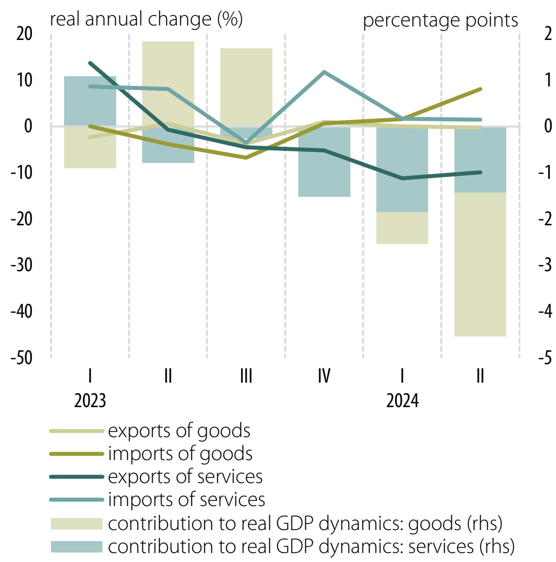
Chart 2.4. Investment, excluding construction



*) excl. transport equipment
**) Apr.-Aug. for domestic orders

Source: Eurostat, NIS, NBR calculations

Chart 2.5. Foreign trade



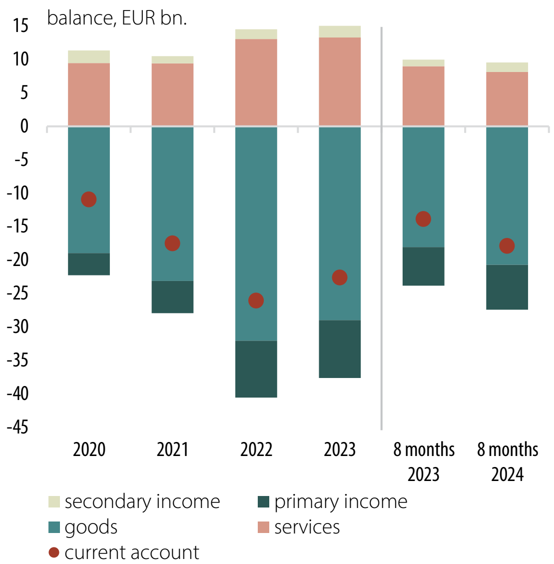
Source: NIS

built up, which probably led to a trend of delayed sales (in Q2, export quantities decreased by approximately 31 percent from the previous year, while import volumes rose by over 20 percent).

The sluggish activity in major European economies has strongly affected exports of processed industrial goods for final consumption (mainly consumer goods) and/or intermediate consumption (such as electrical equipment, electronic components, etc.). At the same time, this has hampered the recovery of activity in the chemical industry (compounding the challenges posed by fluctuating raw material costs) and in metallurgy, which is also impacted by competitive pressures from an abundant and relatively cheap supply on the global market, primarily due to China's steel overproduction. Hence, 2024 Q2 saw widening deficits in certain processed goods in the aforementioned sectors. However, their negative impact was mitigated by improvements in the trade balance on some inputs (lower net imports of iron ore, higher-grade coal, and coke, as well as a shift to a surplus in the natural gas trade balance). As for the trade in crude oil and petroleum products, the suspension of operations at a major refinery March through May 2024 (due to an extensive overhaul) contributed to an increase in net imports of motor fuels, partly offset by a reduction in purchases of raw materials.

In the period January-July 2024, the negative differential between the annual change in exports of goods and that in imports thereof, in terms of volume, was only slightly counterbalanced by the favourable evolution of the price component (with the UVI of imports decreasing more sharply than that of exports)[19]. This reflected in the widening trade imbalance, a trend that also characterised the first eight months. The deficit on trade in goods increased by 14.6 percent compared to the same period of the previous year, acting as the main driver behind the deterioration in the current account balance (by about 29 percent). A negative influence was also exerted by the narrowing services surplus, attributed to the deepening shortfall of travel and air transport (amid higher household real income) and to the decline in net receipts from ICT and freight transport (largely linked with the weak external demand). The primary income account made an additional contribution, as a result of increases in dividend payments of FDI enterprises, as well as in interest payments on government securities issued in the international market (Chart 2.6).

Chart 2.6. Current account



Source: NBR

[19] Calculations based on international trade data – standard international trade classification by broad economic categories (BEC) (Source: Eurostat).

Labour productivity

Labour productivity economy-wide further declined in 2024 Q2, albeit slightly more moderately compared to Q1 (-2.7 percent annual rate of change versus -3.4 percent), Chart 2.7. Decreases in annual terms of the indicator are observed across most economic activities, with a notable double-digit drop in IT, which is undergoing a challenging period at international level (also due to the weakening demand from the industrial sector); the domestic market in this field relies predominantly on outsourcing, given that stage, while local companies are implementing digital solutions to a lesser extent than those in advanced countries).

Chart 2.7. Labour productivity economy-wide

Source: NIS, NBR calculations

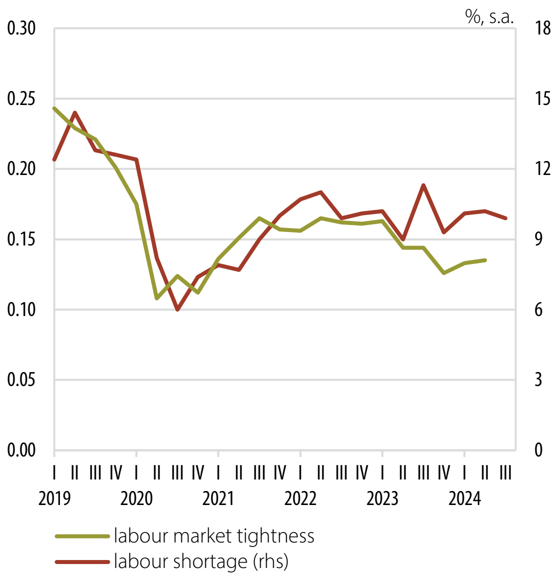
Chart 2.8. Capacity utilisation rate in manufacturing

Source: EC-DG ECFIN

In industry, the period from April through June 2024 marked the seventh consecutive quarter of decreasing labour productivity (-1.7 percent year on year), and the latest data suggest that this trend is to be continued in the following quarter as well. While industries manufacturing consumer goods and, to a lesser extent, intermediate goods exhibit some favourable developments (i.e. relatively resilient domestic demand and marginally positive annual dynamics of production indicators), the situation is entirely different for the capital goods sub-sectors. In this respect, the automotive and machinery and equipment industries saw their labour productivity fall in annual terms during Q2, in line with the EU-wide trends, and over a third of the production capacity in the capital goods segment remained unused, the highest level over the past 20 years (Chart 2.8).

However, some local developments have the potential to somewhat boost industrial activity indicators in the upcoming period. On the one hand, there are signals about the set-up or expansion of production capacities in areas such as the pharmaceutical industry, the manufacture of electrical equipment, the building materials industry, the manufacture of rubber products, food industry and others. On the other hand, the competitive quality of locally produced car models translated into a nearly 9 percent rise in the number of units produced in the first eight months of 2024. In 2024 Q4, a new

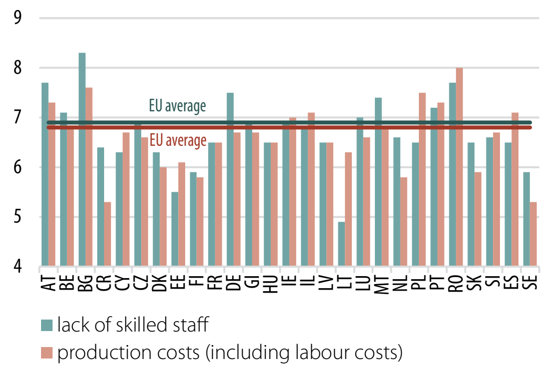
Chart 2.9. Labour market tightness



Note: The labour market tightness indicator is calculated as the ratio of the job vacancy rate to the ILO unemployment rate (monthly data).
Labour shortage refers to the share of answers of companies citing the difficulty of finding workforce as a factor that constrains their economic activity.

Source: NIS, Eurostat, EC-DG ECFIN, NBR calculations

Chart 2.10. Main problems faced by companies in their activity



Note: In the survey, firms respond to the question "How important have the following problems been for your enterprise in the past six months?". The responses refer to 2023 H2 and are provided on a scale from 1 to 10, in ascending order of importance.

Source: ECB, EC-DG IMIESMEs, *Survey on the Access to Finance for Enterprises (SAFE)*

SUV is scheduled to enter production in Mioveni, a model with increased added value that will become the top-of-the-line model for the brand. Nevertheless, given the magnitude of the shock to the European industry, these favourable developments are expected to only slightly mitigate the impact of the foreign demand decline in the near future.

Labour market developments

The key labour market indicators point to a slight easing, in line with the less favourable developments in economic activity in the current year.

The job vacancy rate lingered at 0.7 percent in Q2, whereas the ILO unemployment rate stood at 5.2 percent (-0.1 percentage points versus the previous quarter); nevertheless, the July-August provisional data for the unemployment rate point to an increase to 5.5 percent. In the near run, the results of the DG ECFIN survey on the hiring intentions of companies are indicative of a softening labour demand, the Employment Expectations Indicator standing at 104 points in 2024 Q3 (down 3.4 points from 2024 Q2). According to the same source, the percentage of companies citing labour shortages as a constraint to their activity remains particularly low (about 10 percent, Chart 2.9), among the lowest in the European Union. However, this quasi-standstill may indicate the discouragement of companies to further mention this factor. According to an alternative data source (the ECB SAFE – *Survey on the Access to Finance of Enterprises in the European Union*), Romanian firms perceive the lack of skilled staff, as well as production costs (including labour costs), as being the most pressing problems for their activity – the scores recorded are higher than in other EU countries (Chart 2.10), and also in relation to other factors mentioned in the survey (access to finance, competition, demand, regulatory framework) (Box 1).

Box 1. The inflationary impact of labour shortage

The skill mismatch and the continued downtrend in the working-age population in Romania's economy, influenced *inter alia* by a high emigration rate, affect the equilibrium in the labour market, the local companies facing significant challenges when rebuilding or expanding employment. Wages are typically the first to be adjusted in order to close the gap between labour demand and supply, an evolution which is then passed through via marginal costs into price developments. This analysis relies on firm-level survey data and seeks first to quantify the effects of labour shortage on real wage dynamics by economic activity. Subsequently, they are included in a multisectoral general equilibrium model having specific mechanisms to connect labour market developments with consumer price movements.

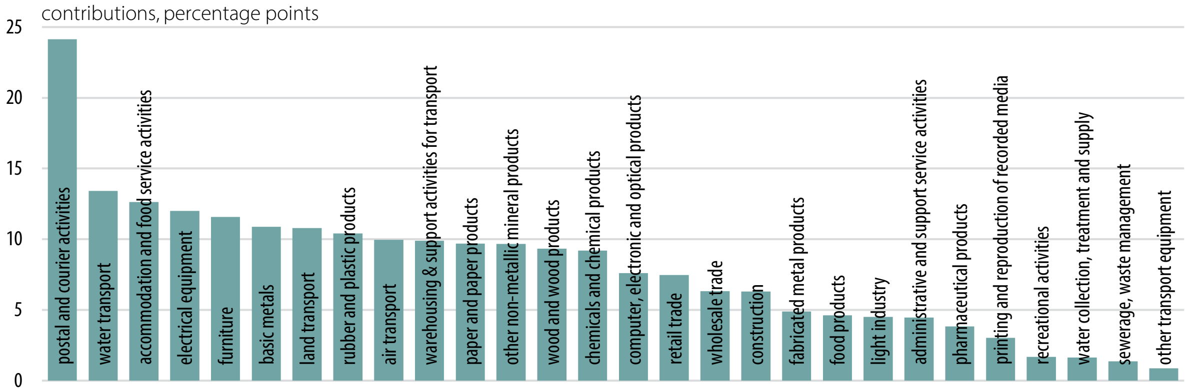
Labour shortage is the gap between the need for adequately skilled staff and the available candidates at a given real market wage. It is only partially captured using specific macroeconomic indicators (job vacancy rate, labour market tightness indicator), while firms resort to other strategies as well (training, capital investment, streamlining of processes) in order to cover that need, when the marginal cost of increasing the number of employees outweighs the related marginal benefit. In this context, firm-level data can provide a picture closer to employers' real perception of the constraints on the availability of qualified staff. Papers using exclusively survey data show that firms with more acute skilled labour shortages offer more substantial wages, as compared to the other entities in the economy (see, for instance, Frohm, 2021 and Kölling, 2022). Moreover, companies' perception of labour shortages changes slowly over time, the trajectory being ascribed to a significant extent to structural factors, such as the participation rate, educational attainment level, regional labour supply (Healy *et al.*, 2015, Groiss and Sondermann, 2023), as well as to technological changes, which increase the skill mismatch, particularly in high skill occupations (Acemoglu and Autor, 2011). Cyclical developments can be relevant as well, with companies adjusting upwards their search effort, wage policy, or downwards their skill requirements when they need to expand employment in order to cover the mounting demand for their products (Carrillo-Tudela *et al.*, 2023), all this resulting in higher wage costs. However, survey data also show that a firm may inaccurately assess that it faces a labour shortage, while in reality it cannot provide sufficiently high wages and/or appropriate working conditions to attract adequately skilled workforce (Brunello and Wruuck, 2021).

The data used to assess labour shortage effects on wage dynamics across the national economic sectors were extracted from the *Survey on the access to finance of non-financial corporations in Romania*, conducted by the NBR twice a year. The *Survey* covers data from 2017 to 2024 H1, except for 2022, when the question about the availability of skilled staff was not included. The survey observations were corroborated with the balance sheet data of firms, provided by the Ministry of Finance (available only until 2023). The database thus established also comprises, in addition to the annual growth of average wage paid by a certain firm, other indicators representing control variables in the regression model. In this vein, this Box continues the NBR's analysis made in 2024[20], where wage cost dynamics

[20] "Box. The effect of labour shortages on wage growth and number of employees", published in the NBR's August 2024 *Inflation Report*.

per employee were estimated to stand about 7 percentage points higher, on average, in the period from 2017 to 2021, for the firms facing shortage of labour, especially skilled staff.

Chart A. Labour shortage effect on sectoral wage dynamics



Note: The chart shows only the sectors where the labour shortage effect on wages is statistically significant. The impact represented graphically results from adjusting the estimated coefficient to companies' relevance for each business sector, depending on their number of employees. Based on a relatively small sample of firms, econometric assessments were made for every NACE section, except for industry, in which case the classification by main industrial grouping was used, and retail and wholesale trade, and restaurants, where the sector was defined on the basis of NACE divisions. The estimates were made using an instrumental variable econometric model, similar to that employed by Groiss and Sondermann, 2023. The control variables refer to the average wage and number of employees in the previous period, labour productivity growth, company age, annual trend and fixed sector effects defined for NACE divisions.

Source: Ministry of Finance, NBR, NBR calculations and estimates

The average wage increases in national economic sectors triggered by skilled labour shortage are shown in Chart A. The greatest impact is recorded in postal and courier activities, a sector which is labour intensive, on the one hand, and has seen sustained demand growth amid the expansion of online trade, on the other. Similar factors account for the rise in wages in the restaurants segment, to these also adding the reduction of productive capacities due to the pandemic. Rebuilding these capacities requires higher costs to attract the available labour from other economic sectors. For the other sectors, the common factor is, most likely, the lack of potential employees with specific technical or digital skills, a trend that is observed in most European economies (Cedefop, 2024).

The following stage of analysis implies a structural general equilibrium model that includes input-output linkages among national economic sectors, the theoretical framework being largely similar to that proposed by Smets *et al.* (2018). In this type of models, apparently benign developments in some economic sectors that are small, but at early stages of the production chain, can generate sizeable macroeconomic effects, the networks amplifying the supply-side shocks to producers (Carvalho and Tahbaz-Salehi, 2019). Moreover, the theoretical framework also incorporates open-economy mechanisms, each business sector having its own share in imports of intermediate goods. As regards the production process, the model simulates the linkages captured by symmetrical input-output tables of the Romanian economy, while also enabling the propagation of shocks both upstream and downstream along the production chains.

The labour market is segmented, in the sense that the available workforce in each economic sector is constant, with the relationship between the unemployed and employers governed by search-and-matching frictions, to which adds an endogenous separation mechanism allowing the firm to lay off a new employee if they have insufficiently high productivity. The model parameters are calibrated using an extensive data set referring to input-output tables, sectoral distribution of labour force, employment rates, level-firm balance sheet and price data, national accounts data, etc.[21]. As regards the sectoral size, the model simulates a 42-sector economy, defined at the level of NACE divisions and sections.

The literature provides strong indications for a significant opposite relationship between labour shortage and labour market efficiency (Carrillo-Tudela *et al.*, 2023; Groiss and Sondermann, 2023). This enables the use of micro estimates in the model, where the high wage dynamics generated by the change in labour market efficiency will be linked with the labour shortage[22]. Therefore, it is assumed that the hiring rate can be reduced independently from the number of job vacancies and the unemployed, given the presence of other factors that can make labour market matching more difficult (such as higher employment standards). A reduction in labour market efficiency leads to a lower probability of firms expanding their payrolls, as they first feel discouraged to post job vacancies[23]. The relatively low hiring rate of approximately 1.5 percent (according to the latest Eurostat data on the transition from unemployment to employment in the 2022-2023 period) also supports this development. Subsequently, once with the increase in employees' marginal value, firms start to post new job vacancies up to a level higher than the pool of unemployed persons, which results in labour market tightness. In this context, labour costs increase, also on account of the complementarity between labour and capital[24]. Further on, these developments reflect in marginal costs, which pass through relatively quickly to producer prices, given the high frequency of price changes. Then, changes in producer prices are further transmitted and amplified along the production chains, thus leading to the increase in inflation rate (based on firm-level data, an average period of three months between price changes is specified in the model, with services prices being considerably stickier than those in industry).

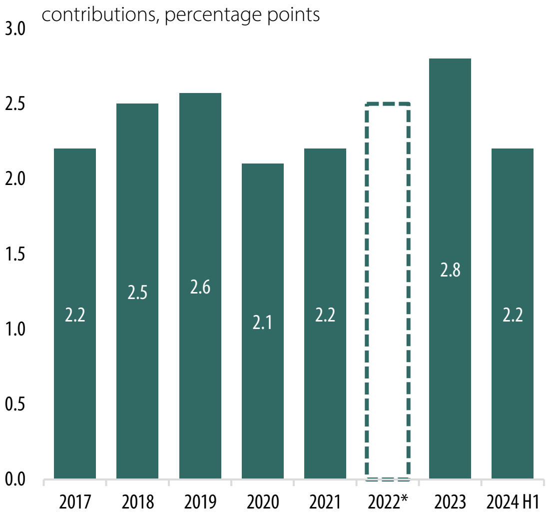
21 Certain parameters that could not be estimated or calibrated based on actual statistical data were taken over from Copaciu *et al.*, 2016, who estimate for the domestic economy a model with mechanisms similar to that used in this analysis, but which assumes only two business sectors classified depending on the currency in which firms borrow.

22 The shock sequence associated with labour market efficiency was determined by fixing the sectoral wage cost dynamics to a one-year level and using the Kalman filter in a context in which the monetary policy rate remains unchanged. Subsequently, all shocks are simultaneously introduced and the model is simulated in perfect foresight in order to take account of non-linear effects, with network effects making a significant contribution. This approach also assumes that the economic agents know the entire shock structure, the assumption being feasible given the dominant structural component of this phenomenon.

23 An important contribution to this trajectory is made by the equilibrium period of over four months when a job stays vacant, a value in line with the calibrations in the literature (Ravenna and Walsh, 2008) and slightly below the anecdotal evidence collected by recruitment firms, suggesting a period of almost six months. A higher value determines the prevalence of firms becoming discouraged to post job vacancies.

24 The model uses a nested constant elasticity of substitution production function, which includes two substitution elasticities, one governing the capital-to-labour ratio and the other the relationship between capital-labour bundle and materials. The substitution elasticities were estimated using firm- and household-level data (NIS *Household Budget Surveys*).

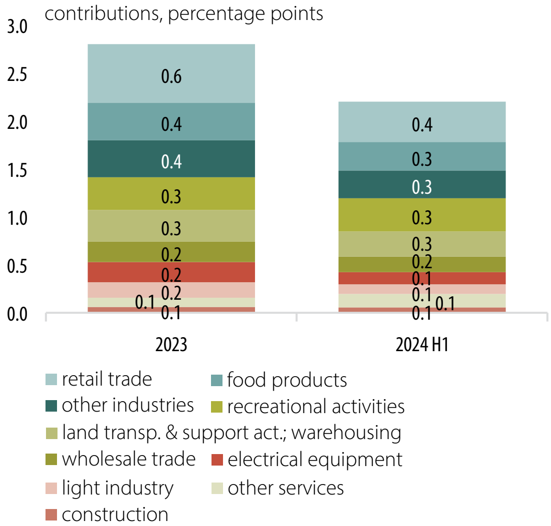
Chart B. Labour shortage effect on inflation rate



*) interpolated value due to unavailable data

Source: NBR estimates

Chart C. Contribution of sectoral labour shortage to the increase in inflation rate



Source: NBR calculations and estimates

The results show that the labour shortage in the Romanian economy pushed inflation up by approximately 2.8 percentage points[25] in 2023, when the highest contribution was recorded in the reviewed period (Chart B). The theoretical framework indicates a transmission coefficient of approximately 30 percent from real wage growth to the annual inflation rate. Subsequently, the impact on inflation rate fell to about 2.2 percentage points, due to more favourable expectations of labour availability in 2024 H1, attributed to a certain extent to the slowdown in economic activity. At the same time, noteworthy is the resilience of the labour shortage effect, which stays above the 2.0 percent threshold, suggesting the prevalence of structural factors on the labour market.

Although the labour shortage effect is manifest on most domestic economic sectors, only certain segments are clearly relevant to consumer prices (Chart C). Retail trade and recreational activities make significant contributions, i.e. approximately 1 percentage point in 2023 and 0.8 percentage points in 2024 H1. Strong influences also have food products, the light industry and electrical equipment, the last segment manufacturing several types of equipment used in consumer goods industries. The inflationary effects from land transport, warehousing and support activities for transport and wholesale trade propagate in a similar manner.

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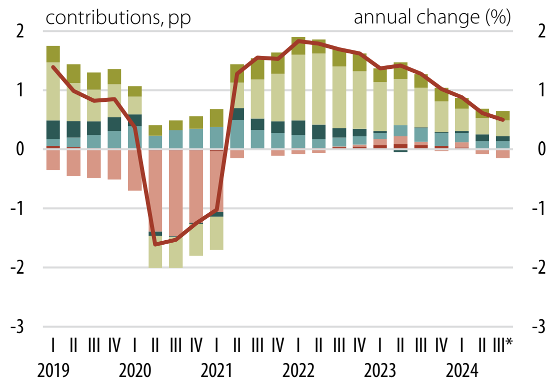
The annual rate of change of the number of employees economy-wide was further positive, but it slightly slowed down to 0.6 percent in Q2 and 0.5 percent in July-August 2024 (compared to 0.9 percent in 2024 Q1), Chart 2.11. In industry, the annual dynamics turned slightly negative (-0.6 percent in July-August versus 0.3 percent in Q1), with downsizing affecting the automotive sector (given the challenges it has been facing at EU level), as well as manufacture of furniture and light industry, due to increasing pressure from rising wage costs. Moreover, marginally negative annual changes were also noticeable in the IT sector, in professional activities and in the transportation and storage sector, while in the accommodation and food service sector there was a slowdown in recruitment. Construction also posted a slightly slacker pace of hiring, which remained, however, above that recorded economy-wide (at approximately 1.5 percent). Trade reported a rebound in employment, in correlation with the rise in activity seen throughout the year. In the budgetary sector, the dynamics of the number

Chart 2.11. Number of employees economy-wide

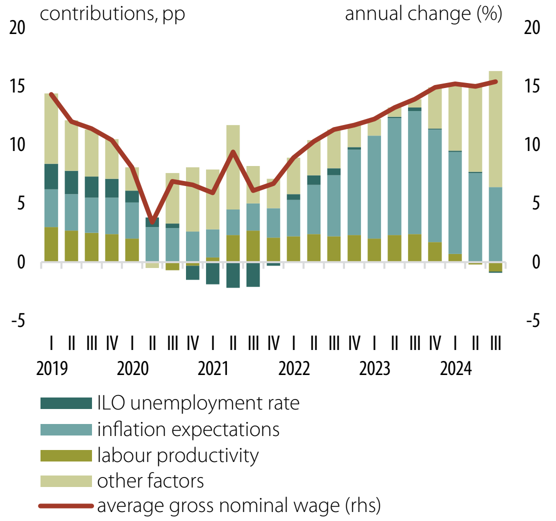


*) Jul.-Aug.

Source: NIS, NBR calculations

of employees stood at 0.8-0.9 percent since the beginning of the year (down from 1.2 percent in 2023).

Chart 2.12. Developments in the average gross wage economy-wide



Note: In this specification of the wage Phillips curve, wage dynamics are determined by labour productivity, labour market conditions and labour market participants' inflation expectations (assumed to be adaptive) as follows:

$\Delta average\ gross\ wage_t = \beta_1 \Delta average\ gross\ wage_{t-1} + \beta_2 \Delta labour\ productivity_t + \beta_3 \Delta CPI_{t-2} + \beta_4 \Delta ILO\ unemployment\ rate_{t-2} + other\ factors$

Changes are approximated by logarithmic differences.

Source: NIS, Eurostat, NBR estimates and forecasts

July through August 2024, the annual dynamics of average gross wage economy-wide returned to a value similar to that recorded in Q1, i.e. 16.8 percent (+1 percentage point against Q2). This pick-up was driven by developments in the private sector, where the annual rate of change climbed to 16.4 percent (+1.7 percentage points); wage dynamics in the budgetary sector halted their upward trajectory, but remained strong (18.1 percent, -1.7 percentage points). The recent rounds of wage increases granted in education and healthcare in June, along with the rise in the gross minimum wage economy-wide from lei 3,300 to lei 3,700 in July (+12.1 percent), have limited the adjustment of wages to the new macroeconomic framework. According to the in-house specification of the wage Phillips curve (Chart 2.12), the above-mentioned exogenous factors (i.e. outside the wage-setting mechanism described in the model) have significantly contributed to the wage dynamics, given that both the unfavourable developments in productivity and the lower inflation expectations[26] would have led to a further deceleration.

2. Import prices and producer prices on the domestic market

In 2024 Q2, import prices and industrial and agricultural producer prices further posted relatively benign developments, in line with most commodity prices. In July and August, however, the annual dynamics of industrial producer prices on the domestic market re-entered positive territory, under the impact of extreme heat that favoured surges in electricity prices. This trend may strengthen over the following months, amid the unfavourable agricultural year and higher pressures from unit labour costs.

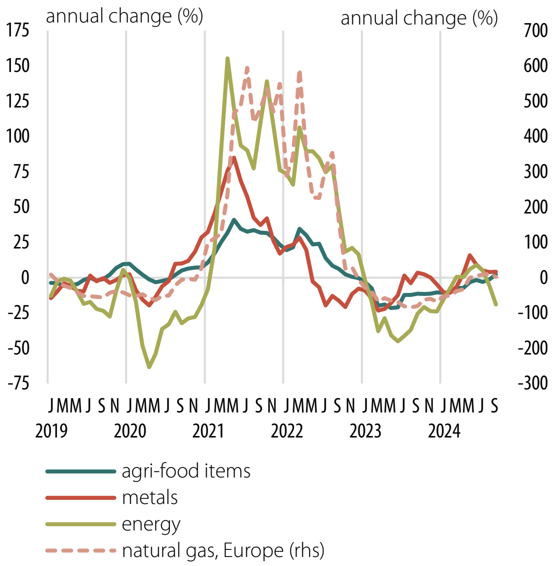
2.1. Import prices

With demand showing signs of recovery, commodity prices witnessed a rebound in Q2, before falling again, as optimistic expectations faded (Chart 2.13). Specifically, after increasing by 4.7 percent year on year in April-June, the World Bank commodity

26 Modelled as adaptive (inflation rate with a two-quarter lag).

price index recorded an annual contraction of -4.1 percent in Q3. Energy prices displayed similar developments – during 2024 Q2, geopolitical tensions and OPEC+ actions boosted the Brent oil price (annual dynamics of 8.5 percent), yet the trend reversed in the next quarter (-7.6 percent), amid signs of weaker demand on large markets such as China and the US[27] and robust production in non-OPEC+ countries.

Chart 2.13. International commodity prices



Source: World Bank, FAO, NBR calculations

On the European natural gas market, storage levels remained high, yet issues related to the supply of liquefied natural gas (LNG) and the risk of a discontinuation of deliveries from Russia to the EU led to a slower annual decline in prices in Q2. Subsequently, the annual dynamics returned to positive territory (to around 7 percent), with a peak in August due to the Ukrainian offensive in Russia unfolding close to a major transit hub; this pushed the TTF gas spot price (EU-wide benchmark) to an average of approximately lei 190/MWh (from lei 160/ MWh in April-June).

Industrial metal prices (including mineral product prices) went up in the first part of Q2, amid signals of recovery in global industrial activity and concerns about copper and aluminium supplies stemming from the new sanctions imposed on Russia. Thereafter, the slowdown in China's economy, particularly in the real estate sector, fostered a downtrend in prices, so their annual growth rate slid to 4.4 percent in July-September (with the price of iron ore dropping sharply in annual terms).

Looking at agri-food commodities, pressures remained relatively low, yet the annual dynamics of the FAO food price index moved gradually from negative values to positive territory at end-2024 Q3, given the concerns surrounding the crops affected by heat waves. At global level, USDA projections for the harvest year have worsened, but continue to indicate better crops than in the previous year for wheat and oleaginous plants, whereas maize production is expected to shrink.

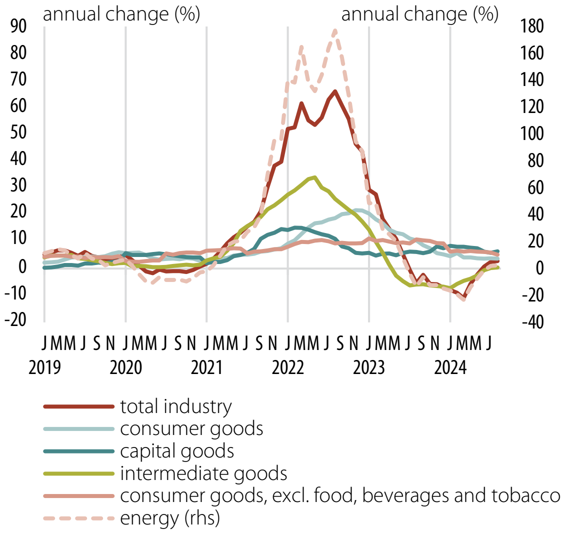
In view of the above-mentioned developments, in Q2 the unit value index of imports (UVI) added 2.2 percentage points, remaining however low (97.9 percent). In line with crude oil and metal price movements, mineral products, chemicals and base metals saw more moderate negative annual rates of change. As regards the goods holding a relevant share in the CPI basket, pressures were limited for agri-food items – the UVIs for fats and oils, sugar, vegetal products were indicative of a contraction in annual terms. By contrast, the UVIs for non-food items posted a broad-based increase, rising above one.

[27] China's below-expectations economic data and concerns about a possible recession in the US affected oil prices; however, the pessimism associated with the trajectory of economic activity in the US was short-lived.

2.2. Producer prices on the domestic market

In July-August, the annual rate of change of industrial producer prices on the domestic market returned to positive values (+2.6 percent, i.e. 5.1 percentage points above the level recorded in Q2), mainly on the back of energy, amid higher electricity prices. The other groups of goods witnessed modest changes in their price dynamics compared to Q2, given the contained pressures from non-energy commodity costs (Chart 2.14). The NIS/DG ECFIN survey of September 2024 broadly shows stability at aggregate level in terms of developments in producer prices (the balance of answers stood at a level similar to that recorded in July-August). However, upward pressures have been manifest from unit labour costs and have the potential to build up via agri-food commodity costs, as a result of the poor agricultural year.

Chart 2.14. Industrial producer prices on the domestic market



Source: NIS, Eurostat

The annual dynamics of energy prices went up in July-August (+10 percentage points to 2.2 percent), solely on the back of the electricity, gas, steam and air conditioning supply (annual change up from -9.4 percent in Q2 to 3.6 percent). Amid extremely high temperatures, the domestic market was faced with the contraction in electricity production (following the drought, as well as the overhauls carried out by certain local energy companies), the higher consumption needs failing to be fully met from domestic sources. Although some progress has been made in developing the production capacity of solar parks, turning to account the potential of this energy source essentially depends on a significant technological improvement in the distribution network and on an expansion of the storage systems; both of these require substantial investments.

Domestic wholesale electricity prices recorded an 18-month peak in July, Romania becoming one of the most expensive European markets[28], given that the systemic issues at national level were compounded by unfavourable external influences (reactors shutting down in Bulgaria and Slovakia, maintenance for some interconnection lines between Austria and Hungary).

In the case of gas, the significant storage levels (over 80 percent, close to the 90 percent target set for 1 November) translated into relatively benign price dynamics (some pressures were manifest in August, in correlation with the unfolding of the Russia-Ukraine war). A marginal upward contribution came from the rise

[28] Electricity prices were high in August as well.

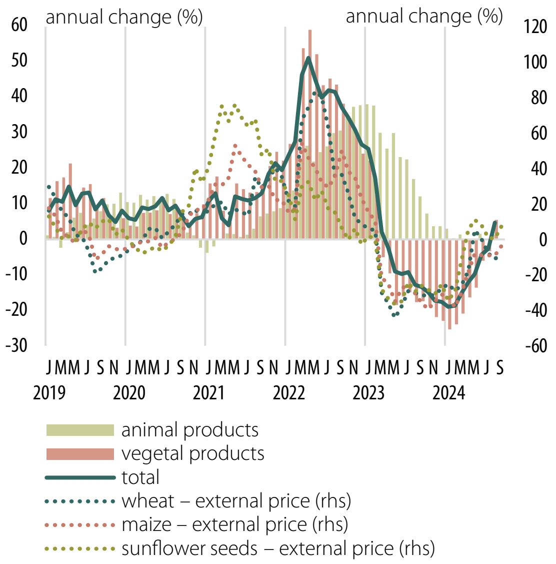
in distribution tariffs as of 1 July 2024. The annual dynamics of crude oil processing prices fell into negative territory (-6.4 percent in August), connected to movements in oil prices on international markets.

Intermediate goods also contributed to the faster pace of increase of producer prices, the annual rate of decline of prices in the chemical industry slowing down by 8.6 percentage points (to -0.2 percent) due to a base effect (lower natural gas prices in the same year-earlier period). In metallurgy, the annual price dynamics also remained in negative territory (-5.5 percent in July-August versus -6.5 percent in Q1), reflecting the fluctuating developments in metal prices – an increase in Q2, amid expectations on an upturn in global industrial activity, followed by a correction, given that the optimistic prospects failed to materialise.

By contrast, looking at capital goods, the annual growth rate of producer prices went down slightly (-1.1 percentage points to 6.1 percent), on the back of the manufacture of road transport equipment, where the motor parts segment has been affected by the global drop in motor vehicle orders.

The annual dynamics of producer prices for consumer goods remained unchanged at 3.8 percent, but a slight pick-up is possible in the coming period, as a result of higher wage costs, as well as less favourable local crops – the weather conditions this season led to significantly lower yields, especially for maize and sunflower, while also reducing considerably the harvested quantities of rapeseed and wheat.

Chart 2.15 Agricultural producer prices



Source: NIS, Bloomberg, NBR calculations

In July-August 2024, the annual change of agricultural producer prices (Chart 2.15) entered positive territory (1 percent, from -8.8 percent in Q2), the lower local crop production leading to an annual increase in the prices of vegetal products (1 percent compared to -12.2 percent in the previous quarter). The price dynamics for vegetables, especially potatoes, also moved upwards, as the lack of rainfall and extreme heat significantly impacted harvests.

In the case of animal products, the annual growth rate of prices remained quasi-stable (+0.7 percent). This increase may gain momentum in the next period, as the weaker grain production also weighs on animal feed costs and, implicitly, on meat prices. In addition, the expansion of the *peste des petits ruminants* (PPR) could lay the groundwork for higher prices of sheep meat.

Unit labour costs

The annual dynamics of unit labour costs economy-wide decelerated to 19.5 percent in Q2 (-2.3 percentage points versus the previous quarter), yet remain brisk by a historical perspective (Chart 2.16), mainly amid the slower pace of increase of compensation per employee (to 16.2 percent, -1.5 percentage points), as well as

Chart 2.16. Unit labour costs

Source: NIS, NBR calculations

a more moderate annual decline in labour productivity, (from -3.4 percent in the first three months of the year to -2.7 percent in Q2). Most economic sectors contributed to the slowing of the aggregate dynamics of unit labour costs, except for the public sector, where the positive rate of change stepped up.

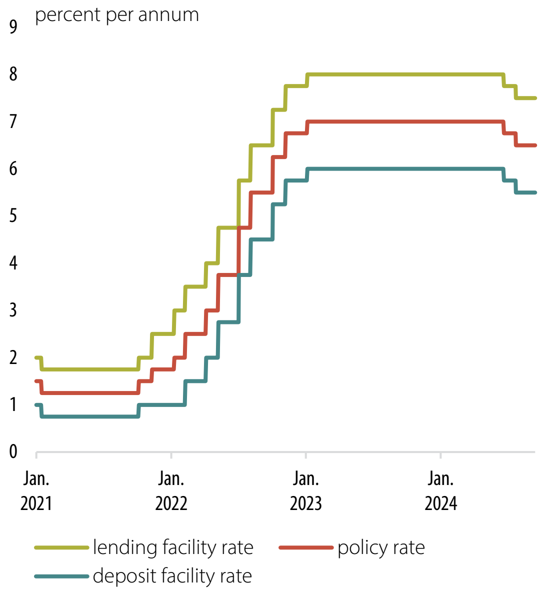
In industry, the annual growth rate of unit wage costs accelerated to 17.6 percent July through August, from 15.8 percent in Q2. Annual contraction in industrial output continued, albeit at a slightly slower pace. Looking at labour force, staff cuts are envisaged, yet the pace of increase of wages was further brisk (15.8 percent in July-August). The industrial sub-sectors that posted higher changes in the aggregate indicator (of approximately 30 percent) were metallurgy, manufacture of plastic products, and manufacture of electronic products.

3. Monetary policy and financial developments

1. Monetary policy

In August 2024 the NBR Board cut the monetary policy rate by another 0.25 percentage points before leaving it unchanged at 6.50 percent in October. Accordingly, the lending facility rate and the deposit facility rate were lowered by 0.25 percentage points in August and were kept unchanged at 7.50 percent and 5.50 percent respectively in October (Chart 3.1). At the same time, the central bank kept the existing levels of minimum reserve requirement ratios on both leu- and foreign currency-denominated liabilities of credit institutions at 8 percent and 5 percent respectively. The decisions aimed to ensure and maintain price stability over the medium term, in line with the 2.5 percent ±1 percentage point flat target, in a manner conducive to achieving sustainable economic growth.

Chart 3.1. NBR rates



The NBR Board decisions in August were warranted by the improvement in the inflation outlook compared to the previous forecast, especially over the near run and amid still high uncertainties associated with longer-term prospects.

Specifically, the annual inflation rate declined in Q2 by more than expected, down to 4.94 percent in June[29], mainly due to the notable drop in energy prices, especially natural gas prices, following the legislative changes implemented as of April 2024, as well as amid the further deceleration in the growth rate of food prices. In turn, the annual adjusted CORE2 inflation rate fell at a faster pace, also compared with the forecasts, down to 5.7 percent in June[30], as the pace of disinflation slowed down in the processed food segment, but stepped up for the non-food and services sub-groups, the annual growth rates of which remained, however, high.

[29] From 6.61 percent in March. Behind the deceleration stood, over this period too, disinflationary base effects and downward corrections of commodity prices. To these added influences stemming from the decreasing dynamics of import prices, as well as from firms' and consumers' short-term inflation expectations re-embarking on a slight downtrend. A moderate opposite impact had the increases in unit labour costs recorded in the first months of 2024, which were passed through, at least in part, into some consumer prices, *inter alia* amid robust demand for goods.

[30] From 7.1 percent in March 2024.

At the same time, the new medium-term forecast revealed an improvement in the inflation outlook compared to the previous projection, especially over the near run, given that the annual inflation rate was expected to fall at the end of 2024 and in 2025 Q1 to significantly lower-than-previously-envisaged values[31] and, after a temporary pick-up in 2025 Q2, to return and remain slightly below the upper bound of the variation band of the target. Specifically, the 12-month inflation rate was seen falling to 4.0 percent in December 2024, 3.4 percent in the closing month of 2025 and 3.2 percent at the end of the forecast horizon, compared to 4.9 percent, 3.5 percent and 3.4 percent respectively, as indicated by the prior projection for the same reference periods.

The decrease was expected to be further driven primarily by supply-side factors, whose disinflationary action would continue to be stronger over the short term than previously anticipated, amid disinflationary base effects[32] and the influences from legislative changes in the energy sector implemented as of April.

Underlying inflationary pressures were, nevertheless, expected to persist over the entire forecast horizon and to ease only slightly compared to the first part of this year and the former forecast, given that excess demand was anticipated to contract further in 2024 H2, but to remain almost constant over the next six quarters, at a significant level, marginally lower than foreseen earlier[33]. Moreover, the double-digit annual dynamics of unit labour costs in the private sector were envisaged to continue to rise this year as a whole and thus exceed the slightly declining level in the previous projection.

At the same time, high uncertainties and risks stemmed from the fiscal and income policy stance in 2024, given the budget execution in the first half of the year, the public sector wage dynamics and the full impact of the new law on pensions. Nonetheless, strong opposite risks were associated with the fiscal and budgetary measures that could be implemented in the future to carry on budget consolidation, in the context of the *National Medium-Term Fiscal-Structural Plan* presumed to be submitted to the European Commission this autumn.

Moreover, uncertainties and risks to the outlook for economic activity, implicitly the medium-term inflation developments, continued to arise from the war in Ukraine and the Middle East conflict, as well as from the economic performance in Europe, but also from the absorption of EU funds, especially those under the Next Generation EU programme.

According to subsequently-released statistical data, the annual inflation rate went up to 5.42 percent in July 2024 and then fell somewhat more modestly, to 5.10 percent in August, thus staying above the forecast. The advance versus June owed to the faster

31 In the May 2024 *Inflation Report*.

32 The disinflationary base effects were envisaged to materialise mainly in the non-food sub-components of core inflation, as well as in the growth rates of administered prices and fuel prices, while small opposite base effects were seen to affect, in the near run, the dynamics of processed food prices, which would thus show a turning point in 2024 Q3, also under the influence of the trend reversal in some agri-food commodity prices.

33 Given the prospects for economic activity to gather momentum in the period 2024-2025 overall, albeit at a somewhat slower pace than envisaged before, amid the slowdown in inflation and the gradual recovery of external demand, but especially under the impact of the fiscal policy stance and the use of EU funds under the Next Generation EU instrument.

rise in food and energy prices over this period amid the severe drought and the pick-up in the distribution tariffs for natural gas, the impact of which was only partly counterbalanced by that of the further disinflation in the dynamics of administered prices and fuel prices, under the influence of base effects and the fall in crude oil prices.

In turn, the annual adjusted CORE2 inflation rate saw a halt in its downward trend, climbing to 5.8 percent in August, as the growth rate of processed food prices re-accelerated and the fast dynamics of the services prices posted a slower decline, whereas the pace of increase of non-food prices continued to decelerate somewhat rapidly, remaining however elevated. The slight rise in the annual core inflation rate was mainly attributable to an unfavourable statistical effect in the processed food segment and to the hike in some agri-food commodity prices, as well as to higher wage costs passed through, at least in part, into some consumer prices, *inter alia* amid still high short-term inflation expectations and a robust demand for goods. The influences thus exerted outweighed those stemming from the disinflationary base effects in non-food sub-components as well as from the decrease in import price dynamics.

Economic activity posted a slower growth in 2024 Q2, to 0.1 percent from 0.5 percent in the previous three months, so that excess aggregate demand is likely to have further narrowed over this period, contrary to forecasts. Household consumption, however, saw a significantly faster rate of increase, including in annual terms, contributing decisively to a larger year-on-year advance in GDP, to 0.8 percent from 0.5 percent in Q1. At the same time, the annual growth rate of gross fixed capital formation remained robust, although on a further slowdown compared to the prior quarter. By contrast, net exports exerted a markedly larger contractionary influence, given that the volume of imports of goods and services recorded a faster increase, while the volume of exports continued to decline in annual terms. Consequently, the trade deficit and the current account deficit reported significantly faster dynamics, spurred in the latter case also by the considerable worsening of the secondary income balance, reflecting the lower inflows of EU funds to the current account.

Looking at the labour market, in June-July, the number of employees economy-wide recorded only a slight pick-up, while the ILO unemployment rate resumed its rise at the beginning of Q3, reaching 5.5 percent in August from 5.1 percent in June. At the same time, for Q3 as a whole, surveys pointed to a sharp decline in employment intentions over the very short horizon, as well as to a contraction in the labour shortage reported by companies, larger in terms of magnitude than the increase in the previous quarter. Nevertheless, the double-digit annual growth rate of the nominal gross wage stepped up to 17.3 percent in July – mainly under the impact of the new hike in the gross minimum wage economy-wide –, while the similar dynamics of unit wage costs in industry posted only a mild decrease at the beginning of Q3 from the previous quarter's average.

On the financial market, the main interbank money market rates fell again in August, as a result of the NBR cutting the key interest rate and the interest rates on its standing facilities, and afterwards remained steady. Long-term yields on government securities steepened their downward course in the first 10-day period of August, similarly to those in advanced economies and in the region – amid investors' revised expectations on the Fed's interest rate path –, before witnessing a significant rise, which was however corrected relatively abruptly towards end-Q3. Against this background, after the downward adjustment in July, the EUR/RON exchange rate returned in August to the higher values prevailing in Q2 and tended to stay there until end-Q3. This reflected, *inter alia*, the renewed heightening of volatility on the international financial market towards the end of the reviewed period, under the impact of escalating tensions in the Middle East. The USD/RON re-entered, nevertheless, and stayed until end-September on a generally downward course, given the former's movements on international financial markets.

The annual growth rate of credit to the private sector picked up further in the first two months of Q3, to 7.7 percent in August from 6.7 percent in June, mainly due to the faster rise in domestic currency loans to households, primarily driven by consumer credit, whose flow reached a historical high in July. The pace of increase of loans to non-financial corporations also continued to step up during the period overall, prompted solely by the leu-denominated component, whose upward dynamics were influenced decisively by credit under government programmes. Conversely, the rate of change of the foreign currency component resumed its decrease. Under the circumstances, the share of leu-denominated loans in credit to the private sector widened more visibly, to 69.7 percent in August from 69.1 percent in June.

The updated assessments in this context indicated that the annual inflation rate would decline until end-2024 on a fluctuating and higher path than that shown in the August 2024 medium-term forecast. Behind this outlook stood mainly the disinflationary action of supply-side factors, which was envisaged to continue to be weaker over the very short term than previously anticipated, amid the persistence in the near term of adverse effects exerted on food and energy price dynamics by the unfavourable weather conditions in 2024 and the increase in some commodity prices[34].

At the same time, significant uncertainties were further associated with the anticipated developments in energy and food prices, *inter alia* amid the legislative changes in the field, as well as with the future path of crude oil prices in view of geopolitical tensions.

Underlying inflationary pressures were however expected to be more moderate than in the prior forecast and to ease somewhat markedly in the very short run, given the likely decrease of excess aggregate demand in 2024 H2 to significantly lower-than-previously envisaged values[35], yet amid private consumption growth staying solid and the dynamics of unit labour costs sticking to very high levels[36].

[34] Additional inflationary influences were anticipated to also come from tobacco products, given the unexpected rise in their prices recently, whereas fuel price dynamics would stay less inflationary in the following months than foreseen in August.

[35] The new assessments indicated somewhat more modest quarterly increases of the economy for 2024 H2 than previously envisaged, but on a gradual step-up, implying also a rise in annual GDP dynamics during that period overall.

[36] At the same time, obvious disinflationary effects were anticipated over this time horizon from the slacker growth rate of import prices, as well as from the downward adjustment of short-term inflation expectations.

Moreover, high uncertainties and risks stemmed from the fiscal and income policy stance in 2024, given the budget execution in the first eight months of the year and the characteristics of the recent budget revision, including the raising of the fiscal deficit target. Over a longer time horizon, high uncertainties and risks were conversely associated with the fiscal and budgetary measures that could be implemented in the future for budget consolidation purposes, in the context of the *National Medium-Term Fiscal-Structural Plan* presumably submitted to the EC in the autumn of 2024, in line with the new EU economic governance framework.

At the same time, heightened uncertainties and risks to the outlook for economic activity, implicitly the medium-term inflation developments, stemmed from the war in Ukraine and the Middle East conflict, as well as from the economic performance in Europe and globally, in the context of escalating geopolitical tensions. A major source of uncertainties remained also the absorption of EU funds, especially those under the Next Generation EU programme.

The analysed context overall warranted a policy rate *status-quo*, with a view to ensuring and maintaining price stability over the medium term, in a manner conducive to achieving sustainable economic growth.

Under the circumstances, in its meeting of 4 October 2024, the NBR Board decided to keep the monetary policy rate at 6.50 percent and to leave unchanged the lending and deposit facility rates at 7.50 percent and 5.50 percent respectively. At the same time, the NBR Board kept the existing levels of minimum reserve requirement ratios on both leu- and foreign currency-denominated liabilities of credit institutions.

2. Financial markets and monetary developments

In 2024 Q3, the daily average interest rate on interbank transactions[37] and the longer-term rates declined markedly, as a result of the NBR cutting the monetary policy rate and the interest rates on standing facilities in July and August. The EUR/RON exchange rate posted a sizeable drop in the first half of July, but reverted relatively quickly and tended to remain in August and September at the higher values prevailing in 2024 Q2. The annual growth rate of liquidity across the economy went up July through August overall, while that of credit to the private sector continued on an upward trend.

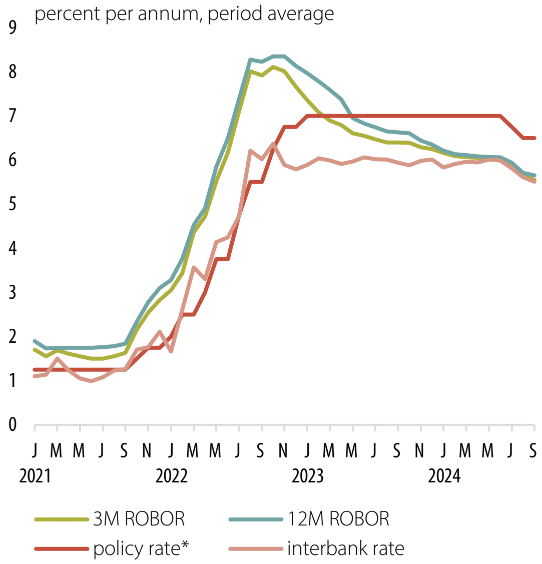
2.1. Interest rates

In Q3, the daily average interest rate on interbank transactions stayed close to the lower bound of the interest rate corridor, falling in line with it once the NBR lowered the key rate and the interest rates on standing facilities by 0.25 percentage points

[37] The average interest rate on transactions in deposits on the interbank money market, weighted by the volume of transactions.

each in both July and August. The quarterly average of the indicator[38] thus fell by 0.32 percentage points to 5.67 percent.

Chart 3.2. Policy rate and ROBOR rates



*) end of period

This evolution reflected the behaviour of very short-term rates, amid the persistence of a wide, albeit declining, liquidity surplus on the money market, which the central bank continued to mop up via the deposit facility[39].

In turn, 3M-12M ROBOR rates decreased considerably immediately after the NBR's decisions to lower the key rates in July and August, but then remained practically unchanged in the latter part of Q3, also amid the signals sent by the central bank in the context of communicating the monetary policy decision in August. Their quarterly averages thus saw a faster decline, reaching 5.68 percent for the 3M rate (-0.36 percentage points), 5.73 percent for the 6M maturity (-0.33 percentage points) and 5.77 percent for the 12M rate (-0.30 percentage points) (Chart 3.2).

On the government securities market, the developments in the medium and long maturity segment were correlated in the first part of Q3 with the change in yields on government securities in advanced economies, which resumed a sharply downward course, amid investors' revised expectations on the Fed's interest rate path[40], while subsequently stronger influences temporarily came from investor concerns about the budget and the fiscal consolidation prospects domestically.

Under these circumstances, medium- and long-term reference rates on the secondary market[41] resumed their downward course in early Q3 and went down more swiftly at mid-quarter. Afterwards, they re-embarked on a sharply upward path, accumulating a significant rise, which however was corrected rather suddenly in the long maturity segment in the closing days of September[42]. Short-term yields posted a relatively similar, albeit less strong pattern (Chart 3.3). As a result, the monthly averages of the rates recorded only small declines in September as compared to those seen in the last month of Q2 for the 5- and 10-year maturities (down by approximately 0.1 percentage points to 6.40 percent and 6.69 percent respectively) and stood almost still for the 3-year

38 Average weighted by the volume of transactions.

39 The average daily stock of these deposits shrank to lei 40.9 billion in 2024 Q3 from lei 48.7 billion in the previous quarter.

40 Investor expectations for the Fed to launch the interest rate lowering cycle in September increased progressively in July, amid the economic data released during this period, which hinted at the ongoing moderation of inflationary pressures across the US economy. Subsequently, the expectations on a more sizeable policy rate cut (ultimately confirmed by the Fed's decision of 17-18 September) were spurred by increased investor concerns about the potential recession of the US economy, amid the underperformance of the US labour market, as shown by statistical data released at the beginning of August. This also led to an episode of heightened volatility on the international financial market, which escalated afterwards due to the massive unwinding of yen-funded carry trades and the risk of stronger tensions in the Middle East.

41 Bid-ask averages.

42 Due *inter alia* to the announcement on 19 September 2024 of the result of the Ministry of Finance's Eurobond issue, the volume of which amounted to the equivalent of about EUR 5 billion.

maturity (at 6.18 percent), but dropped visibly for maturities of 6-12 months (down by around 0.2 percentage points to 5.75 percent and 5.76 percent respectively). Against this backdrop, the yield curve saw its positive slope steepen further.

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

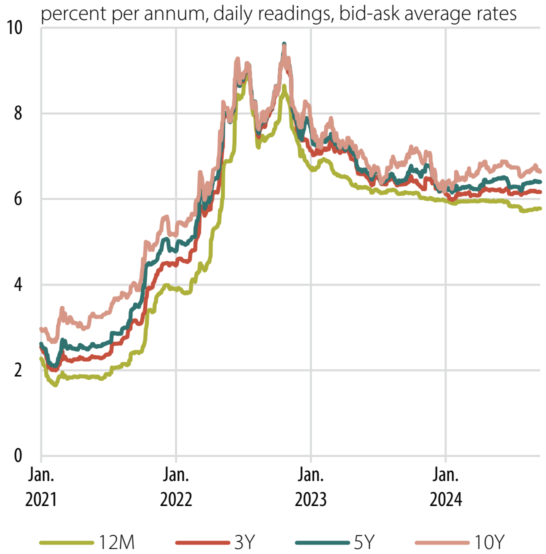
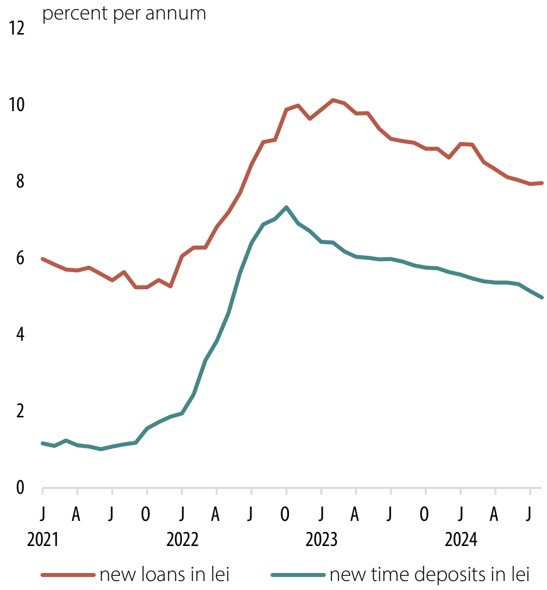


Chart 3.4. Bank rates



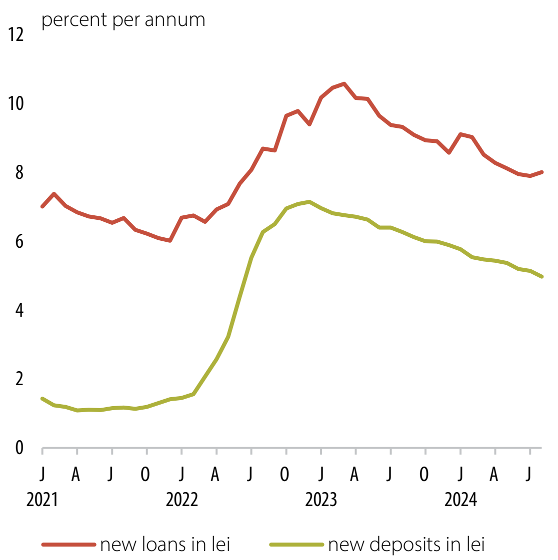
The average accepted rates on the primary market displayed relatively similar developments[43]. Specifically, they decreased fairly significantly, i.e. by 0.25 percentage points, to 5.77 percent in September against June for the 1-year Treasury certificates, but more modestly for the 5- and 10-year maturities (down 0.14 percentage points and 0.10 percentage points to 6.48 percent and 6.72 percent respectively) and only marginally for 3-year securities (-0.05 percentage points to 6.21 percent). The monthly volume of issues rose in July[44], but contracted markedly in the following months, given the notable increase in the volume and share of long-term securities during Q3 overall, to the detriment of those for short-term securities (below 1 year), which normalised as compared to the high levels recorded in the previous quarter[45].
At the same time, the ratio of the amounts of bids submitted by primary dealers to

[43] During Q3, the "Tezaur" programme saw the monthly issuance of government securities with 1- and 3-year maturities, at rates of: (i) 6.00 percent and 6.85 percent respectively in July, (ii) 6.00 percent and 6.85 percent respectively in August and (iii) 5.80 percent and 6.60 percent in September. Moreover, in August, the MF issued government securities for households under the "Fidelis" programme, both in domestic currency, with 1- and 5-year maturities, at rates of 5.80 percent and 7.00 percent respectively, worth around lei 1.7 billion, and in euro, with 1- and 5-year maturities, at rates of 4.00 percent and 5.00 percent respectively, totalling about EUR 311 million. In September, the MF issued both EUR-denominated Eurobonds, with maturities of 7 and 20 years, at rates of 5.13 percent and 6.02 percent respectively (amounting to EUR 3 billion), and USD-denominated Eurobonds, with 4- and 10-year maturities and rates of 5.28 percent and 5.84 percent respectively (totalling about USD 2.2 billion).

[44] To about lei 13 billion, a 12-month high.

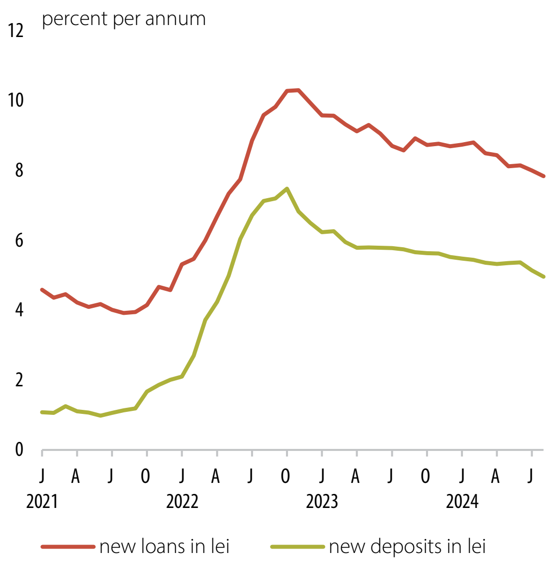
[45] During Q3 overall, the value of securities issued dropped by lei 6.2 billion against the previous three months, to lei 26.3 billion. The value of net issues soared however (by lei 15.4 billion, to lei 24.5 billion), given that the volume of securities maturing in this period decreased considerably, reaching a 16-quarter low.

Chart 3.5. Interest rates for households*



*) households and non-profit institutions serving households

Chart 3.6. Interest rates for non-financial corporations



the announced volume at MF auctions increased to 2.69 in July, but fell subsequently to 1.86 in September. Moreover, the ratio of the volume of issues to the announced volume by the MF grew to 1.97 in July, but decreased in the following months, going marginally below one in September[46].

The average interest rate on new loans to non-bank clients posted a slower decline in July-August as against Q2 (-0.21 percentage points to 7.95 percent), while the average remuneration of new time deposits decreased at a slightly faster pace (-0.29 percentage points to 5.05 percent) (Chart 3.4).

The average lending rate on new business to households slowed its downtrend, shedding 0.16 percentage points to 7.96 percent as against Q2, amid diverging behaviours across the major types of loans (Chart 3.5). Specifically, the average interest rate on new consumer credit halted its decrease, remaining unchanged as against Q2, i.e. at 9.48 percent[47], in line with the results of the NBR's latest *Bank Lending Survey* (August 2024), which indicated that the easing of credit standards visible in the first half of the year would be discontinued in 2024 Q3, amid keener competition in this market segment. However, the average interest rate on new housing loans further shrank as compared to the previous quarter (-0.25 percentage points to 6.29 percent).

The average lending rate on new business to non-financial corporations displayed, however, a new significant decline, only slightly lower than that recorded in Q2 (-0.32 percentage points to 7.92 percent) (Chart 3.6). The downward adjustments were similar across the major types of loans. Thus, the average interest rate on high-value loans (above EUR 1 million equivalent) fell 0.36 percentage points to 7.22 percent, while that on low-value loans (below EUR 1 million equivalent) dropped by 0.34 percentage points to 8.26 percent.

46 During Q3 overall, the ratio of the amounts of bids submitted by primary dealers to the announced volume at MF auctions remained quasi-steady at 2.16, while the ratio of the volume of issues to the announced volume by the MF fell slightly to 1.47, from 1.66 in Q2.

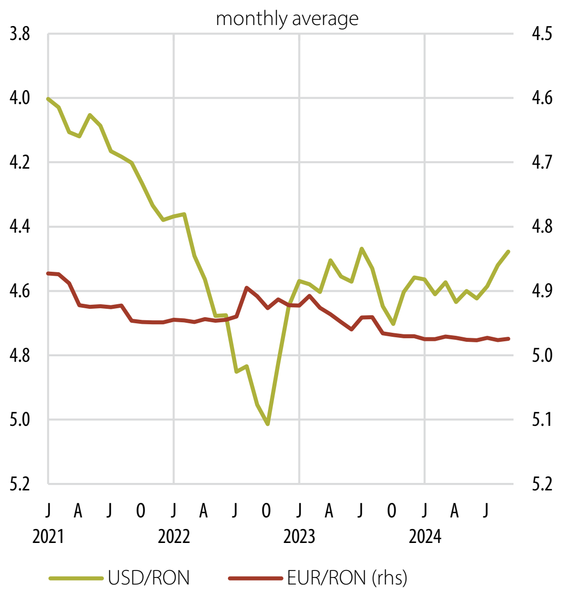
47 At monthly level, it decreased further in July, but saw a larger increase in August, i.e. +0.57 percentage points to 9.76 percent (a 5-month high).

Looking at new time deposits, the average remuneration saw a slightly faster downward movement, on account of developments in the non-financial corporations segment (-0.30 percentage points to 5.05 percent). As for households, the indicator decreased at a similar pace to that recorded in Q2 (-0.28 percentage points to 5.06 percent).

2.2. Exchange rate and capital flows

The EUR/RON exchange rate posted a sizeable drop in the first part of July, but reverted relatively quickly and tended to remain unchanged in August and September at the higher values prevailing in 2024 Q2 (Chart 3.7).

Chart 3.7. Nominal exchange rate



The EUR/RON witnessed a downward correction in the first part of July and stayed at lower values until towards end-July, amid relatively strong fluctuations. Behind this behaviour stood a new revision of investor expectations on the outlook for the Fed's interest rate[48] – which also led to the EUR/USD exchange rate re-embarking on a generally upward path –, as well as the improvement of the risk perception towards financial markets in the region[49], alongside the relative attractiveness of investments in domestic currency (Table 3.1). In the closing days of the month, the EUR/RON climbed however relatively abruptly, in tandem with the exchange rates of currencies in the region. This owed to the deterioration of the global risk appetite, under the impact of the tech stock sell-off in the US and the escalating tensions in the Middle East (Chart 3.8).

The EUR/RON exchange rate went up further in the early days of August, returning to the values prevailing in Q2, in the context of a short-lived episode of increased international financial market volatility, triggered during this period by heightened investor fears about the US economy possibly entering a recession[50] – implying also a sharper depreciation of the US dollar versus the euro –, but also by the massive unwinding of yen-funded carry trades[51]. The EUR/RON exchange rate stuck to the higher readings until the end of the month, amid the influences stemming, on one hand, from investor concerns about the budget and the fiscal consolidation prospects

48 Investor expectations for the Fed to start the interest rate cut cycle in September increased progressively in July, amid the economic data released during this period, which hinted at the ongoing moderation of inflationary pressures across the US economy.

49 Given *inter alia* the alleviation of political uncertainties in Europe.

50 Amid the underperformance of the US labour market, as shown by statistical data released at the beginning of August.

51 Given the unexpected increase in the monetary policy rate by the Bank of Japan, to 0.25 percent from 0.10 percent, which led to a significant appreciation of the yen against the US dollar.

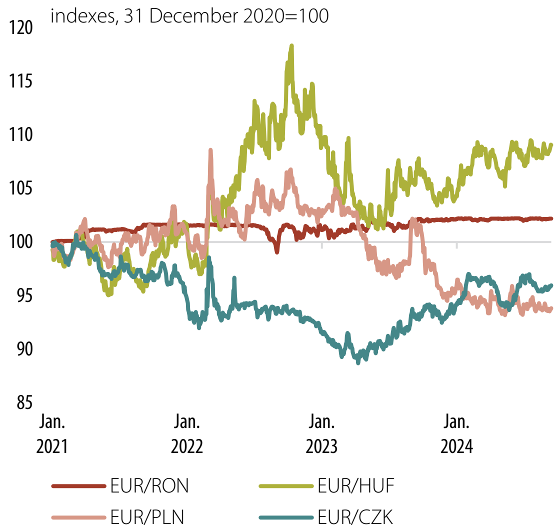
Table 3.1. Key financial account items

EUR million

	8 mos. 2023			8 mos. 2024		
	Net acquisition of financial assets*	Net incurrence of liabilities*	Net	Net acquisition of financial assets*	Net incurrence of liabilities*	Net
Financial account	12,590	17,975	-5,385	7,000	18,775	-11,775
Direct investment	859	5,067	-4,208	1,638	5,766	-4,128
Portfolio investment	941	12,549	-11,608	1,214	9,990	-8,776
Financial derivatives	181	x	181	29	x	29
Other investment	2,695	358	2,336	1,072	3,019	-1,947
– currency and deposits	2,682	-591	3,273	-1,465	-413	-1,052
– loans	-226	257	-483	73	965	-892
– other	238	693	-454	2,464	2,468	-4
NBR's reserve assets, net	7,914	0	7,914	3,047	0	3,047

*) "+" increase/"-" decrease

Chart 3.8. Exchange rate developments on emerging markets in the region



Source: ECB, NBR

domestically and, on the other hand, from expectations on near-term developments in the leu's exchange rate, likely to underpin the attractiveness of investments in domestic currency.

The EUR/RON exchange rate saw a decrease, albeit more modest, in the early days of September as well, before re-embarking on an upward course, due *inter alia* to residents' keener demand for foreign currency, probably associated with international trade flows. The trend was temporarily slowed down by the relative improvement in global risk appetite[52], but sharpened afterwards. Towards the end of the period, the exchange rate returned in the vicinity of the values recorded in the month before, given the heightened pressure on the exchange rates of currencies in the region, amid some signs of worsening economic developments in the euro area[53], also having as a result the halt in the US dollar depreciation against the euro[54] at the end of Q3.

The interbank forex market turnover rose slightly in Q3 as compared to the previous three months[55], while the negative balance of transactions contracted as against Q2, on account of non-residents' operations.

In Q3 overall, the leu strengthened marginally versus the euro[56,57] in nominal terms (+0.05 percent) and somewhat more visibly in real terms (+0.4 percent). In relation to the US dollar, the domestic currency appreciated 3.3 percent in nominal terms and 3.6 percent in real terms. Looking at the annual change in the quarterly averages of the exchange rate, the leu saw its depreciation against the euro remain constant and resumed its appreciation vis-à-vis the US dollar.

52 On the back of investor stronger expectations for the Fed to start the interest rate cut cycle with a relatively larger reduction, confirmed on 18 September 2024 by the decision to lower the target range for the federal funds rate by 0.50 percentage points to 4.75-5.00 percent.

53 The steeper-than-expected decrease in euro area PMI indices in September to levels indicative of a contraction in economic activity, owing to the stronger decline in industry.

54 Under the circumstances, the leu appreciated quasi-steadily in relation to the US dollar throughout Q3.

55 It thus remained close to the peaks recorded over the past two to three years, which are historical highs.

56 Based on the September and June 2024 averages of the EUR/RON exchange rate.

57 During the same period, the Czech koruna weakened 1.3 percent against the euro, the forint remained unchanged against the single currency, whereas the zloty appreciated 1.0 percent.

2.3. Money and credit

Money

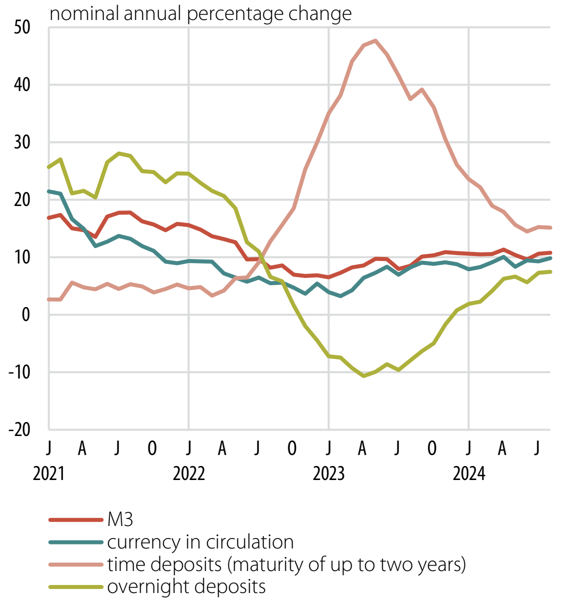
The annual dynamics of broad money (M3) stepped up to 10.7 percent in the July-August period[58], after decelerating to 10.5 percent in 2024 Q2, in correlation with the characteristics of budget execution and the pick-up in the growth rate of credit to the private sector, as well as with the worsening of the balance on trade in goods and services (Table 3.2).

Table 3.2. Annual growth rates of M3 and its components

nominal percentage change

	2023		2024			
	III	IV	I	II	Jul.	Aug.
	quarterly average growth					
M3	8.9	10.6	10.6	10.5	10.6	10.8
M1	-4.0	0.8	4.3	7.0	7.8	8.1
Currency in circulation	8.1	8.9	8.4	9.3	9.3	9.9
Overnight deposits	-8.0	-2.0	2.8	6.2	7.3	7.5
Time deposits (maturity of up to two years)	39.4	30.9	21.6	16.0	15.3	15.1

Chart 3.9. Main broad money components



The stronger momentum of M3 was driven entirely by the annual pace of increase of narrow money (M1). The latter further moved upwards in the first two months of Q3, yet more slowly, on the back of the opposite influences coming, on the one hand, from the faster growth of leu-denominated overnight deposits and, on the other hand, from the milder narrowing of the decline in foreign-currency denominated overnight deposits[59] and the more sluggish advance in the rate of change of currency in circulation, which reached however an 11-quarter high[60] (Chart 3.9).

By contrast, time deposits with a maturity of up to two years followed the opposite path, as the impact of the halt in the deceleration of the domestic currency component's dynamics over this period – on account of deposits from non-monetary financial institutions (non-MFIs) and, to a smaller extent, of those from non-financial corporations – was slightly counterbalanced by that of the further decrease in the rate of change of the foreign currency component, yet at a considerably slower pace, attributable to both major sectors' deposits. Against this background, the share of M1 in M3 remained at the level recorded at end-Q2, i.e. 60.5 percent.

The breakdown by holder shows that the small advance in M3 dynamics was driven by the slight re-acceleration of the growth rate of companies' M3 deposits, solely on the back of developments in non-MFI deposits[61]. Conversely, the annual rate

58 In real terms, the annual growth rate of M3 went up at a slower pace, to 5.2 percent from 4.9 percent in 2024 Q2.

59 The developments in both categories of overnight deposits owed entirely to households.

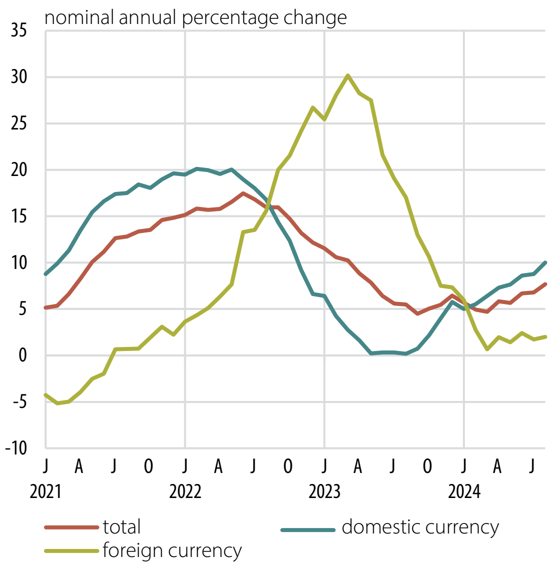
60 Assessment based on quarterly average growth rates.

61 The annual rate of change of total deposits from non-monetary financial institutions entered positive territory July through August as a whole after staying negative for two quarters.

of change of non-financial corporations' deposits further declined, yet markedly less quickly, amid the higher disbursements from the budget[62] and the faster dynamics of credit to this sector, which largely counterbalanced the effects stemming from the worsening of the trade balance and the hike in wage costs. At the same time, the double-digit annual growth rate of household deposits included in M3 decreased from the 2½-year peak reached in the previous quarter, yet only marginally, in a context in which the step-up in the dynamics of disposable income was associated with the further robust advance in purchases of goods over the same period[63], as well as with the significantly swifter pace of increase of this sector's holdings of government securities in July-August.

From the perspective of M3 counterparts, expansionary influences came from the substantially stronger momentum in net credit to the central government and the further pick-up in the dynamics of credit to the private sector, while opposite effects stemmed from the decline in the annual rate of change of net foreign assets of the banking system.

Chart 3.10. Credit to the private sector by currency



Credit to the private sector

The annual growth rate of credit to the private sector remained on an upward trend in July-August 2024, reaching 7.2 percent[64] on average from 6.1 percent in Q2, chiefly under the impact of the leu-denominated component, whose pace of increase continued to accelerate, but also marginally due to foreign currency credit, however on the back of the statistical effect of the EUR/RON exchange rate (Chart 3.10). Thus, the share of leu-denominated loans in total credit widened to 69.7 percent in August from 69.1 percent in June.

The step-up in the dynamics of credit to the private sector was almost fully ascribable to household loans, whose annual rate of change further gained momentum, solely due to the leu-denominated component (Chart 3.11). The latter's pace of increase climbed to a two-digit level in the first two months of Q3, mainly prompted by consumer credit and other loans, whose growth rate reached a post-2008 quarterly peak, as a result of the record high seen in July by new loans of this type[65]. In turn, the annual dynamics of housing loans stuck to a gradual upward path, on the back of the flow

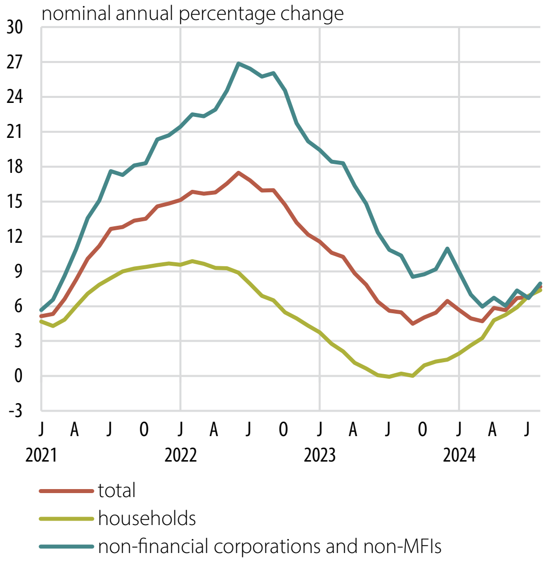
62 According to general government budget execution data.

63 The average annual growth rate of retail trade turnover fell only slightly in July-August, to 8.1 percent from 9.8 percent in Q2, whereas that of turnover in trade in motor vehicles and motorcycles remained at 3.5 percent.

64 Real annual growth of credit to the private sector further stepped up, to 1.9 percent on average July through August, from 0.7 percent in Q2.

65 Assessment based on the flows adjusted for the value of renegotiated loans. In August, the volume of new loans fell only slightly as compared with that in July.

Chart 3.11. Credit to the private sector by institutional sector



of loans returning to a more than two-year high[66]. By contrast, the stock of foreign currency-denominated credit to households (expressed in euro) continued to steepen its particularly sizeable contraction against the same year-earlier period.

At the same time, the growth rate of loans to non-financial corporations ceased to decline and even increased slightly versus the previous quarter. This owed solely to the performance of medium- and long-term loans in domestic currency, whose annual dynamics re-entered positive territory, amid the July record contributions from loans granted under government programmes. Nevertheless, the annual pace of increase of foreign currency-denominated loans further decelerated, chiefly as a result of the developments in short-term loans.

66 Adjusted for the value of renegotiation operations.

4. Inflation outlook

The annual CPI inflation rate will follow an overall downward trend throughout the projection interval, albeit with some fluctuations in the first quarters (similarly to the recent period), while afterwards disinflation is envisaged to lose momentum markedly. The breakdown shows that core inflation is projected to decline gradually, even slowly over the medium term, whereas exogenous components will stand behind the volatility expected in the headline CPI index during the first part of the forecast interval, mainly due to a number of base effects. Under these circumstances, the annual inflation rate will stand at 4.9 percent in December 2024, will reach the upper bound of the variation band of the target (3.5 percent) at end-2025 and then it will drop to 3.3 percent at the projection horizon (September 2026). Compared to the forecast in the August *Inflation Report*, the annual CPI inflation rate will run at higher levels over the entire projection interval, particularly until 2025 Q3. The adjustment will be of 0.9 percentage points at the end of this year, mainly as a result of more unfavourable developments in the food segment, especially in the case of VFE (volatile food prices) affected by adverse weather conditions, but also in the case of processed food prices. To this add the upward revisions in the dynamics of electricity and tobacco prices. In the latter part of the projection interval, headline inflation was revised slightly upwards (by 0.1 percentage points both in December 2025 and at the previous forecast horizon, i.e. June 2026). The assessed balance of risks suggests possible upside deviations of inflation from its path in the baseline scenario, particularly should new adverse supply-side shocks materialise.

1. Baseline scenario

1.1. External assumptions

The dynamics of the external trading partners' economic activity, as proxied by the EU effective GDP, were further seen to stand at 1 percent for this year, while for 2025 they were revised upwards to 1.5 percent (Table 4.1). This revision owes to the carry-over effect related to the less favourable outlook for the latter half of 2024, given the low level of consumer and business confidence. Over the short term, external economic activity remains contained by the tight financial conditions. Thus, for 2024 Q3 and Q4, a merely moderate quarterly growth in EU effective GDP is anticipated. However, over the medium term, economic activity is set to gain momentum. In this vein, contributions are forecasted to come from the gradual increase in household real income and the restoration of economic agents' confidence, but also from the recovery of extra-EU

Table 4.1. Expected developments in external variables

annual averages

	2024	2025
EU effective GDP growth (%)	1.0	1.5
Euro area annual inflation (%)	2.4	2.2
Euro area annual inflation excluding energy (%)	2.8	2.4
Annual CPI inflation rate in the USA (%)	3.0	2.3
3M EURIBOR (% p.a.)	3.6	2.3
USD/EUR exchange rate	1.09	1.11
Brent oil price (USD/barrel)	80.9	74.6

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

demand (already visible) and the further alleviation of the restrictive effect of the ECB's monetary policy.

Against this background, the effective external output gap was revised downwards for 2025 and is envisaged to remain in negative territory for longer, that is until 2025 Q2 (and not 2024 Q4 as was previously foreseen), and then to advance to positive values, yet more slowly.

The average annual inflation rate for the euro area is projected to reach values very close to those in the prior *Report* (2.4 percent in 2024 and 2.2 percent in 2025). The breakdown shows that the slight upward revision of core inflation is offset by the downward adjustment of food and energy inflation forecast. The annual inflation rate is foreseen to reach the ECB's 2 percent benchmark in 2025 Q4, as envisaged in the previous *Report*, while the dynamics of import prices (which also cumulate the impact of the effective exchange rate vis-à-vis trading partners) will near the 2 percent level in 2026.

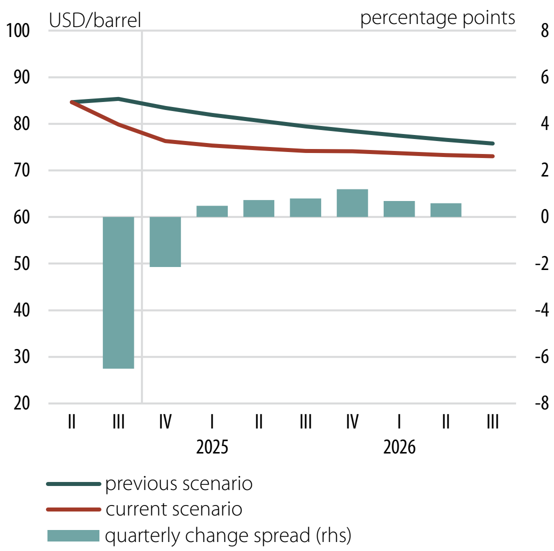
The forecast of the euro area HICP inflation excluding energy[67] was kept at 2.8 percent for 2024, and revised slightly upwards (by 0.1 percentage points) to 2.4 percent for 2025. Looking by quarter, the indicator follows a steadily downward track, at a swifter pace than headline inflation over both the short and medium term. Nominal wage growth has slowed in recent quarters, and the indicator is expected to further moderate gradually in the coming years. Moreover, profit margins have decreased, thus partly offsetting the pass-through of labour costs to final prices. At the projection horizon, i.e. 2026 Q3, the HICP inflation rate excluding energy is anticipated to run slightly above headline inflation (2 percent versus 1.9 percent).

The nominal 3M EURIBOR hit a high of 4 percent for the current cycle in 2023 Q4, and is seen to gradually decrease throughout the projection interval and reach 2 percent in 2026 Q3. The real 3M EURIBOR rate is estimated to remain in positive territory, with a peak in 2024 Q2, before falling gradually over the forecast interval. Hence, it will further exert a restrictive impact on euro area economy. This effect is however assessed to fade out faster and turn quasi-neutral in mid-2025, due to the swifter decline in nominal terms especially in the former part of next year, as shown by futures prices.

The path of the EUR/USD exchange rate points to a steady euro in the short term, followed by a slow and gradual strengthening against the USD over the forecast interval. This path takes shape against the background of expectations for the monetary policies pursued by the ECB and the Fed. The forecasted developments are further surrounded by a high degree of uncertainty.

67 A proxy for imported inflation in the case of Romania.

Chart 4.1. Brent oil price scenario



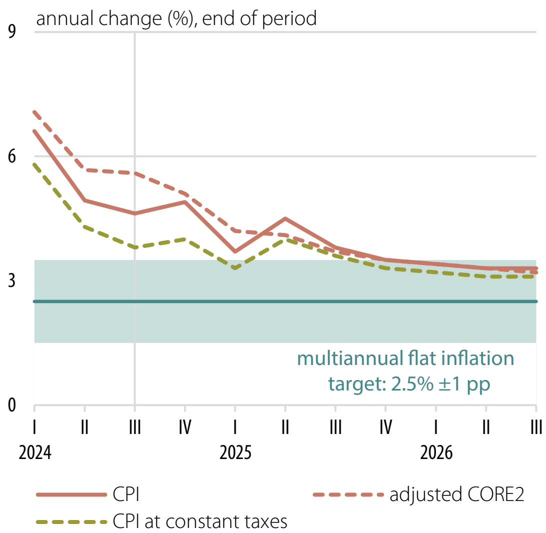
Source: U.S. Energy Information Administration, NBR assumptions based on Bloomberg data

The scenario for the Brent oil price is based on futures prices and foresees a downswing, given the prospective slowdown in global economic activity. Specifically, at the forecast horizon, the Brent oil price is projected at around USD 73/barrel (Chart 4.1). However, this outlook is subject to multiple sources of risks, in particular geopolitical ones, which could drive up the price of oil. On the demand side, concerns about the weakening global growth prevail over the short and medium term, weighing also on oil demand, but are partly offset by possible fiscal incentives in China. On the supply side, the escalating geopolitical tensions in the Middle East keep fuelling fears about potential disruptions to oil deliveries from the region. Consequently, while a descending path of the oil price is envisaged based on futures prices, the broad uncertainty surrounding its developments in the period ahead is worth highlighting.

1.2. Inflation outlook

After a slight rise in July, in line with the forecast in the previous round, the annual CPI inflation rate resumed its downward path in August, coming in at 4.62 percent at end-2024 Q3. Looking ahead, the overall downward trend in the inflation rate will persist throughout the projection interval, but there will be fluctuations in its first part and afterwards the pace of CPI disinflation is expected to slow down significantly (Chart 4.2). The breakdown shows that core inflation is forecasted to decline gradually, even sluggishly over the medium term, while exogenous components will drive the volatile pattern of headline CPI during the first part of the interval, mainly owing to some base effects.

Chart 4.2. CPI and adjusted CORE2 inflation forecasts



Source: NIS, NBR projection

Specifically, over the short term, the annual inflation rate will increase in 2024 Q4, amid faster annual growth rates of fuel prices (which posted substantial decreases in 2023 Q4) and electricity prices. Headline inflation will reflect favourable influences in early 2025 (associated with the hike in some indirect taxes in January 2024 dropping out of the annual inflation rate calculation) and unfavourable influences in 2025 Q2 (coming from the decline in natural gas and unprocessed food prices in 2024 Q2). Subsequently, the annual inflation rate will embark on a slow downward path. Under these circumstances, it will stand at 4.9 percent in December 2024, reach the upper bound of the variation band of the target at end-2025 (3.5 percent), and then inch down to

Table 4.2. CPI and adjusted CORE2 inflation in the baseline scenario

annual change (%), end of period

	2024	2025				2026		
	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3
Target (mid-point)	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
CPI projection	4.9	3.7	4.5	3.8	3.5	3.4	3.3	3.3
CPI projection*	4.0	3.3	4.0	3.6	3.3	3.2	3.1	3.1
Adjusted CORE2 projection	5.1	4.2	4.1	3.7	3.5	3.4	3.3	3.2

*) calculated at constant taxes

3.4 percent in March 2026 and to 3.3 percent at the projection horizon (September 2026, Table 4.2).

Compared to the forecast in the previous *Inflation Report*, the annual CPI inflation rate is seen at higher values for the entire projection interval, with larger differences primarily until 2025 Q3. At the end of this year, the revision is +0.9 percentage points. This was mainly ascribable to the more unfavourable developments and outlook in the food segment, especially the VFE group, and partly in the processed food segment, amid the soil drought in the summer months. The contributions of electricity and tobacco products have been revised in the same direction, whereas the inflation rate for fuels is lower than in the previous forecast at this horizon. Over the latter part of the projection interval, headline inflation is expected to be only mildly upwards (by 0.1 percentage points both in December 2025 and at the previous forecast horizon, June 2026), on account of fuels.

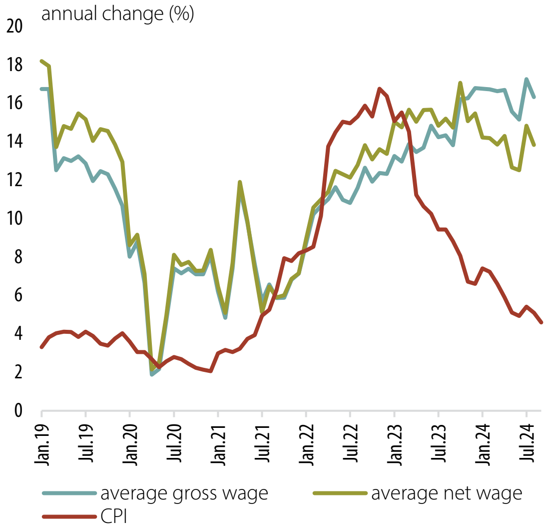
The annual adjusted CORE2 inflation rate further followed a downward path in 2024 Q3, albeit at a visibly slower pace compared to the previous quarters (down only 0.1 percentage points in September from June, to 5.7 percent). Looking ahead, the indicator will remain on a continuous downtrend. However, after more significant decreases in the short term (especially in 2025 Q1), the pace of disinflation will slow down markedly. Hence, the annual core inflation rate is projected at 5.1 percent at end-2024, 3.5 percent in December 2025, and 3.2 percent in September 2026.

The breakdown shows that the anticipated trajectory of core inflation is shaped by the gradual deceleration in the annual dynamics of prices for non-food items and services, which are still high (7 percent and 7.4 percent respectively in September 2024). The latest data suggest favourable developments in the case of non-food items, with corroborative evidence from the related industrial producer prices and import prices. Market services prices further reflect the persistent inflationary pressures from labour costs, which post robust growth rates, albeit on a decline in the medium term. In addition, some of these pressures are expected to be mitigated by non-financial corporations recording lower profit shares in GVA from a historical perspective (see Box 2). At the same time, a complementary analysis revealed that the risk of a wage-price spiral would continue to diminish in the near run (see Box 3). The annual inflation rate of the food sub-group will witness relatively stable developments overall, with rather small fluctuations, as recent pressures associated with the poor domestic harvest will be partly offset by opposite base effects in early 2025. Compared to the rest of the index, the annual dynamics of the sub-group are foreseen to remain significantly lower.

Box 2. The impact of profits on wage growth

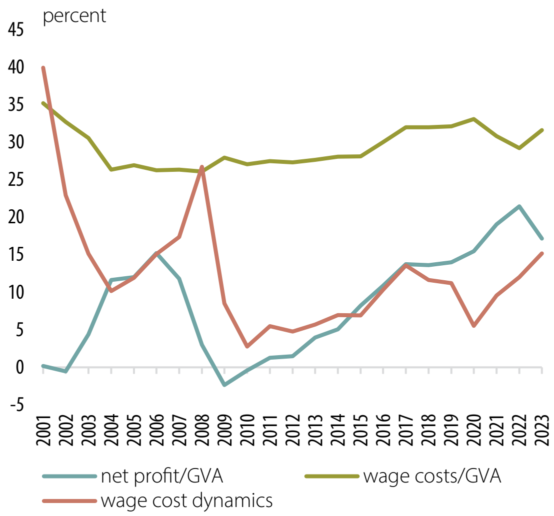
Over the past year and a half, the annual inflation rate in Romania has followed a downward path (Chart A), driven by a combination of factors, including the gradual dissipation of the energy shock (intensified by the outbreak of the war in Ukraine) and the post-pandemic easing of bottlenecks in global supply chains, along with the fading-out of the base effects associated with certain administrative measures adopted by the authorities. By contrast, the dynamics of wage earnings gained momentum as early as 2023, exhibiting inertia relative to inflation. The partial misalignment between the two variables can be explained by employees' gradual recovery of purchasing power eroded due to supply-side shocks in recent years. The growth rate of wages remained elevated in 2024 as well, even accelerating for public sector earnings, while experiencing a slight moderation in the private sector, as a natural response to the slowdown in economic activity in the first part of the year.

Chart A. Nominal wage growth and inflation rate



Source: NIS, NBR calculations

Chart B. Profit shares and wage cost dynamics for non-financial corporations

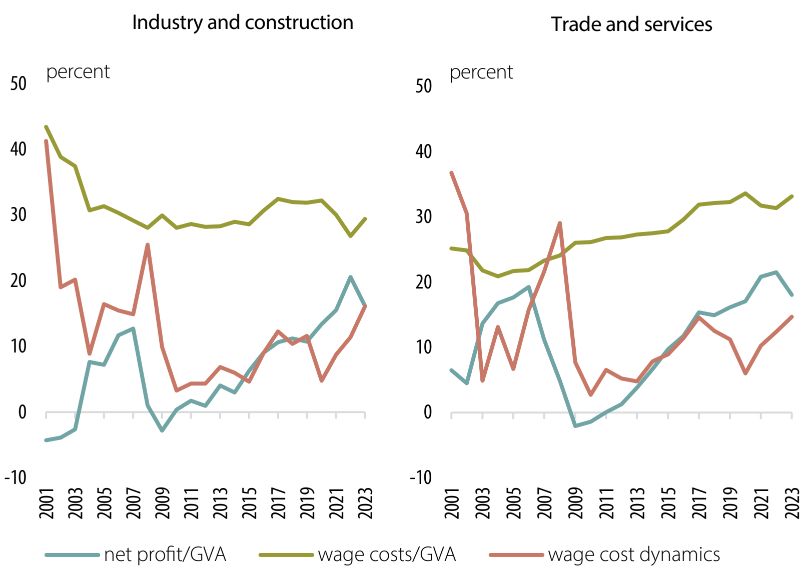


Source: balance sheet data of non-financial corporations, MF, NBR calculations

Apart from this lagged response of wage growth to shocks that occurred in previous periods, a possible explanation for the downward trend in inflation in parallel with the faster and thereafter only moderately lower wage growth across the economy lies in companies' use of profits as a buffer to mitigate the pass-through of their higher wage costs into a proportional increase in sales prices (Hansen, Toscani, Zhou, 2023; Healy *et al.*, 2024). In the literature, the role played by profits in relation to labour market variables has recently been studied through the lens of the labour hoarding indicator. Specifically, it has been estimated that an increase in profit margin (gross profit to turnover ratio) intensifies labour hoarding, with a one-year lag (Botelho, 2024). Thus, more profitable firms can cover the costs of a temporarily oversized workforce, a behaviour driven by labour shortages and, by extension, recruitment difficulties.

In Romania, the share of net profits in gross value added (profit share or profit rate), calculated using balance sheet data of non-financial corporations reported to the Ministry of Finance, widened steadily from 2013 to 2022, accompanied by a faster pace of increase in wage costs, particularly up to 2017 (Chart B). The pandemic marked a slowdown in wage growth, yet the profit rate continued its upward trend. The 2023 deceleration in economic activity was correlated with a drop in the profit rate[68], accounting for the first such occurrence since the 2008-2009 global financial crisis[69]. These dynamics were also visible at sectoral level (Chart C), with 2023 showing less pronounced declines in profit rate in trade and services compared to industry, construction, or agriculture. Under the circumstances, companies' profit shares, which followed an upward trend after the global financial crisis until 2022, is likely to have enabled the accommodation of more robust wage growth rates.

Chart C. Profit shares and wage cost dynamics for non-financial corporations across various sectors



Source: balance sheet data of non-financial corporations, MF, NBR calculations

To illustrate this assumption in the context of Romania's economy[70], annual balance sheet data from non-financial corporations with private capital, reported to the Ministry of Finance for the period from 2008 to 2023, were used. From the collected data series, outliers were removed, leaving only firms with more than 10 employees in the sample. Subsequently, observations in the first and last decile of the distribution of the variable "share of net profits in gross value added (profit rate)" were also excluded. The resulting sample, used in the econometric estimations, covers nearly 60 percent of the private sector workforce (as of 2023). To quantify the impact of the profit rate on wage cost dynamics, a binary variable was constructed and assigned a value of 1 if the respective firm recorded a profit rate above the median, and 0 if the profit rate was below or equal to the median. The level of wages and the number of employees in the previous year, productivity dynamics, firm size and age, as well as sector, year, and firm fixed effects were used as control variables.

68 These dynamics could also be influenced by the capping of mark-ups on certain basic food products, a measure introduced in August 2023 for an initial period of three months. However, this measure has direct effects only in the retail trade sector, and its repeated extension may lead to the transfer of losses to the margins of goods not subject to the cap (the so-called "waterbed effect").

69 There was a decline in the share of profits in gross value added in 2018 as well, but it was marginal (-0.1 percentage points), amounting more to a stagnation.

70 These estimates aim to quantify the effect of the previous year's profit rate on wage growth, without providing evidence of the latter's pass-through into inflation.

The results show a significant link between the profit rate in the previous year and current wage growth. Specifically, companies reporting a profit rate above the median in the previous year exhibit wage growth nearly 6 percentage points higher than those with a profit rate below the median (Table A). Therefore, the increase in companies' profit rate in the period prior to 2022 could be a factor that enabled strong wage growth. Considering the drop in profit rates in 2023, amid, *inter alia*, the modest developments in economic activity, estimates also suggest that wage cost dynamics could have decelerated in 2024 in the absence of other pressures, such as the Government's decision to raise the minimum wage by approximately 12 percent in July 2024[71].

Table A. Results of estimations

	D.log.wage
Profit > median (t-1)	0.0575*** (0.000864)
D.log.productivity	0.183*** (0.00239)
log.wage (t-1)	-0.588*** (0.00366)
log.employees (t-1)	0.0938*** (0.00251)
Size&age	YES
Sector x year	YES
Sector x	YES
Year	YES
Firm	YES
R^2	55.2%

( ) standard deviations

*,**,*** indicate that the coefficient is statistically significant for a confidence level of 90%, 95%, and 99%, respectively

Source: balance sheet data of non-financial corporations, MF, NBR calculations and estimates

It should be noted, however, that this analysis only quantifies the impact of profits on wage growth, without directly assessing the role of profit adjustments in cushioning the inflationary impact of wage growth (a hypothesis suggested by some studies in the literature), given that, theoretically, the existence of this latter mechanism is not unequivocal.

References

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Hansen, N. J. H., Toscani, F., G., and Zhou, J. – "Euro area inflation after the pandemic and energy shock: Import prices, profits and wages", *International Monetary Fund Working Papers* WP/23/131, 2023

Healy, P., Kuik, F., Morris, R., and Slavik, M. – "Main findings from the ECB's recent contacts with non-financial companies", *ECB Economic Bulletin 3/2024*

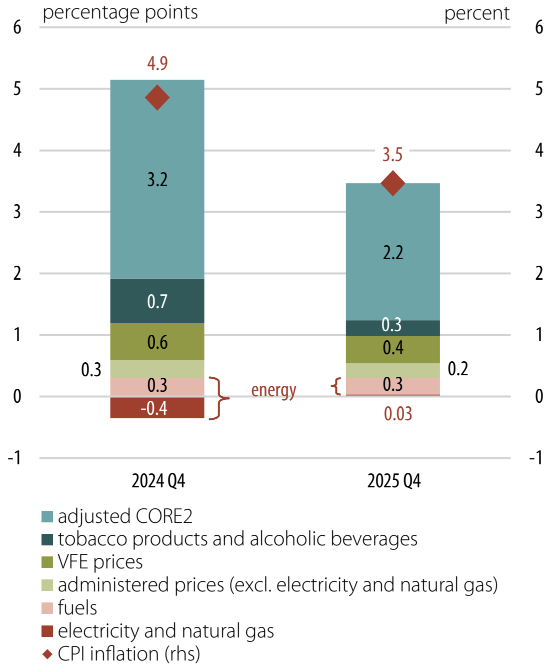
Looking at the underlying inflation factors, the projected decrease in adjusted CORE2 inflation mainly reflects declining contributions from economic agents' inflation expectations. The latter follow a steadily downward course, yet staying above the variation band of the target, which is envisaged to be re-entered at the projection horizon, i.e. 2026 Q3. Additionally, disinflation will be favoured by the growth rate of import prices, which decelerated more visibly in the first part of 2024 and is seen to moderate somewhat more gradually thereafter, in line with the anticipated annual dynamics of euro area HICP inflation excluding energy[72]. At the same time, the output gap

71 This is also confirmed by Chart 2.11 of the August 2024 *Inflation Report*, which shows the decomposition of annual wage growth by fundamental factors, attributing a significant and increasing role to exogenous factors (including income policy) starting from late 2023. In the absence of the latter, wage growth would have followed a decelerating path.

72 According to the September 2024 *ECB staff macroeconomic projections for the euro area*, the average annual growth rate of the indicator will fall from 2.9 percent in 2024 to 2.4 percent in 2025 and 2 percent in 2026.

is projected to have only marginally positive values, which point to favourable conditions for domestic demand, but also to the latter's coverage primarily via imports.

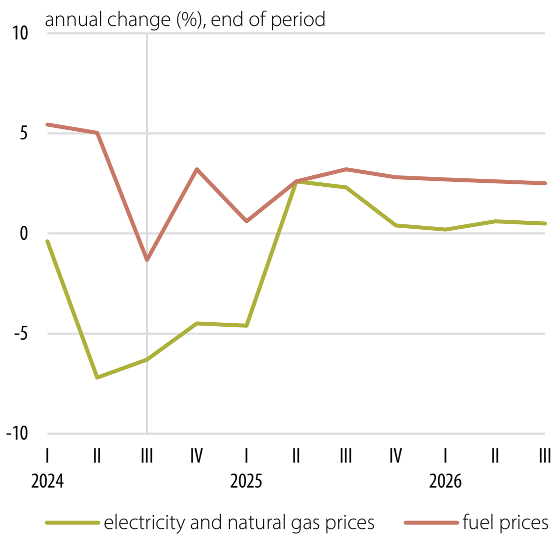
Chart 4.3. Components' contribution to annual inflation rate*



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

Source: NIS, NBR projection

Chart 4.4. Inflation of fuel prices and of electricity and natural gas prices



Source: NIS, NBR projection

Compared to the previous forecasting round, the annual core inflation rate was revised upwards for the first part of the projection interval and slightly downwards for the second part. Specifically, the forecast for end-2024 is higher by 0.5 percentage points. At end-2025, the projection is similar to that in August, and at the horizon of the preceding forecast (June 2026), the updated forecast is 0.1 percentage points lower. The revision in the first part of the forecast interval reflects the recent pressures in the food segment, as well as, to a certain extent, the underestimation of the persistent pressures from the services sub-group. In the second part of the interval, the revision is based on the reconfiguration of the output gap path at a lower level, close to zero.

The cumulative contribution of the exogenous components of the consumer basket to the annual CPI inflation rate is projected at 1.6 percentage points at end-2024 (revised upwards by 0.5 percentage points compared to the August 2024 *Inflation Report*), at 1.2 percentage points (unchanged) in December 2025, and at the projection horizon, i.e. September 2026, at 1.3 percentage points (Chart 4.3). Behind the upward reassessment in December 2024 stood primarily more unfavourable developments in the case of volatile food prices (VFE), electricity prices, tobacco product prices, and administered prices; these influences were only partly offset by corrections in fuel and natural gas prices.

Fuel prices will gain momentum during 2024 Q4, whereas for the rest of the projection horizon, their dynamics are expected to remain close to the variation band of the target. This year-end evolution is attributable mainly to the trajectory of oil prices[73], but also to unfavourable base effects. Subsequently, the fading-out of the statistical effect associated with the July 2024 excise duty hike, along with the slow decline of oil futures prices, will moderate the anticipated dynamics of fuel prices to values inside

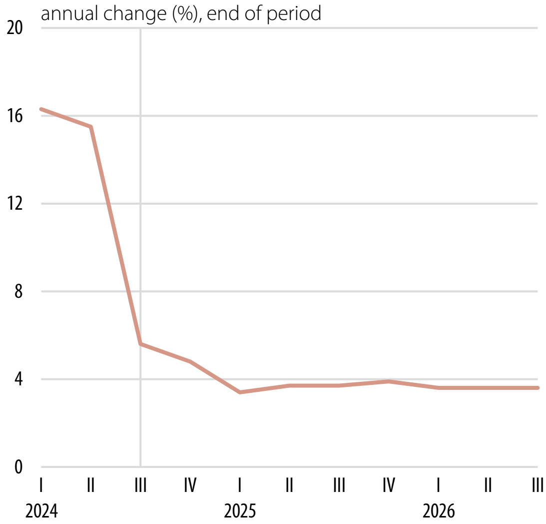
[73] For further details, see Section 1.1. External assumptions.

Table 4.3. Inflation of CPI exogenous components

annual change (%), end of period	Dec. 2023	Dec. 2024	Dec. 2025	Sep. 2026
Energy prices	-3.2	-0.5	1.7	1.6
Fuel prices	2.4	3.2	2.8	2.5
Electricity and natural gas prices	-8.1	-4.5	0.4	0.5
VFE prices	6.7	10.2	7.6	7.1
Administered prices (excl. electricity and natural gas)	14.3	4.8	3.9	3.6
Tobacco products and alcoholic beverages prices	8.3	9.8	3.4	4.7

Source: NIS, NBR projection

Chart 4.5. Administered price inflation (excl. electricity and natural gas)



Source: NIS, NBR projection

the variation band of the target. Compared to the previous *Report*, the projected value for December 2024 was revised significantly downwards, whereas that for December 2025 was adjusted slightly upwards, which was strictly conditional on the path of oil futures prices.

Under the impact of the price capping scheme for household consumers, the annual dynamics of electricity and natural gas prices[74] are forecasted to remain negative until the measure expires, at end-March 2025 (Chart 4.4, Table 4.3). The group is afterwards foreseen to witness benign developments, under the assumption of a normal functioning of the relevant markets. Compared to the August 2024 *Inflation Report*, the path was revised upwards, more visibly in the first part of the projection horizon, as the main electricity suppliers re-aligned the prices for the upper consumption bracket to the cap level (in July-August 2024) and consumers are expected to migrate to the upper consumption bracket in the cold season.

The exogenous scenario for administered prices, other than electricity and natural gas[75], which is built chiefly on historical changes, foresees that the annual dynamics will decelerate over the next two quarters, before stepping up slightly towards end-2025 and stabilising afterwards close to the upper bound of the variation band of the target (Chart 4.5, Table 4.3). Compared to the previous *Inflation Report*, only the values in the first part of the projection interval were adjusted more notably upwards, mainly due to anticipated larger increases in prices for water, sewerage, and sanitation services, and for heating in the cold season. Over the remainder of the projection interval, the annual growth rate of administered prices is relatively similar to that shown in the prior *Report*, being based on the historical pattern of changes to the prices of the main items in this group.

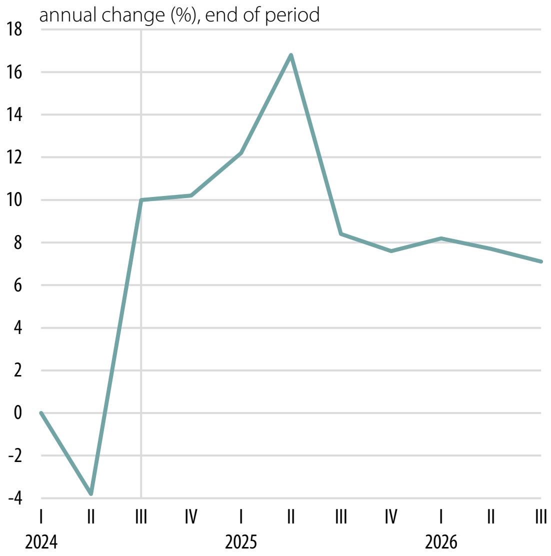
As a result of the protracted soil drought in this summer, the annual dynamics of volatile food prices (VFE) are expected to stay within two-digit levels in the first part of the projection interval (Chart 4.6, Table 4.3). Subsequently, assuming that temperatures return to the multiannual average, the annual growth rates are seen to moderate,

[74] According to NIS Press Release No. 37/14 February 2023, electricity and natural gas were re-included in the group of administered price items of the CPI basket, following the changes made to the energy price capping and compensation schemes as of 1 January 2023.

[75] The main categories of items included in this group are heating, water, sewerage, sanitation services and medicines.

although remaining visibly above the variation band of the target. The same as in the prior rounds, the forecast for this component depends almost entirely on weather conditions, which have recently become highly unpredictable. Compared to the previous forecast, only the value for December 2024 was revised, i.e. significantly upwards.

Chart 4.6. VFE price inflation



Source: NIS, NBR projection

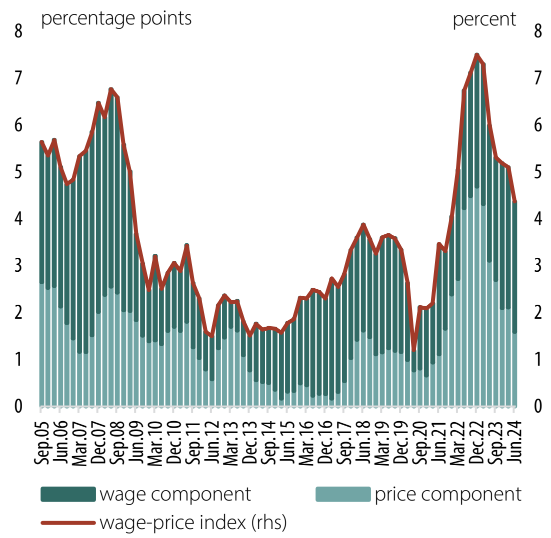
The path of the annual growth rate of tobacco product and alcoholic beverage prices is shaped primarily by higher excise duties provided for in the legislation, but also by the behaviour of companies in the field as regards the final price adjustment. The annual dynamics of this group are anticipated to decelerate until 2026 Q2, before stepping up at the forecast horizon, i.e. September 2026 (Table 4.3).
The projection for the end of the current year was revised upwards, mainly amid an unexpected price hike in the packet of cigarettes in September, which was not justified by the tax regime; for the remainder of the interval, the path is similar to that foreseen in the previous *Report*.

Box 3. Wage-price spiral: A Macro-at-Risk approach

This Box provides an empirical assessment of the 'wage-price spiral' risk, where wage hikes and price increases mutually reinforce one another, leading to persistent inflation. The topic is highly relevant in the context of the latest debates on a relatively slow global disinflation process, especially in the non-food and services segments.

The assessment is based on the Macro-at-Risk approach substantiated by Adrian *et al.* (2019) and, from a methodological point of view, uses the econometric quantile regression model to estimate the distribution of possible values of the wage-price index. The risk of a spiral is assimilated to the 95th percentile of this index (the portion of the statistical distribution of the wage-price index that cumulates 5 percent of its highest values).

Chart A. Wage-price index determined for Romania



Source: NIS, NBR calculations

According to Alvarez *et al.* (2022), the simultaneous increases in wages and prices for 3 consecutive quarters out of 4 may indicate the formation of such a spiral, while Bossay *et al.* (2022) look at periods when wage dynamics exceeded the inflation rate. Despite the different approaches, both empirically and theoretically it is generally accepted that such an event is preceded by simultaneous accelerated increases in the two variables.

The paper by Franta and Vlček (2024), which was also the source of methodological inspiration for this Box, proposes the use of an index calculated as a weighted sum of price growth and nominal wage growth. For Romania, this index (Chart A) is determined based on the equation (1):

$$wage - price\ index_t = 100 * \left[\frac{1}{std(\Delta 4p)} * \Delta 4p_t + \frac{1}{std(\Delta 4w)} * \Delta 4w_t\right] \quad (1)$$

where p_t is the consumer price index (CPI) at time t, adjusted for the first-round effect of VAT rate changes (expressed in natural logarithms) and the gross nominal wage in the private sector[76] at time t (expressed in natural logarithms). The price growth and wage growth are then standardised (using the standard deviation of each of the variables, $std(\Delta 4p)$ and $std(\Delta 4w)$), to balance the contribution of each component, starting from their historical volatility. Thus, the components become comparable in terms of size.

A wage-price index above its value at risk (as proxied by the 95th percentile of its distribution) indicates a substantial likelihood of a wage-price spiral. The 95th percentile was determined conditional on a set of explanatory variables and estimated using the quantile regression model. At the same time, the analysis also involves quantifying "normal" thresholds for the wage-price index and the estimated risk[77]. The deviations from these thresholds signal wage-price spiral risks, with potential unfavourable consequences.

The set of explanatory variables used to estimate the conditional distribution of the possible values of the wage-price index included a number of factors relevant to the aggregate demand in the economy (the deviation of real GDP from its potential level, the deviation of the real effective exchange rate from the equilibrium level, the deviation of the nominal 3M ROBOR interbank rate from the equilibrium level), but also the Global Supply Chain Pressure Index (GSCPI), expressed in the form of annual dynamics, as a proxy for global supply-side shocks[78]. These disruptions, stemming from bottlenecks in global value chains as well as from extreme developments in energy commodity markets, were the main driver of the latest inflation bout.

Table A. Quantile regression estimates for the wage-price index, Romania

Dependent variable	Wage-price index (95th percentile)
Persistence term	0.78** (0.29)
Real effective exchange rate gap (-4)	0.09* (0.06)
Output gap (-4)	0.28* (0.14)
3M ROBOR gap (-4)	-0.48*** (0.15)
Annual GSCPI dynamics (-4)	0.45** (0.22)
Constant	2.26** (1.07)
R^2	58.95%

( ) standard deviations

*,**,*** indicate that the coefficient is statistically significant for a confidence level of 90%, 95%, and 99%, respectively

Source: NIS, New York Federal Reserve, NBR calculations and estimates

76 From the perspective of the theoretical mechanism of the spiral effect, wage developments in the public sector are less relevant since they are not the direct financial responsibility of private companies, which are price setters, but they can indirectly (e.g. via demonstration effects) influence price setting in the private sector.

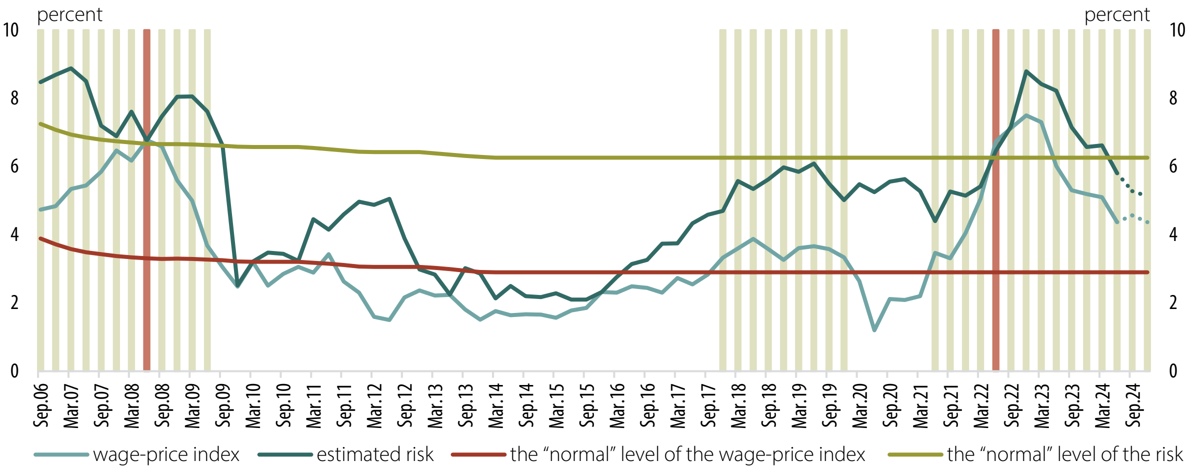
77 The reference ("normal") level of the wage-price index is determined based on equation (1), where price dynamics are set at the central inflation target and wage dynamics at the historical average of the variable. The reference ("normal") level of risk is obtained by applying two standard deviations from the "normal" level of the index.

78 An alternative specification was also tested, using the dynamics of the industrial producer price index in manufacturing as a proxy for supply-side shocks. Unlike the GSCPI, this index captures developments in the domestic economy. The results do not differ significantly from those presented in this Box.

The estimates of the 95th percentile are shown in Table A. The accuracy of the model, as measured by a R^2 index, is 58.95 percent[79].

In the period under review (2005 Q3 – 2024 Q2) two episodes were identified when the wage-price index was slightly above the estimated value at risk: 2008 Q2 and 2022 Q2; Chart B shows the specificities of these moments (the episodes in red). The first episode precedes the 2008-2009 financial crisis. Prior to this period, the NBR had pointed to a wage-price spiral risk in the February 2008 *Inflation Report*, before declaring this risk to be the main factor leading to the monetary policy tightening in February and March 2008 (see, for example, the May 2008 *Inflation Report*). As regards the second episode, the risk of a wage-price spiral was constantly flagged in the minutes of the monetary policy meetings of the NBR Board between October 2021 and July 2022, being one of the factors underlying the decisions to raise the key interest rate.

Chart B. Wage-price index and the 95th percentile of its conditional distribution



Notes: (1) The "normal" level of the wage-price index is determined based on equation (1) where price dynamics are set at the central inflation target and wage dynamics at the historical average of the variable (considered as reference values for the period under review). (2) Areas in light green refer to the episodes when the wage-price index was above the "normal" level, while those in red to the episodes when it also exceeded (marginally) the 95th percentile of the distribution (the estimated risk). (3) The dotted lines indicate forecast values.

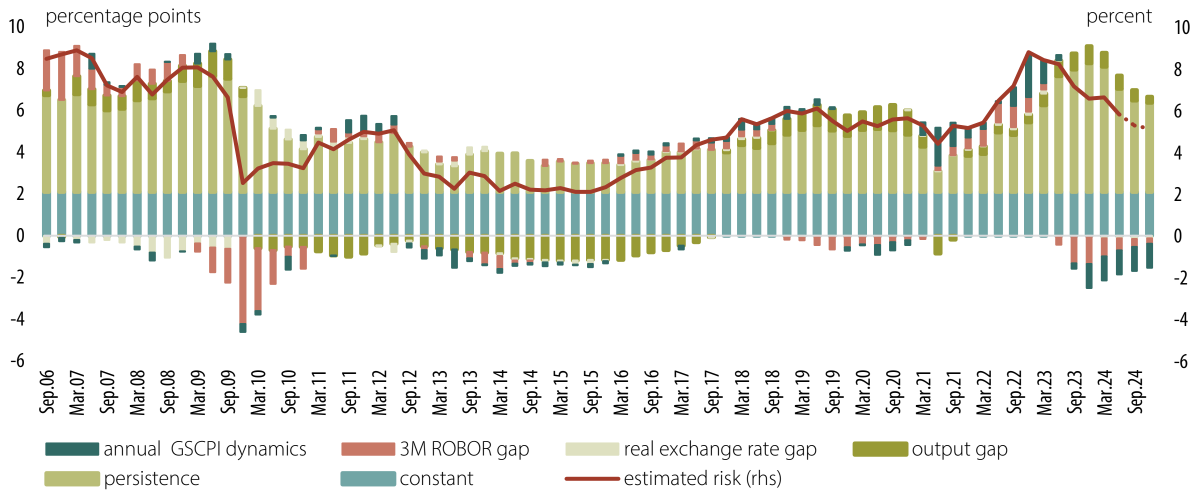
Source: NIS, NBR calculations and estimates

The comparison with the "normal" level of the index identifies three periods when it recorded higher values (shown in light green in Chart B): the period before the 2008 financial crisis, the period spanning 2017 Q4 – 2019 Q4 and the period after 2021 Q2. All three periods were marked by substantial wage increases in both the public and private sectors, *inter alia* amid the successive hikes in the minimum wage economy-wide, as well as by CPI inflation rates generally above the upper bound of the variation band. Moreover, in the first and last period mentioned, the estimated risk of a high wage-price index and, implicitly, of an inflationary spiral, was at least "normal". Such developments called for the adoption of a prudent, proactive monetary policy focused on anchoring medium-term inflation expectations,

79 The value is comparable to the results presented by France and Vlček (2024) for the United Kingdom, the USA and the Czech Republic.

with a view to preventing a self-sustained rise in the overall level of consumer prices. The decomposition of risk by influencing factors, as shown in Chart C, indicates that monetary policy[80] acted generally towards reducing the risk during these periods.

Chart C. Decomposition of the risk associated with the 95th percentile of the conditional distribution of the wage-price index



Note: The dotted line indicates forecast values.

Source: NBR calculations and estimates

For the recent period, the risk is estimated to have fallen below the "normal" level in 2024 Q2, which points out a lower probability for an inflationary spiral. At the same time, according to the forecasts in the baseline scenario of the projection, the wage-price index is expected to remain below the "normal" level of risk until the end of this year (Chart B). However, despite its recent reduction, the risk of a wage-price spiral is seen to still be elevated, calling for close monitoring of developments. Monetary policy is deemed to support further risk reduction.

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Franta, M. and Vlček, J. – "Wage-price spirals: A risk-based approach", *CNB Working Paper Series*, No. 1/2024

80 The analysis captures the monetary policy impact with a four-quarter lag.

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

The output gap

According to the NIS Press Release of 10 October 2024[81], in 2024 Q2 real GDP posted subdued growth in quarterly terms (0.3 percent), lower than expected in the August 2024 *Inflation Report*. This was the result of the strong (largely import-driven) pick-up in household consumption growth being almost fully offset by the negative contributions from net exports (also on the back of weaker exports) and gross fixed capital formation.

For the latter half of 2024, short-term forecasts point to an only gradual advance in real GDP quarterly change amid mixed signals from high-frequency indicators. On the one hand, the expected consolidation of disposable income is underpinned by the robust path of nominal wage earnings (also amid the increase in the national minimum wage in July) and the entry into force of the new pension law (with stimulative effects especially for 2024 Q4). Moreover, despite the restrictive nature of real monetary conditions, lending to the private sector is seen expanding, supported by economic agents' ongoing high confidence (ESI) and the generic level of uncertainty running below the historical average (as reflected in the dispersion of economic analysts' forecasts). On the other hand, the (slight) uptrend of the unemployment rate is likely to weigh on economic growth. Moreover, signs of sluggish consumption come from the feeble advance in turnover volumes in retail trade and market services to households in July-August. As far as investment is concerned, developments are mixed as well. Specifically, in the first two months of Q3, industrial activity continued to fall for most subdivisions, and its prospects are dampened by the worsening responses to the DG ECFIN survey and the manufacturing PMI survey. Conversely, noteworthy are construction works, whose recovery in July-August is corroborated by the improved confidence in this sector, according to the survey. However, the positive dynamics were solely due to civil engineering works, the weak performance of building construction being expected to continue over the short term. Additional effects depressing investment dynamics also stem from the slow take-up of EU funds. In turn, international trade is expected to be burdened by the fragile path of the European industry (in this respect, the announcements of major motorcar manufacturers on the need for plant restructuring are relevant), but also by the recent increase in bottlenecks in global supply chains (also amid the heightened Russo-Ukrainian war and the Middle East conflict). In addition, the poor short-term outlook for external demand is suggested by: the ESI confidence indicator for the euro area remaining below the long-term average, the marked worsening of the Sentix survey responses and the slow increase in Europe's financial market (STOXX 600) in 2024 Q3. In Q4, some improvement is foreseen given the further monetary policy easing by major central banks.

81 It should be noted that, in its Press Release No. 266 of 10 October 2024 on provisional data 2, the NIS made significant revisions to the historical series of seasonally adjusted real GDP and its components as a result of the EU-wide "coordinated benchmark revision of national accounts and balance of payments in 2024". Compared to provisional data 1, the newly released series are generally more volatile and record higher extreme values, which hints at uncertainties surrounding the composition of projected GDP growth.

Against the background of weaker-than-expected developments in real GDP in 2024 H1 and the prospects pointing to a merely gradual economic rebound, the average annual growth rate for 2024 is projected to be lower than a year ago[82]. The projection reflects, *inter alia*, the sluggish industrial activity (both domestically and in the largest economies of Europe, with a direct effect on Romania's exports), recently hit by stronger supply chain bottlenecks (amid geopolitical tensions), as well as the tightness of real monetary conditions. For 2025, real GDP is expected to gather some momentum, depending also on the recovery in external demand. A favourable contribution to economic growth is envisaged to stem from turning EU funds from multiple sources[83] to good account, although new delays have been recorded in the absorption and actual use of these amounts for investment projects.

The projected path of economic growth is shaped solely by domestic demand, given that the contribution of net exports is forecasted to be negative. For this year, final consumption is estimated to resume its role as the main driver of economic growth (amid the pick-up in both its pace and its share of GDP), while the GFCF contribution is projected to be substantially lower than in 2023. However, over the medium term, the GFCF contribution is expected to recover, under the assumption of EU funds absorption, but also foreign direct investment inflows. Starting this year, the contribution of net exports is anticipated to become negative again (after the slightly positive one in 2023), amid a path of exports of goods and services substantially below that foreseen for imports.

Potential GDP dynamics are foreseen to further post relatively robust average annual values over the forecast interval, slightly gaining momentum as of next year. Compared to the previous *Report*, following the unanticipated worsening of economic activity in the first part of this year, in particular gross fixed capital formation (GFCF), the path of potential GDP was revised downwards throughout the forecast interval, especially during 2024. The revision of the indicator reflects lower contributions from total factor productivity (TFP) trend and capital stock accumulation, amid the persistent effects of the recent contraction in investments and the reassessment of their outlook, also given the assumption of a lower impact from investments financed through the Next Generation EU programme.

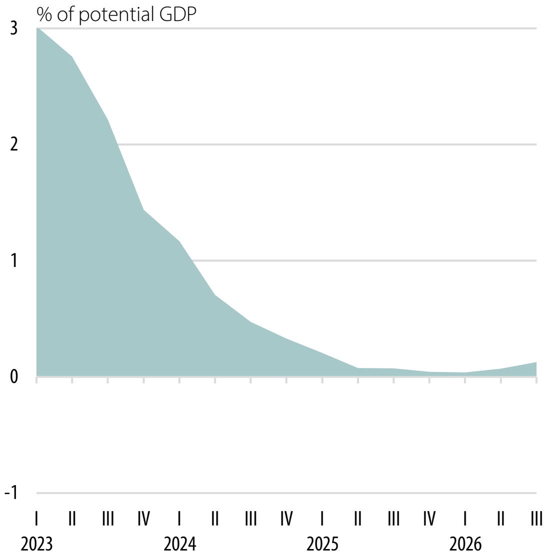
The main driver of potential GDP growth will remain capital stock accumulation, reflecting the exceptional dynamics of gross fixed capital formation in the previous year, as well as its recovery prospects following the deterioration in the first two quarters of this year. However, the favourable investment dynamics are expected to record some slowdowns, amid the fading-out of the stimulative effects of real bank interest rates (which were assessed to have turned positive for new loans already since the end of last year) and the estimated impact of some corporate tax measures adopted by the authorities. Against this backdrop, key sources of GFCF financing

82 In 2023, the annual real GDP growth stood at 2.4 percent. The contribution of the change in inventories, a component with limited economic content, was negative and it was large, suggesting uncertainties surrounding the final composition of GDP growth (after the NIS makes, in time, all revisions of statistical data, the final data for 2023 are due for October 2025).

83 As from 2025, the Multiannual Financial Framework 2021-2027 and the Next Generation EU programme (2021-2026).

are foreseen to be allocated via inflows of foreign direct investment and EU funds[84]. The contribution of labour is projected to remain only moderately positive, reflecting, *inter alia*, a slight increase in the working-age population – an evolution expected to be temporary, i.e. solely in the course of this year. Over the medium and long term, the component remains burdened by the persistently unfavourable demographic and migratory developments in Romania. The contribution of the TFP trend is mitigated by companies' relatively modest performance in identifying innovative solutions, also in terms of integrating digitalisation into their operations[85]. However, the contribution of the TFP trend is forecasted to gradually recover over the medium term, reflecting the ongoing efforts to make technological upgrades and enhance energy efficiency. Looking ahead, the adverse effects of uncertainty associated with geopolitical tensions worldwide and possible new large-scale bottlenecks in global supply chains remain relevant to the paths of both GDP and potential GDP.

Chart 4.7. Output gap



Source: NBR assessments based on data provided by the NIS

After narrowing throughout 2023 and further into 2024, the output gap will run in 2024 Q4 only slightly below the level projected in the previous *Report* and close to nil, amid the recent weaker-than-expected performance of GDP and its only gradual pick-up anticipated for the short-term horizon. Subsequently, the output gap remains slightly above nil throughout the projection interval, a path also conditional on the assumptions regarding the projected developments in budget deficit (Chart 4.7)[86].

From the perspective of output gap fundamentals, the fiscal impulse is assessed to exert stimulative effects in 2024 as a whole, revised accordingly after the increase in the budget deficit following the September budget revision, while during the next year, the impact is forecasted to be broadly neutral. In the previous *Report*, the effects of the fiscal impulse were anticipated as approximately neutral in 2024 and subsequently stimulative. Conversely, the monetary policy stance remains tight vis-a-vis economic activity over the entire forecast interval. The external output gap is foreseen to stay longer in negative territory compared to the prior projection (until 2025 Q2, as against 2024 Q4 in the previous assessment), and thereafter to grow more slowly to positive values.

84 At the time of writing this *Report*, the volume of inflows under the standard multiannual financial framework (MFF) reflects that the (extended) 2014-2020 framework was nearly used up and the 2021-2027 MFF saw a slight improvement, yet well below the monthly inflows in the first part of the year. In addition, projects financed through the Next Generation EU programme play a key role, given that there are already some delays in both drawing the planned funds and using such amounts.

85 According to the European Innovation Scoreboard 2024, Romania is still an Emerging Innovator, coming in last EU-wide. At the same time, among its peers, a poorer performance versus 2023 is recorded only in the case of Romania.

86 From the perspective of aggregate demand components, the output gap path is shaped by those of domestic demand (with large contributions from household individual consumption and, to a much lower extent, GFCF), whereas the aggregate gap of net exports is foreseen to be negative (mainly due to that of imports of goods and services).

Aggregate demand components

In 2024 as a whole, final consumption is assessed to gather pace and become again the key driver of economic growth. Over the remainder of the projection interval, the component is expected to grow at rather robust rates. These developments are supported by the swift rise in real disposable income (speeding up notably this year), which benefits from both wage increases (reflecting also the measures taken by the authorities to boost household income[87]) and the gradual curbing of inflation. However, the uncertainties further arising from the war in Ukraine and the Middle East conflict remain relevant in the medium term, alongside those generated by domestic factors, mainly related to the design of fiscal consolidation measures to be implemented by the authorities as from next year, also in the context of the planned ending of the energy price capping scheme. Therefore, a certain moderating trend of consumption, especially with regard to vulnerable consumers, should not be overlooked.

Gross fixed capital formation, which proved highly resilient in recent years, is estimated to slow down substantially in 2024 amid a worsening already seen in the first part of this year. Over the forecast interval, GFCF is expected to recover, returning to solid average annual rates. The prospects for its future path are strictly conditional on the rebound in both domestic and external economic activity, on investor confidence, as well as on the authorities' stance as regards EU funds absorption, with stimulative effects on private-sector projects. In this context, the Next Generation EU programme plays a key role, yet its progress is envisaged, at least based on the performance so far, to be slow when it comes to the actual implementation of the allocated and transferred amounts. Furthermore, investment resources could be hit by the fiscal reforms adopted to increase corporate taxation. Looking ahead, depending on the measures taken, starting in 2025, for fiscal consolidation purposes, companies' investment plans and strategies could undergo notable reassessments.

Under the baseline scenario, the anticipated negative performance of exports of goods and services in 2024 is illustrative of their contraction in the first part of the year and a subdued outlook for short-term developments. Over the medium term, the path of exports is expected to gradually return to more robust average annual rates, remaining, however, surrounded by uncertainty about the unfolding of military conflicts, the possible escalation of which would additionally hamper the functioning of global supply chains. As for monetary conditions, the real effective exchange rate (calculated by deflating by the consumer price indices in Romania and its trading partners) is envisaged to remain overvalued until the forecast horizon, and thus to further exert restrictive effects on the price competitiveness of Romanian products, yet gradually on the wane as from next year. Having contracted in 2023, imports of goods and services are forecasted to record a sustained advance over the projection interval (especially this year), reflecting the overall performance of domestic demand

[87] Among the measures that entered into force as of 1 January 2024 are the following: (i) the increase in the state allowance for children, in the pension point and in the minimum pension; and (ii) the hike in public sector wages, followed by an additional indexation in June. Moreover, starting 1 July 2024, the minimum wage was raised by 12.1 percent (from lei 3,300 to lei 3,700). Disposable income rose further amid the pension recalculation as of 1 September 2024. In addition to these measures, social cards of lei 250 are granted every two months. At the same time, worth mentioning is also the planned increase in the minimum wage in January 2025, up to lei 4,050, as set forth in the Government Decision of 21 October 2024.

(the stronger consumption in particular). Against this background, net exports are foreseen to make a renewed negative contribution to economic growth as from 2024.

Following last year's sizeable correction (of 2.2 percentage points), the external imbalance is expected to widen further in 2024 and to remain elevated over the medium term. In this regard, the measures already enacted, e.g. the pension recalculation and public sector pay rises, are anticipated to also reflect in the external imbalance. Such developments mirror, *inter alia*, the limited capacity of domestic production to meet excess demand. The return to a deficit correction trend over the forecast interval is conditional on the pace but also, to a certain extent, on the composition of fiscal consolidation measures. At the current juncture, however, upside risks to the external deficit stem from a possible significant resurgence of bottlenecks in global value chains amid the escalating geopolitical tensions, as well as from a slowdown in economic activity in Romania's main trading partners, Germany in particular.

After having slightly expanded in 2023, the current account deficit coverage by stable, non-debt-creating capital flows is assessed to post more modest values starting with 2024. As for capital transfers, the decrease in EU funds reimbursements under the 2014-2020 MFF will probably be only partially counterbalanced by the outlook for improved inflows under the 2021-2027 MFF. Foreign direct investment is expected to remain at robust levels, standing in absolute terms above those in the pre-pandemic period, yet the latest data point, in this case as well, to less favourable developments compared to the assessments in the prior *Reports*.

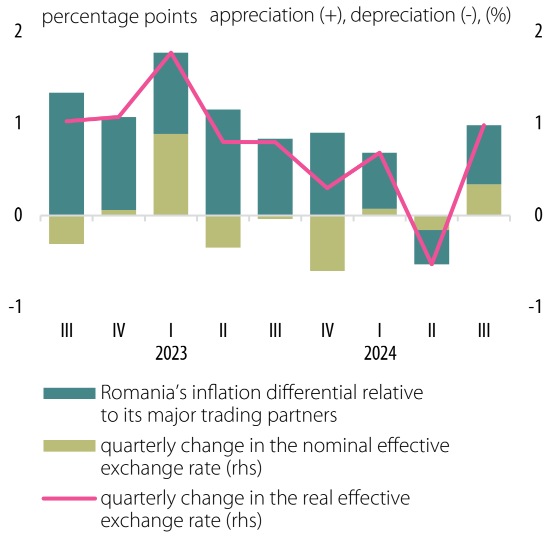
Broad monetary conditions

According to the transmission mechanism, broad monetary conditions capture the cumulative impact exerted on future developments in aggregate demand by the real interest rates applied by credit institutions on leu- and foreign currency-denominated loans and deposits of non-bank clients, and by the real effective exchange rate of the leu. The exchange rate exerts its influence via the net export channel, as well as via companies' wealth and balance sheet effect.

The baseline scenario of the projection envisages that real broad monetary conditions will continue to be restrictive over the entire forecast interval. This will occur amid a further pass-through into the economy of the NBR Board's monetary policy decisions, which aim to ensure and safeguard price stability over the medium term, in a manner conducive to achieving sustainable economic growth.

Looking by component, the real effective exchange rate (Chart 4.8) will further generate restrictive effects on the price competitiveness of Romanian products via the net export channel. This impact is somewhat stronger than in the previous *Report*.

Chart 4.8. Quarterly change in the effective exchange rate



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

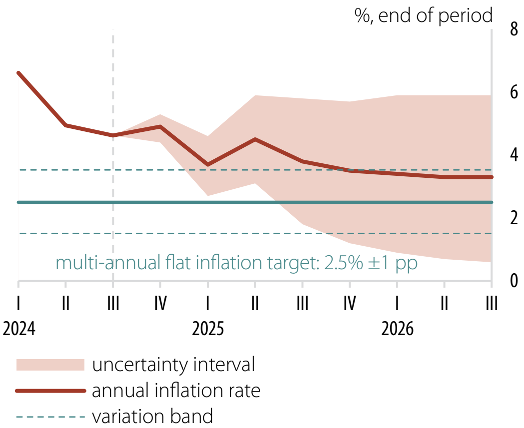
The contribution of the real effective exchange rate is estimated in the context of the previous appreciation of the domestic currency in real terms, associated with the prevailing effect of the higher domestic inflation rate compared to those of Romania's trading partners. Conversely, real interest rates on both new loans and new time deposits in lei are anticipated to have rather neutral influences throughout the forecast interval. This is projected to take place as monetary policy decisions pass through to nominal interest rates, along with a downward trend of inflation expectations.

The wealth and balance sheet effect is assessed to further post restrictive values, albeit gradually on the wane throughout the projection interval. The breakdown shows that its dynamics mainly reflect the downward path of the real foreign interest rate (3M EURIBOR), given the gradual decline of the nominal rate, the effect of which is partly offset by the falling inflation expectations in the euro area. At the same time, the sovereign risk premium for Romania is projected to have a restrictive impact, mirroring the imbalances associated with the twin deficits in the economy and the persistent effects of the war in Ukraine on investor perception. The dynamics of the leu's real effective exchange rate gap are seen to exert a quasi-neutral impact via the wealth and balance sheet effect.

2. Risks associated with the projection

The assessed balance of risks (Chart 4.9) suggests possible upward deviations of the annual inflation rate from its path in the baseline scenario. With the heightening of geopolitical tensions in the Middle East, new adverse supply-side shocks with an inflationary potential have become increasingly relevant, although the direct economic effects have been relatively contained so far. Conversely, a potential sluggish global economic activity would have disinflationary traction. On the domestic front, uncertainties persist about the future configuration of the fiscal consolidation package, although since the previous *Report* the authorities have started preparing a *National Medium-Term Fiscal-Structural Plan*.

Chart 4.9. Uncertainty interval associated with inflation projection in the baseline scenario



Note: The uncertainty interval was calculated based on the annual CPI inflation forecast errors in the NBR projections during 2005-2023. The magnitude of forecast errors is positively correlated with the time horizon they refer to.

Source: NIS, NBR calculations and projections

The baseline scenario is built on the principle that fiscal measures are included only once they have been enacted or at least if they are well into the legislative process. Even though the *National Medium-Term Fiscal-Structural Plan* indicates the path contemplated by the authorities for adjusting the budget deficit over a seven-year period, the actual revenue- and expenditure-related measures ensuring the excessive deficit correction have yet to be singled out and are thus further marked by high uncertainty. In the context of an envisaged tax reform to be launched during 2025, the document lists possible revisions of legal provisions for several categories of revenues and expenditures, without however providing details on their precise content, magnitude or timing. In the short run, based on the features of the package of measures, there can be both additional inflationary pressures (for at least 12 months, in the event of an increase in some indirect tax rates, such as VAT rate or excise duties) and some disinflationary pressures (in case of raising direct taxes or containing public expenditures). Over the medium and long term, however, the impact is expected to be definitely disinflationary, regardless of the set of consolidation measures to be implemented.

A hefty package of fiscal correction measures might also entail, depending on its composition, a series of changes in economic agents' behaviour. Looking at households, a more cautious stance would not be ruled out, reflected in keener saving to the detriment of consumption. In turn, companies could postpone some investment decisions until the clarification of the entire set of measures that might influence their activity including over the medium term. At the same time, the possible rise in income taxation would lead to upward pressures on private sector wages to preserve the purchasing power of net income. In the medium run, uncertainties are ascribed to implementing the legislation on bringing the minimum wage to European standards, as well as to companies' accommodating, in such a case, the additional wage costs.

On the labour market, risks stem *inter alia* from the persistence of its relatively high tightness in the recent period. The swift wage growth in the public sector might pass through via demonstration effects to the private sector as well, especially in the sectors facing a more pronounced labour shortage, thus possibly leading to persistent inflationary pressures. In the medium run, they could be fuelled by potential rises in the structural deficiencies of the Romanian labour market. On the other hand, according to the current version of the *National Medium-Term Fiscal-Structural Plan*, the authorities contemplate a moderation of the public sector wage dynamics in order to limit government expenditures, but also to realign, in the period ahead, labour cost dynamics to productivity growth.

Any delay in adjusting the excessive deficit is likely to have knock-on effects on foreign investors' perception, reflected in possible downgrades of Romania's ratings by credit rating agencies. The sizeable and persistent macroeconomic imbalances, alongside the potential intensification of international financial market tensions, could entail sudden and substantial capital outflows, which would translate into a soaring sovereign risk premium, with a direct impact on the exchange rate and hence on the annual inflation rate. Moreover, in the event of significant slippages from the path agreed in the *National Medium-Term Fiscal-Structural Plan*, the European legislation provides *inter alia* for sanctions from the European Commission.

The international environment has seen an increase in risks linked to geopolitical tensions, whose recent deepening could induce new inflationary pressures, particularly in the case of energy prices. For instance, new oil price spurts, even larger than those seen recently, could arise if critical points of Iran's oil infrastructure are affected or harsher economic sanctions are imposed. Potential risks are also associated with the future price of natural gas, amid a possible halt in Russian gas transit via Ukraine. Domestically, additional uncertainties are attributed to the price levels prevailing after the electricity and natural gas price capping scheme expires on 31 March 2025.

The economic impact of geopolitical tensions is not the only potential source of inflationary pressures. In parallel, risks are associated with increasingly frequent extreme weather events, with multiple and overwhelmingly adverse effects. Recurrent episodes of drought or devastating floods would affect agricultural crops both domestically and regionally or internationally, calling for additional investment to adapt to any new similar shocks. This year, the protracted drought left its mark on agri-food commodity prices, the baseline scenario incorporating already some worsening of inflationary prospects related to these sources. Opposite effects, yet probably with positive economic implications only over the short horizon, would be generated in the event of introducing a scheme such as the one circulated publicly regarding the capping of the mark-up on agri-food items processed in Romania. Accommodating this measure could create, however, distortions in the market owing to potentially different reactions from the business environment, especially in terms of magnitude of the response, compared with those in previous periods. Specifically, compensatory hikes in prices for goods outside the scope of the scheme cannot be ruled out.

The map of risks to inflation is complemented by factors with disinflationary traction arising from aggregate demand. Uncertainties are associated with the stalling global economic activity. A more sizeable impact would be linked to a further deceleration of industrial activity in Germany, Romania's main trading partner. In fact, according to recent estimates, the economy of Germany, hence of the European Union as well, would be strongly impacted in the event of escalating trade tensions between the major economic blocs, especially in case of measures to restrict, even partially, free trade with the US. The economic recovery at European level might slow down also in the context of applying the provisions of the new economic governance framework, calling for the introduction of fiscal consolidation packages in the main economies of the Union. From a global perspective, contagion effects from China cannot be ruled out either, given the relatively high integration of the Chinese economy with global value chains. Similarly to previous rounds, the future monetary policy decisions of major central banks and of those in the region reconfirm their importance.

Abbreviations

CPI	consumer price index
DG ECFIN	Directorate General for Economic and Financial Affairs
EC	European Commission
ECB	European Central Bank
ESCB	European System of Central Banks
EU	European Union
Eurostat	Statistical Office of the European Union
FAO	Food and Agricultural Organization of the United Nations
FDI	Foreign Direct Investment
FOMC	Federal Open Market Committee
GDP	gross domestic product
GFCF	gross fixed capital formation
HICP	Harmonised Index of Consumer Prices
ILO	International Labour Office
IPPI	Industrial Producer Price Index
IRCC	benchmark index for loans to consumers
MF	Ministry of Finance
MFF	Multiannual Financial Framework
NBR	National Bank of Romania
NIS	National Institute of Statistics
NRRP	National Recovery and Resilience Plan
OPEC	Organisation of the Petroleum Exporting Countries
ROBOR	Romanian Interbank Offer Rate
TFP	total factor productivity
USDA	United States Department of Agriculture
UVI	unit value index
VAT	value added tax
VFE	vegetables, fruit, eggs
WB	World Bank
3M	3 months
12M	12 months
3Y	3 years
5Y	5 years
10Y	10 years

Tables

Charts