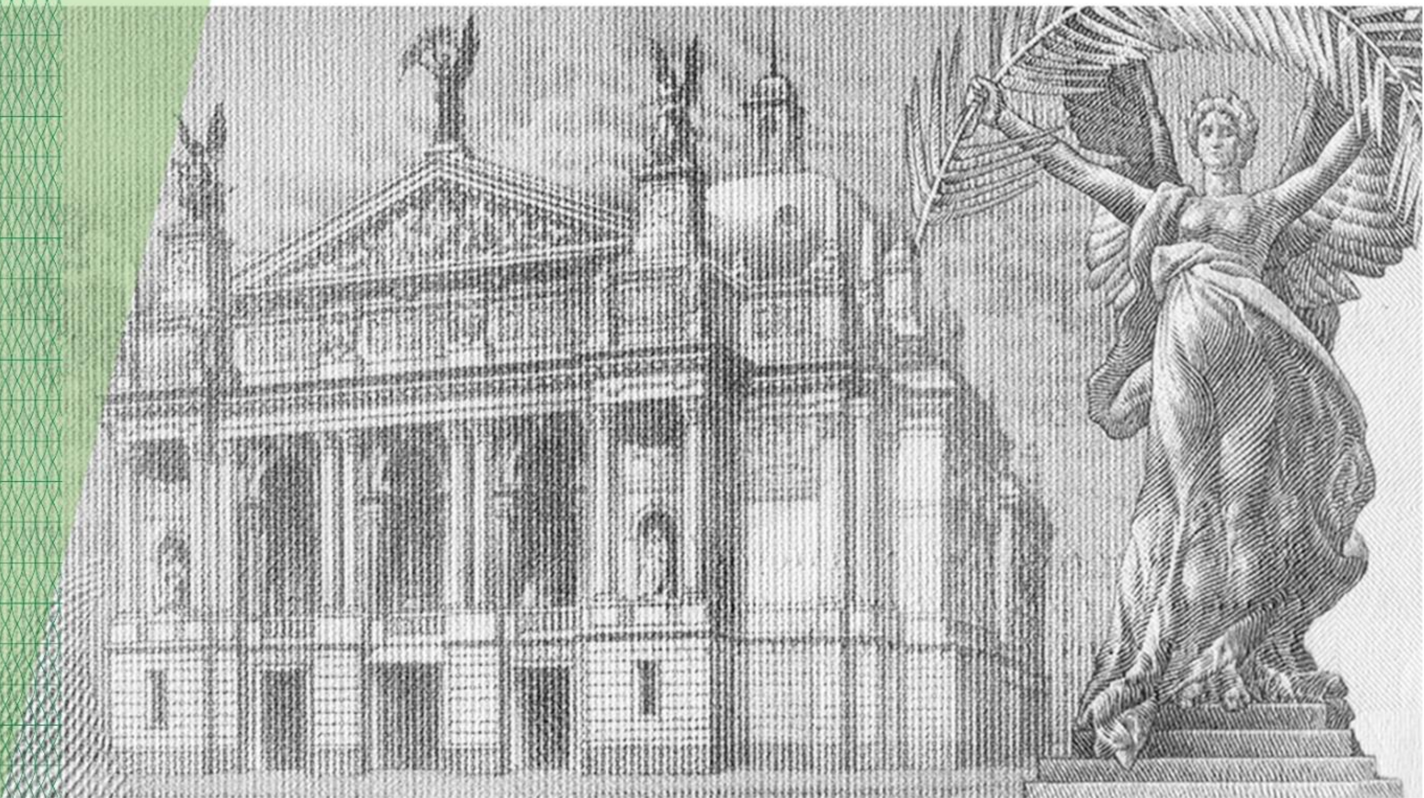
National Bank
of Ukraine

Inflation Report

April 2024



Despite the full-scale war, the NBU remains committed to its mandate to ensure price and financial stability – the key to achieving sustainable economic recovery. At this point, these goals are being attained through a combination of instruments of interest rate and FX policies and FX restrictions as per Monetary Policy Guidelines for the Duration of Martial Law and the Strategy for Easing FX Restrictions, Transitioning to Greater Flexibility of the Exchange Rate, and Returning to Inflation Targeting (hereinafter referred to as the "Strategy"). In keeping with the principles of managed flexibility of the exchange rate, the NBU maintains an active presence in the FX market and makes up for structural deficits of foreign currency to ensure that the exchange rate fluctuates moderately in either direction, depending on changes in market conditions. Coupled with smoothing out excessive exchange rate volatility, this contributes to keeping inflation expectations and exchange rate expectations under control, maintaining confidence in the hryvnia, and ensuring the desired inflation dynamics. At the same time, exchange rate flexibility makes it possible to fortify the resilience of Ukraine's economy and FX market against domestic and external shocks and reduce the risk of accumulation of foreign-trade imbalances.

Further renewal of the effectiveness of monetary transmission channels contributes to the gradual strengthening of the key policy rate's role as a monetary instrument. Decisions to change the key policy rate or adjust the operational design of the interest rate policy are flexibly informed by significant shifts in the balance of risks and primarily aimed at maintaining the sustainability of the FX market and price and financial stability.

Aware of the urgency of removing market distortions and supporting the economic recovery, the NBU eases its FX restrictions. How and when to loosen them depends on whether the right macroeconomic prerequisites, not specific deadlines, have been met.

The analysis in the current Inflation Report (April 2024) is based on the data available at the time of its preparation, meaning that the time horizon of the analysis may vary for some indicators. The cut-off date for the data in this report is 24 April 2024 for most indicators. The Inflation Report contains a forecast of the country's economic development in 2024–2026 that was prepared by the Monetary Policy and Economic Analysis Department and approved by the NBU Board at its monetary policy meeting on 25 April 2024.[1]

The NBU Board makes decisions on the key policy rate and other monetary tools in line with the schedule published in advance. The decisions the NBU Board makes in January, April, July, and October are based on a new macroeconomic forecast. At the remaining four meetings (in March, June, September, and December), the NBU Board takes its decisions based on the results of assessments of risks and uncertainly that take into account the economic developments in Ukraine and abroad that have occurred since the latest forecast. The decisions are announced at a press briefing held at 2 p.m., after the NBU Board's monetary policy meeting. A press release that reflects the NBU Board's consensus perspective on its decisions is published at the same time. The summary of the discussion at the Monetary Policy Committee is published on the 11th day after the decision is taken. The summary shows the depersonalized opinions of all MPC members on the optimal monetary policy decisions to be made. It includes differences of opinion and the reasoning behind them.

Previous issues of the Inflation Report, presentations of the Inflation Report, the forecast of the main macroeconomic indicators, and data in tables and figures are available here.

[1] NBU Board Decision No. 137–D *On Approval of the Inflation Report* dated 25 April 2024.

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Summary

The baseline scenario of the NBU's macroeconomic forecast assumes that Ukraine will continue to conduct prudent monetary and fiscal policies focusing on maintaining macrofinancial stability and will consistently meet its commitments under programs with international partners, which in turn will not stop providing sufficient volumes of financial support. The NBU assumes that security risks will subside and that conditions in which the economy operates will normalize over the forecast horizon. This will contribute to the full unblocking of sea ports, the expansion of opportunities for investment and economic activity, and the gradual return of forced migrants to Ukraine.

In Q1 2024, consumer inflation slowed more rapidly than expected by the NBU

Actual consumer inflation slowed to 3.2% yoy in March and was below the NBU's forecast published in the January 2024 Inflation Report. The deviations from the forecast were primarily driven by factors that were difficult to predict, including temporary ones. Mild winter led to higher supply of raw foods and lowered the pressure from business costs, in particular the cost of energy. In addition, last year's strong harvests continued to affect consumer prices.

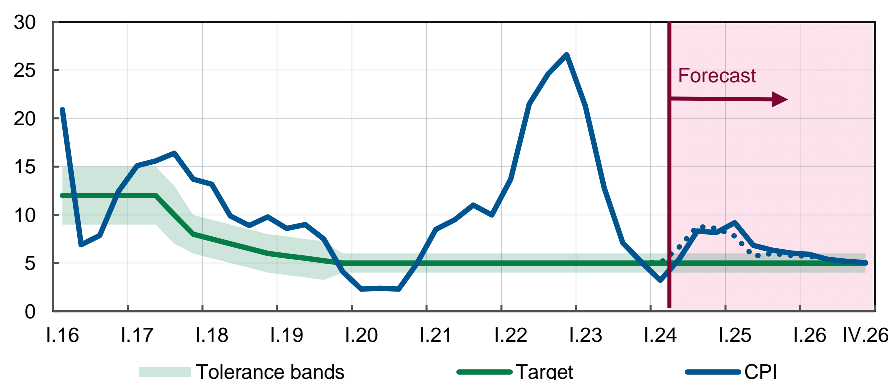
Core inflation also slowed (to 4.2% yoy) and was close to the NBU's forecast. The underlying inflationary pressures were eased by an improvement in inflation expectations and pass-through effects from lower prices of raw foods to the prices of processed foods and some services. Meanwhile, further growth in labor costs and consequences of the blockade of the western borders restrained core inflation from slowing faster.

The NBU has improved its inflation forecast for end-2024 to 8.2% and expects inflation to settle within the target range of 5% ± 1 pp in the coming years

As before, the NBU forecasts a moderate increase in inflationary pressure this year in view of the expected vanishing of effects from last year's strong harvests, continued recovery in consumption, a rise in business costs amid the war. At the same time, taking into account the improved dynamics of actual inflation and better inflation expectations, the NBU has lowered its end-2024 inflation forecast, from 8.6% to 8.2%.

In the coming years, inflation will decrease and settle within the target range of 5% ± 1 pp. This will be facilitated by a gradual normalization of conditions in which the economy operates, an easing of external inflationary pressures, and the NBU's consistent monetary policy. Inflation is expected to slow to 6% at the end of 2025 and to 5% at the end of 2026.

Figure 1.[2] **CPI change (end of period, % yoy) and inflation targets**



Source: SSSU, NBU staff estimates.

The economic recovery will continue, but will be restrained – primarily, due to significant damage to energy infrastructure

According to the NBU's estimates, real GDP growth in Q1 2024 was weaker than expected, mainly as a result of contained budgetary spending amid the uncertainty about inflows of external financing. The blockade of the western borders was an additional factor restraining the activity in some economic sectors. At the same time, the stable operation of the sea

[2] Unless specified otherwise, a dashed line in the figures indicates the previous forecast.

corridor, favorable weather, and strengthening domestic demand supported economic growth.

The NBU forecasts further recovery in economic activity given recent progress with the issue of international assistance to Ukraine, which will allow keeping the budget policy accommodative, and an expected pickup in domestic and foreign demand. Meanwhile, the real GDP growth forecast has been revised downwards due to the consequences of russia's massive attacks on Ukraine's energy infrastructure. The economy is expected to grow by 3% in 2024 and by 4.5%–5% in 2025–2026.

The continuation of international financial support and measures to strengthen the sustainability of public finances will secure further macrofinancial stability necessary for solid economic recovery

As expected, Ukraine received USD 9 billion from international partners in March, which allowed the country to increase its international reserves to almost USD 44 billion.

Moreover, in the past days, Ukraine received positive news from the United States about the approval of the military and financial assistance package. Ukraine also received another tranche from the EU in the amount of EUR 1.5 billion. In such a way, Ukraine can count on receiving USD 38 billion in external budgetary support this year.

In the meantime, the country continues to implement measures to increase its self-sufficiency. The government is strengthening its own resource base and increasing borrowing from the domestic market. In particular, the forecast scenario assumes that additional fiscal revenues might be mobilized to avoid monetary financing. For its part, the NBU is improving currency control measures. Combined with the resumed regular inflows of external assistance, this will allow financing the planned budget expenditures and supporting the controllable situation on the FX market.

Taking into account the balance of risks, as well as favorable macrofinancial trends, in particular better inflation dynamics, the NBU cut the key policy rate by 1 pp in April, to 13.5%

The previous steps to ease interest rate policy and changes in the operational design of monetary policy gradually decreased nominal yields on hryvnia deposits and domestic government debt securities. At the same time, on the back of the overall improvement in inflation expectations, these instruments remained attractive and in demand. A moderate cut in the key policy rate should not diminish interest in hryvnia assets, as they will continue to protect savings from being eroded away by inflation.

The NBU is also cutting the interest rates on overnight certificates of deposit and three-month certificates of deposit, to 13.5% and 16.5% respectively. What is more, the NBU is decreasing interest rates on refinancing loans more pronouncedly – by 2 pp, to 17.5%. In the context of the interest rate policy easing cycle, the need to maintain a significant difference between the interest rate on refinancing loans and the key policy rate is diminishing.

With the level of international reserves being comfortable, the situation on the FX market being under control, and there being expectations of further international assistance inflows, the NBU is preparing a number of steps to liberalize the FX market in the coming weeks. These steps will be in line with the *Strategy for Easing FX Restrictions, Transitioning to a More Flexible Exchange Rate, and Returning to Inflation Targeting*. These steps have already been taken into account in the revised macroeconomic forecast, which assumes that international reserves will remain close to their current level this year and next year – – at USD 43-44 billion.

The NBU sees some room for the further easing of its interest rate policy, provided that favorable macrofinancial trends continue

The baseline scenario of the NBU's forecast envisages a cut in the key policy rate to 13% this year. This easing of interest rate policy and the planned steps to liberalize the FX market should not pose any additional threats to macrofinancial stability and FX market sustainability.

The NBU will adapt its monetary policy if the balance of risks changes significantly. Thus, lower risks to inflation and exchange rate sustainability could create preconditions for further cuts in the key policy rate and an easing of FX restrictions, which would support lending and economic recovery.

The course of the full-scale war continues to be the key risk to inflation dynamics and economic development

russia's full-scale aggression continues and causes new losses to the Ukrainian economy. The NBU assumes that security risks will subside and that conditions in which the economy operates will normalize over the forecast horizon. However, a prolonged, high-intensity war threatens to further destroy cities, infrastructure, and production facilities, and the extent of the destruction is difficult to estimate in advance.

Compared to the previous forecast, the risk of insufficient international financing this year has eased considerably, but the risks to regularity of the financing remain. The following risks also remain relevant:

- the emergence of additional budget needs to maintain defense capabilities or cover substantial quasi-fiscal deficits, in the energy sector in particular
- heavy damage to infrastructure, especially energy and port infrastructure, which will limit economic activity and put supply-side pressures on prices
- the continuation of the partial blockade of freight transportation at border crossings with some EU countries, which will depress exports and make imports more expensive
- the deepening of adverse trends in migration, and
- the aggravation of the situation in the Middle East, which, in particular, increases the risks of possible disruptions to energy supplies and a rise in energy prices for the global economy.

At the same time, a number of positive scenarios are still likely to materialize, including further expansion of export opportunities, the transfer of funds from immobilized russian assets to Ukraine, the acceleration of European integration processes, and the implementation of a large-scale recovery program.

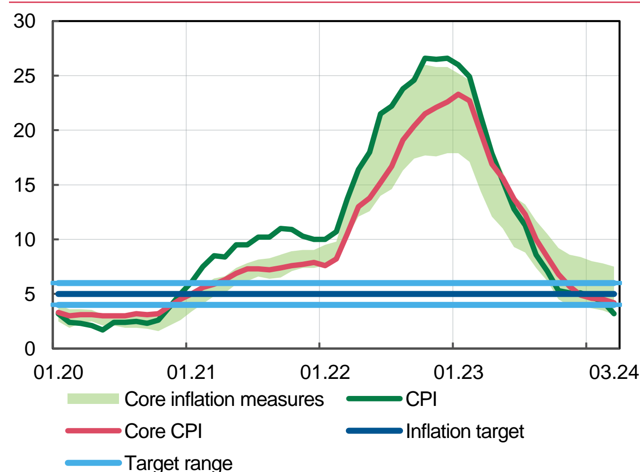
Part 1. Inflation Developments

- Consumer inflation declined sharply due to the effects of consistent monetary policy, in particular the situation in the FX market being under control, more ample supply of certain foods, and lower pressures from commodity and energy prices. These factors outweighed the effects of ongoing pressures from labor costs and the temporary impact of the blockade of Ukraine's western borders.
- Inflation will accelerate moderately, temporarily exceeding the target range in H2 2024, as the effects of the previous year's larger harvest wear off, consumption continues to recover, and business cost pressures caused by the war persist.
- At the same time, the easing of external price pressures and the NBU's monetary policy measures will restrain price growth. This will bring inflation back to its target range by the end of 2025 and keep it there thereafter, even in the face of further growth in demand and rising utility prices.

Consumer inflation declined rapidly, primarily due to temporary supply-side factors. As these effects wane, inflation will accelerate and temporarily exceed its target range in 2024

Consumer price growth continued to decelerate sharply in Q1 2024, reaching 3.2% yoy in March, which was significantly lower than the forecast published in the January 2024 Inflation Report. The deviation from the forecast resulted mainly from the dynamics of non-core inflation components.

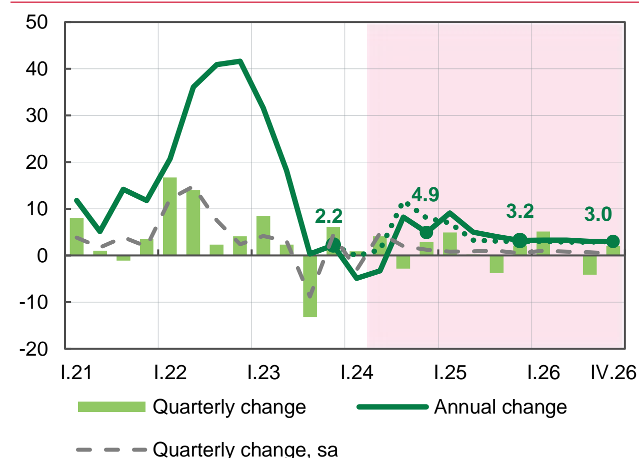
Figure 1.1. Consumer inflation and underlying inflation trends*, % yoy



* Read more in the January 2017 Inflation Report (pages 20–21).

Source: SSSU, NBU staff estimates.

Figure 1.2. Raw food inflation, %

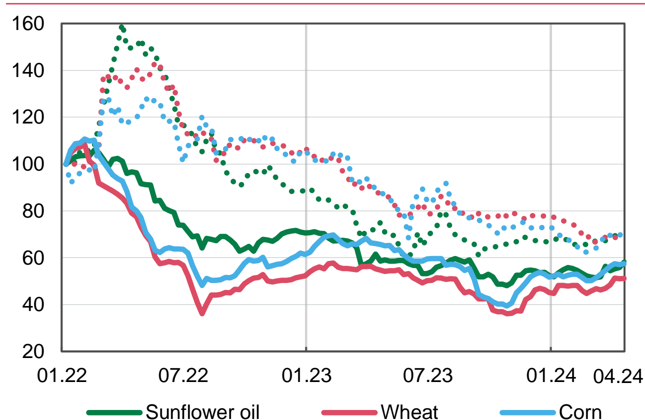


Source: SSSU, NBU staff estimates.

The largest contribution to the slowdown in headline inflation was made by raw food prices, which fell by 4.9% yoy in March 2024. This is only the fourth time in the last 25 years that a year-on-year decline in the price of this group of goods has been observed, with deeper falls seen only in March 2012 and 2013. Back then, this was the result of record grain and vegetable harvests for several years in a row, while the stagnant economy was an additional factor. The dynamics of raw food prices in late 2023 and early 2024 also reflected the effects of the bumper harvests of the previous few years. Although grain and vegetable harvests in absolute terms were not record-breaking in 2023, the supply of these foods per capita was the highest in Ukrainian history, primarily due to a decline in the population as a result of migration abroad. Additionally, the supply of raw foods this year was positively affected by the mild winter and early warm weather, as well as the temporary reorientation of producers of certain foods to the domestic market because of the blockade of Ukraine's western border.

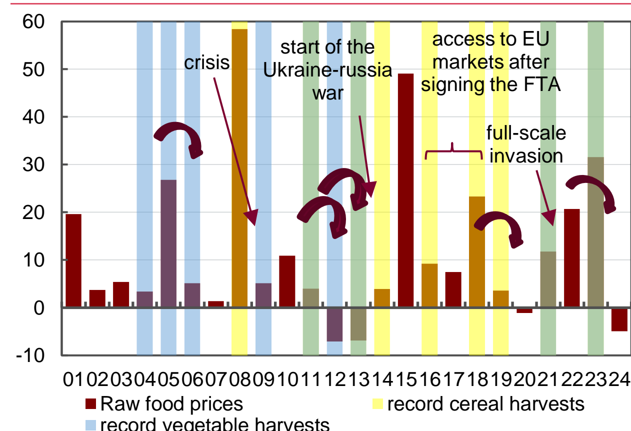
Large harvests in 2021–2023, amid limited export opportunities in the previous two years, have significantly reduced pressures from businesses' expenses on raw materials and feed. Together with lower pressures from energy costs, this has stimulated the development of animal breeding and food processing.

Figure 1.3. Prices for major agricultural commodities in Ukraine and on foreign markets* in dollar terms, 01.2022 = 100



* The solid lines refer to prices for agricultural products in Ukraine on EXW terms, and the dashed lines are prices in foreign markets on FOB terms.
Source: APK-Inform, NBU staff estimates.

Figure 1.4. Raw food prices in March, % yoy, and harvests



The green area indicates the record harvests of both cereals and vegetables. The 2013 vegetable harvest was the second largest in history and is marked as a record. The 2023 harvests for both cereals and vegetables are shown as a record per capita.
Source: SSSU, NBU staff estimates.

As a result, egg, cereal, flour, and sugar prices continued to fall. Sunflower oil remained cheaper than last year, while the growth in the prices of certain sunflower oil-based products slowed. Both borshch vegetables and greenhouse products fell in price. The growth in the prices of meat (except beef) and raw milk decelerated. The rise in prices for processed foods also slowed (to 5.3% yoy from 5.9% yoy in December). In particular, prices for bread and flour-based confectionery products, as well as those for meat products, rose more slowly. Due to second-round effects from the decline in raw food prices, the prices of certain services and non-foods that have a significant share of food in their cost, such as dining out and pet food, also grew more slowly. At the same time, effects from the blockade of Ukraine's western borders and rising labor costs kept the growth in prices for processed foods and services from slowing.

Supply-side factors were also responsible for the slower growth of administered prices, to 9.9% yoy in March. More specifically, prices for domestic alcoholic beverages and tobacco products rose at a slower pace, primarily due to competition from shadow supplies, as well as lower pressures from commodity, energy, and licensing prices.[3] Fuel prices returned to growth (rising to 11.2% yoy in March), but their rate of growth was lower than expected thanks to the moderate dynamics of global oil prices at the beginning of the year, a mild winter, and diversified and stable supplies, despite the blockade of Ukraine's western borders.

Core inflation also decelerated – to 4.2% yoy in March, which was quite close to the NBU's forecast. In addition to the pass-through effects from cheaper raw food products, the deceleration in core inflation was driven by improved inflation expectations due to the FX market situation being under control and the ongoing relatively high yields on hryvnia instruments.

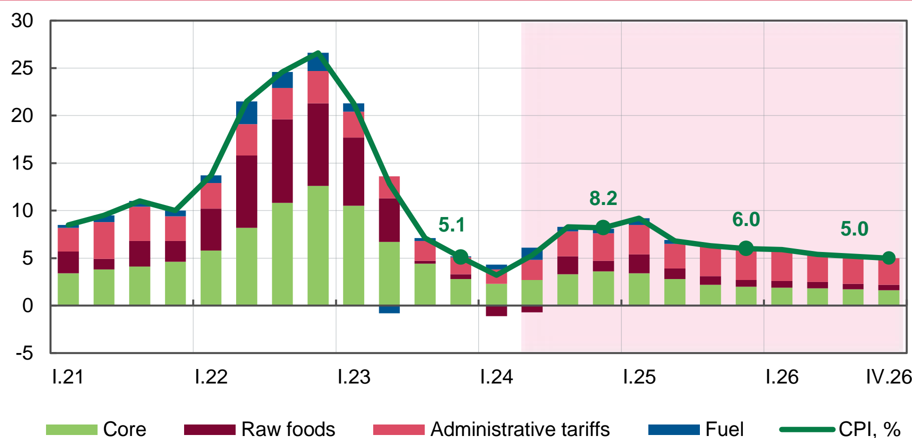
In the coming months, inflation is expected to remain low, but the trend will turn toward moderate acceleration. In Q2, inflation will return to its target range and temporarily exceed it in H2. This will be due to pressures from business labor costs, a further revival in consumer demand, and the waning of the effects of the previous year's bumper harvest and this year's mild winter.

In the short run, raw foods will still be cheaper than last year. However, in H2 2024, raw food prices will rise amid a low comparison base resulting from an expected lower harvest. The growth in prices for processed foods that are included in the core CPI will also accelerate somewhat. In the coming years, food inflation will return to a low level

[3] Thus, the sugar beet harvest in 2023 reached almost 12 million tons, a record high for the previous five years. Also, the Law of Ukraine No. 3193-IX, which came into force on 23 November 2023, significantly simplified the operations of small producers of craft spirits: it reduced the cost of licenses (from UAH 500,000 to UAH 30,000), eased the process for obtaining a number of permits and certificates, while also simplifying the regulation of the production and distribution of alcoholic beverages.

(3% to 4% per year) due to a gradual increase in food production and a decline in global food prices.

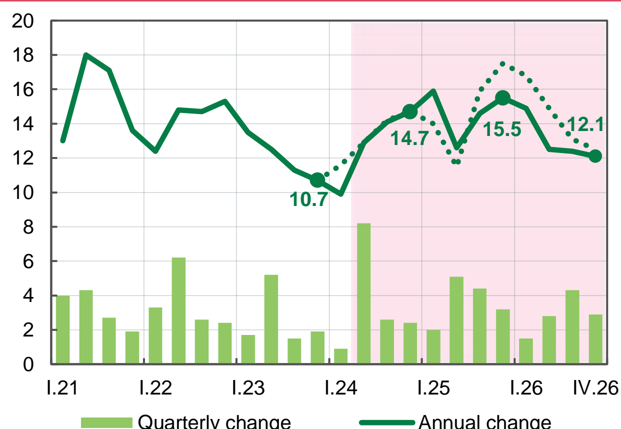
Figure 1.5. Contributions to annual CPI growth by main components at the end of period, pp



Source: SSSU, NBU staff estimates.

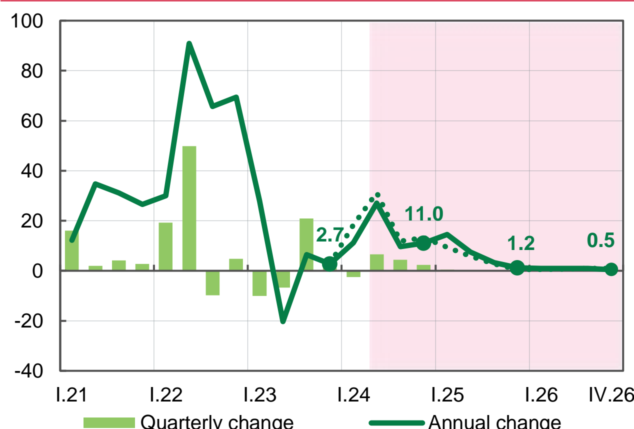
The fixing of tariffs for certain utilities, such as gas, hot water, and heating, remained an important factor in restraining the administrative component of inflation. However, with the ongoing normalization of the economy and given the difficult state of the energy system, utility tariffs are expected to be gradually increased to market-based levels (for more details, see Part 4 *Assumptions and Risks to the Forecast* on page 35). This will be an important inflation driver. A further increase in excise taxes on tobacco products resulting from Ukraine's European integration commitments will also make a significant contribution to the administrative component of inflation.

Figure 1.6. Administered price inflation, %



Source: SSSU, NBU staff estimates.

Figure 1.7. Fuel price, % yoy



Source: SSSU, NBU staff estimates.

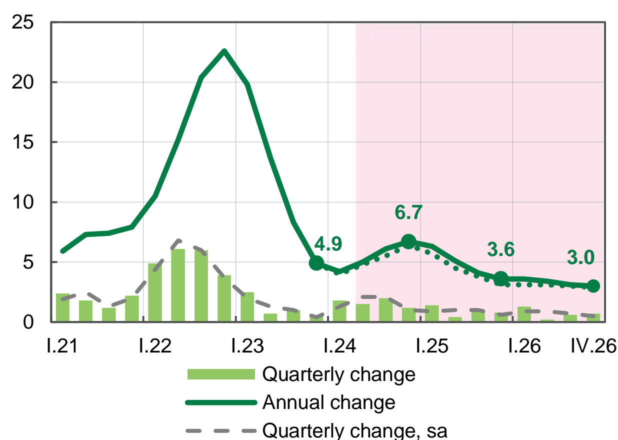
Growth in fuel prices will temporarily accelerate in Q2, in part due to higher global oil prices as a result of the Red Sea crisis and the low comparison base of the previous year. This will have second-round effects on the cost of certain goods and transportation services. However, starting next year, the decline in global oil prices will stabilize domestic fuel prices, which will have an overall disinflationary effect.

Despite persistent underlying pressures, inflation will return to its target range in 2025 and remain there thereafter, thanks in part to monetary policy measures

The controlled situation on the FX market, which was maintained thanks to the NBU's monetary policy and FX supervision measures, was an additional factor in restraining the growth of prices for a wide range of goods, especially those the cost of which significantly depends on the price of imported goods. In particular, growth in non-food prices, excluding these of clothing and footwear, slowed to 0.4% yoy in March. Clothing and footwear continued to fall in price year-on-year. Favorable FX market conditions,

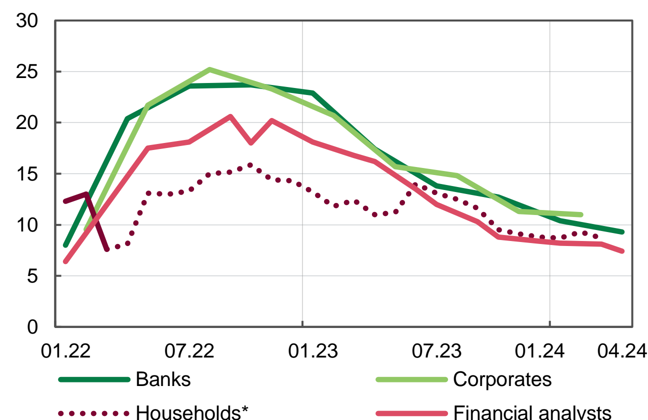
low current inflation, and the moratorium on raising utility prices[4] further improved inflation expectations, which also helped reduce underlying inflationary pressures. However, these pressures remained persistent. This was evidenced, in particular, by the continued high growth rate of services prices – about 10% yoy in Q1 2024. High services inflation was driven primarily by structural changes in the economy, including an uneven recovery in consumer demand and labor market mismatches. These mismatches were reflected, among other things, in the further increase in the impact of labor costs on the pricing of companies across a wide range of sectors due to labor shortages.

Figure 1.8. Core inflation, % yoy



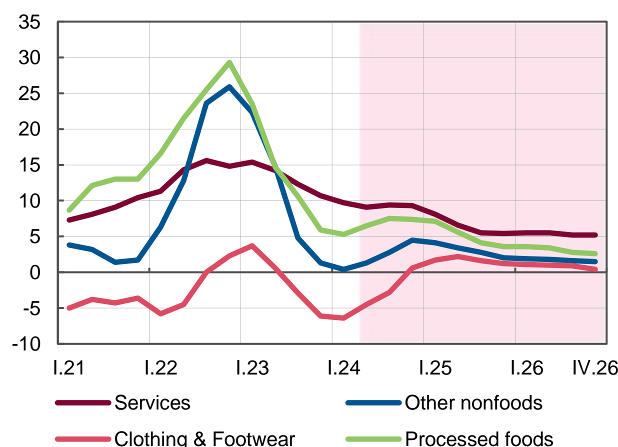
Source: SSSU, NBU staff estimates.

Figure 1.9. 12-month-ahead inflation expectations*, %



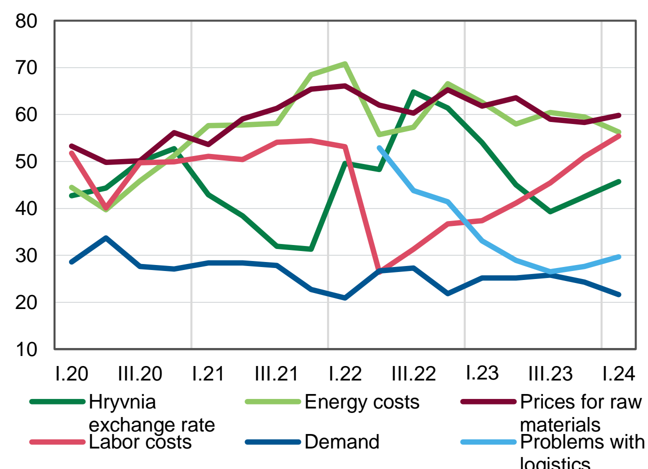
* The dotted line indicates a change in the method of survey for a telephone interview.
Source: NBU, Info Sapiens.

Figure 1.10. Core CPI components at the end of period, % yoy



Source: SSSU, NBU staff estimates.

Figure 1.11. Major factors affecting businesses' expectations of price changes for their goods and services, % of respondents



Source: NBU.

Companies' logistics costs also remained elevated as a result of high security risks and the blockade of some parts of Ukraine's western border. The blockade had the most pronounced effect on the cost of those products the cost of which significantly depends on the price of imported goods (mainly dairy products and some non-foods). Even though there was a certain shift to other supply routes, this reduced the supply and raised the delivery cost of these products.

Core inflation will temporarily speed up by the end of this year, propelled by persisting cost pressures, particularly labor costs, the recovery of domestic demand and household income, and the accumulated effects of the weakening of the exchange rate, which has already taken place. Next year, underlying pressures will begin to ease thanks to monetary policy measures, in particular those aimed at maintaining exchange rate sustainability and the attractiveness of hryvnia assets. The further optimization of

[4] According to a study by Tetiana Yukhymenko (2022), the inflation expectations of households and financial analysts were found to be sensitive to utility tariff news. For more details about the factors that influence inflation expectations, see the Box 1 *Inflation Expectations: Impact from the Credibility of the NBU, Its Communications, and Financial Literacy* on page 12.

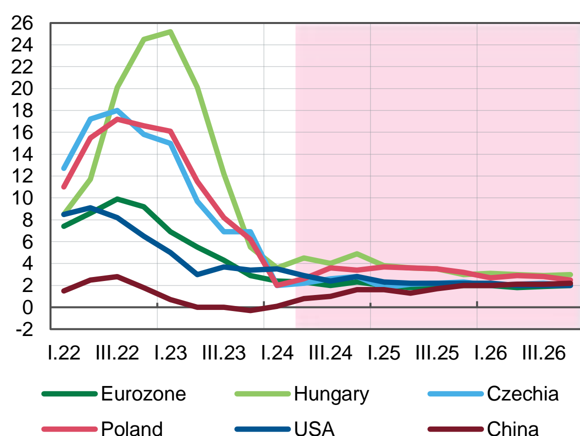
logistics and production processes will also contribute to this. The expected return of migrants will push up demand for goods and services, while also helping address labor market mismatches. However, strong competition for labor, including with foreign businesses, will fuel pressures from rising wages. Consistent monetary policy measures will decelerate core inflation to 3.0% by the end of the forecast period.

An important factor in slowing inflation in the coming years will be the easing of external inflationary pressures

Inflation in Ukraine's MTPs has not yet returned to a steady decline. On the one hand, tight financial conditions and lower global commodity prices should have contributed to deceleration of price growth. In addition, a strong disinflationary impulse caused by sluggish manufacturing activity, higher supply, and restored supply chains has already been reflected in prices of goods.

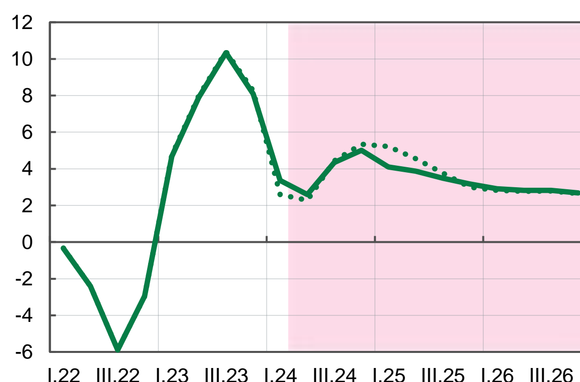
On the other hand, there are a number of inflation drivers at work. More specifically, the Red Sea crisis is slowing the fall in goods prices due to elevated risks of higher sea and air transportation costs and longer delivery times. In addition, the tensions in the Middle East are also contributing to the rise in global oil prices.

Figure 1.12. Consumer inflation in selected countries – Ukraine's MTPs (eop), % yoy



Source: National statistical agencies, NBU staff estimates.

Figure 1.13. External inflationary pressure (a weighted average of CPIs in Ukraine's MTPs in dollar terms), % yoy



Source: NBU staff estimates.

Price growth in the services sector also remains significantly above its pre-pandemic levels, with the gap between goods and services inflation widening in recent months. The persistence of services inflation primarily reflects pressures from rising wages amid strong labor markets and declining labor productivity. This makes it necessary to maintain tight financial conditions for a longer period.

Tight labor markets and resilient demand will continue to restrain the decline in service price growth. As a result, core inflation will remain persistent at least until the end of 2024. This, together with base effects, will keep headline inflation in many of Ukraine's MTP countries close to the upper bound of the target range in the coming months, and even temporarily accelerate it in the middle of this year. Moreover, in CEE countries, inflation is likely to exceed central bank targets in the coming months, reflecting a combination of tight labor markets, loose fiscal policies, and unanchored inflation expectations.

However, in the coming years, the pressure from tight labor markets will gradually ease. Indeed, many countries have already seen a slower increase in the number of vacancies posted. In addition, wage growth will be restrained by firmly anchored medium- and long-term inflation expectations in advanced economies. As a result, headline inflation will return to central bank targets on a sustainable basis in 2025, and remain close to these targets thereafter thanks to moderate labor costs and the waning of negative effects from the energy shocks of previous periods and from supply chain bottlenecks.

External inflationary pressures for Ukraine, as measured by the annual change in the weighted average CPI in Ukraine's MTPs in dollar terms, will decline from 8.1% in late 2023 to 3.2% and 2.7% in late 2025 and 2026 respectively.

Box 1. Inflation Expectations: Impact from the Credibility of the NBU, Its Communications, and Financial Literacy

An effective monetary policy of a modern central bank foresees maintaining low and stable inflation. Inflation expectations play a key role in achieving this goal, as they influence households' consumption or savings decisions, and businesses' investment decisions. That is why managing inflation expectations is one of the key elements of central banks' monetary policies. Managing inflation expectations becomes even more important in the face of significant shocks and high uncertainty, which limit the effectiveness of traditional monetary policy instruments. It is not surprising that central banks not only pay special attention to monitoring the dynamics of inflation expectations of different groups of economic agents (companies, banks, financial analysts, and households), but also carefully study the factors that influence the shaping of, and change in, inflation expectations. Previous studies of inflation expectations in Ukraine have shown that they are largely adaptive and highly dependent on past inflation rates, as well as on the current situation on the FX market and the movements of prices for the most commonly consumed goods and services (food, fuel, utilities, and so on). A recent series of NBU research projects has shown that the degree of trust in the NBU and the banking system, the level of financial literacy of economic agents, and the openness of the NBU's communications play a significant role in anchoring inflation expectations in Ukraine. The results of these studies allow the central bank to develop more appropriate policies in the area of communications, financial literacy, and raising public awareness of the bank's objectives and actions more effectively.

The expectations of households and firms about future price changes affect current economic processes

This relationship is fundamental to the modern understanding of macroeconomics and the role of proactive monetary policy in achieving macroeconomic stability (Adrian, 2023). Households' expectations about future prices influence households' current decisions about whether to consume or to save. On the one hand, this determines aggregate consumer demand in the economy, and on the other hand, it creates a demand for wages in the labor market that take into account expected inflation, so as to maintain the purchasing power of incomes. At the same time, businesses set current prices for goods and services, taking into account such demand, the desired level of employee wages, and their own expectations regarding factor productivity costs in the future.

Anchored inflation expectations of households and businesses allow central banks to achieve their inflation targets more effectively. More specifically, expectations are considered to be anchored if they react little to past and current short-term inflation fluctuations and remain at the level of the inflation target. Thus, in the event of transitory supply-side inflationary shocks, a central bank can pursue a less tight monetary policy, minimizing negative losses for the economy. Conversely, in the case of deflationary shocks on the demand side, a loose central bank policy is more effective due to anchored expectations, which reduces the risk of reaching the lower bound of the interest rate (Bernanke, 2022).

Inflation expectations in Ukraine are largely adaptive, which underscores the importance of a consistent policy of low and stable inflation

Inflation expectations in Ukraine are largely adaptive, meaning that past inflation dynamics have a significant impact on future inflation expectations, which creates risks of expectations becoming unanchored in the event of a short-lived inflation shock. In addition, inflation expectations in Ukraine depend on the situation on the FX market and movements of the exchange rate, which for a long time was a nominal anchor under the fixed exchange rate policy.

At the same time, recent studies (Yukhymenko, 2022) show that the media significantly influence the formation of expectations, especially if they cover news about changes in prices for socially sensitive goods and services (such as food, fuel, and utilities). In particular, households' and financial analysts' expectations appear to be sensitive to

news about utilities, while businesses' inflation expectations are responsive to news about food. The exchange rate channel operates primarily through households and financial analysts, as they are highly sensitive to the frequency of exchange rate news.

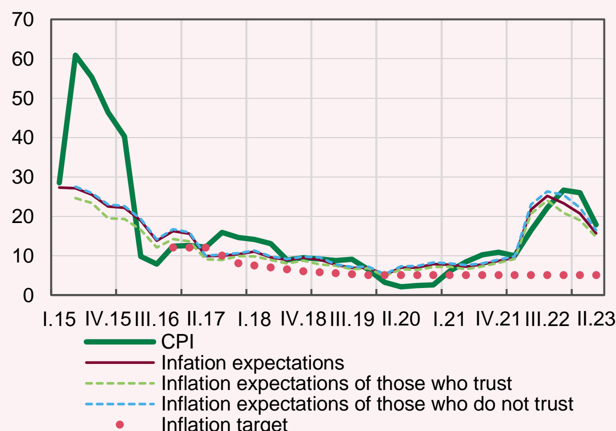
Highly adaptive inflation expectations are quite typical for emerging markets, and Ukraine is no exception (IMF, 2023). At the same time, the higher the level of adaptability of expectations, the greater the efforts a central bank needs to make to achieve its objectives. Therefore, central banks should strive to at least partially decouple the expectations of economic agents from temporary phenomena and increasingly focus their attention on long-term trends and benchmarks.

The stronger the trust in the NBU, the closer inflation expectations are to their target

The "great disinflation" of the early 1980s in advanced economies and later in emerging markets provides convincing evidence that the anchoring of inflation expectations directly depends on the credibility of central bank policy. The latter gains trust by fulfilling its promises (Blinder, 1999). This is a recursive process: low and stable inflation boosts trust, which anchors inflation expectations and helps stabilize inflation.

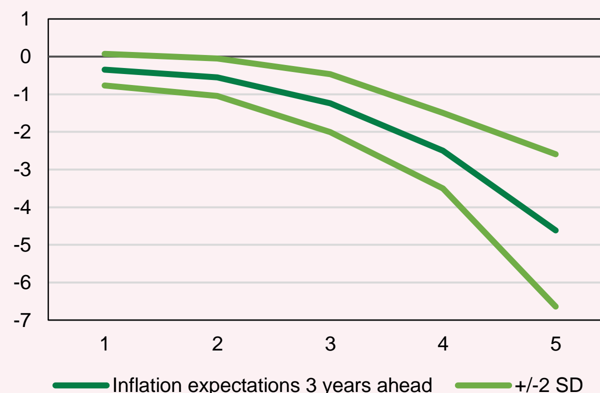
At the beginning of the introduction of inflation targeting in Ukraine in 2015, the NBU's credibility was rather low, likely reflecting agents' distrust of the new regime and the uncertainty caused by the inflation spike that had already been experienced. In the following years, the NBU gradually managed to increase credibility of its policies. At the beginning of russia's full-scale invasion in 2022, trust in the NBU even increased (from 44% to 56% of respondents). This growth may be attributed to the perceived success of the NBU's unprecedented measures aimed at maintaining the economy's resilience during the war.

Figure 1. **One-year-ahead inflation expectations of firms (by level of trust in the NBU), inflation, and inflation targets, % yoy**



Source: Savolchuk & Yukhymenko (2023).

Figure 2. **Reaction of households' three-year-ahead inflation expectations to growth in trust for different levels of anchoring of expectations (1 – anchored, 5 – unanchored)**



Source: Tsapin & Faryna (2024).

The results of a study by Savolchuk & Yukhymenko (2023) confirm the significant role of trust in shaping the inflation expectations of Ukrainian companies. The higher the companies' confidence in the NBU, the closer their inflation expectations are to the NBU's target and published inflation forecasts. What is more, trust reduces the adaptability of expectations. It is noteworthy that even in the face of the unprecedented shock of a full-scale war, the expectations of economic agents who trust the NBU were considerably lower (see Figure 1) compared to those who do not, which also contributed to the effective overcoming of the inflationary surge in 2022.

The effect of trust on inflation expectations is also confirmed for households. Using data from the USAID Financial Literacy Survey in Ukraine, which asked respondents about their inflation expectations and trust in the banking system, Tsapin & Faryna (2024) found that higher trust in banks is associated with lower short-term and especially long-term inflation expectations of households, and this relationship is stronger for respondents with unanchored inflation expectations (see Figure 2).

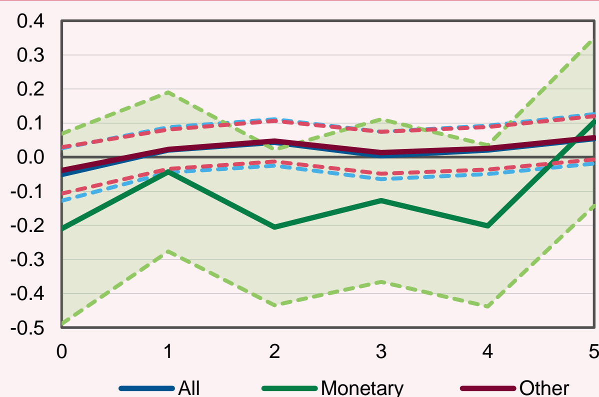
Central banks' active communications and public awareness help anchor inflation expectations

Communication is one of the key unconventional tools that central banks are increasingly using to boost the transparency of their actions, build trust in their policies and, ultimately, manage inflation expectations. Since the introduction of the inflation targeting policy, the NBU has made special efforts to transform and improve its communication policy.

A study by Yukhymenko & Sorochan (2024) analyzes the impact of the NBU's communications on a number of macrofinancial indicators. The survey results show that the NBU's active communications helps smooth out sentiment in the FX market and reduce financial experts' inflation expectations. Communications and news about monetary policy decisions were particularly important. In particular, a 1% increase in the number of monetary policy announcements is associated with a 0.2 pp decline in professional forecasters' inflation expectations over the first four months (see Figure 3).

Communications targeting informed professional market participants reach out only to a fraction of economic agents. Increasingly, central banks, and the NBU in particular, are actively communicating with the general public, as households, unlike professional financial market participants, may be less aware of the essence of economic processes. The aforementioned study by Tsapin & Faryna (2024) assessed the impact of households' financial literacy on the anchoring of inflation expectations. According to the results, financial literacy helps reduce short-term inflation expectations, especially for those households whose expectations are unanchored (see Figure 4). This underscores the importance of the NBU conducting active and accessible communications with the general public to increase their awareness and, consequently, stabilize their inflation expectations.

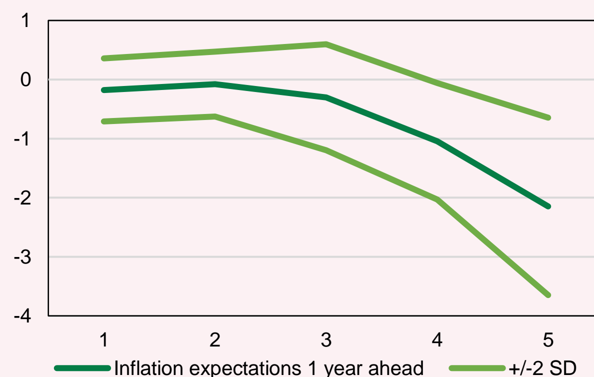
Figure 3. Reaction of financial experts' inflation expectations to increased NBU's communication



Note: Dashed lines show the confidence interval at the 95% level.

Source: Yukhymenko & Sorochan (2024).

Figure 4. Reaction of households' one-year-ahead inflation expectations to increase in financial literacy for different levels of anchoring of expectations (1 – anchored, 5 –unanchored)



Source: Tsapin & Faryna (2024).

Thus, anchoring inflation expectations is a complex, long-term, and multifaceted process. A central bank should build trust in its policies through high-quality communications and active measures to develop the financial literacy of the population. The NBU's experience shows that these instruments can be effective even in the face of unprecedented uncertainty caused by russian military aggression.

Part 2. Economic Developments

- The economic recovery will continue thanks to the adaptability of Ukrainian businesses. This will also be facilitated by a loose fiscal policy, a revival in external demand, the further development of export routes, and rising household income.
- However, the war is ongoing and its consequences are reflected in the economy, while the growth momentum caused by the low base of 2022 will gradually wear off until there is a significant inflow of investment and/or a reduction in security risks. Economic growth will slow to 3.0% this year also due to the loss of energy infrastructure.
- With the speed-up of the normalization of the economic environment, economic growth will accelerate to 4.5% to 5.3% in 2025–2026 thanks to improved consumer and investment sentiment, the return of migrants, and progress in European integration reforms. As a result, real GDP will approach its potential level by the end of the forecast period.

At the beginning of 2024, economic growth slowed primarily due to restrained budget spending

Economic activity continued to recover in Q1 2024. However, the NBU estimates that real GDP growth was only 3.1% yoy, which is lower than in the previous quarter and the estimate in the January 2024 Inflation Report. This is due to restrained budget expenditures at the beginning of the year amid uncertainty over external financing. Yet, fiscal policy remained loose, and together with the effect of a significant increase in fiscal spending at the end of 2023, this fueled aggregate demand further. Economic activity was also boosted by a warm winter with almost no electricity shortages, the stable functioning of the sea corridor, and even the fact that it was a leap year.

Moderate GDP growth will continue until the end of 2024. The main drivers of growth will remain a persisting loose fiscal policy, a pickup in external demand, and the continued adaptation of businesses and households to the significant security threats. However, economic growth will slow given the effects of the war and the wearing off of the growth momentum caused by the low 2022 base. The consequences of the destruction of energy infrastructure will also hinder the recovery. These are the main reasons why the forecast for real GDP growth in 2024 has been downgraded to 3.0% (compared to 3.6% in the January 2024 Inflation Report).

In 2025–2026, GDP growth will accelerate, propelled by a more rapid normalization of economic activity. Amid a gradual decline in security risks, GDP growth will be facilitated by improved investment and consumer sentiment, higher harvests, the further optimization of logistics, a continued loose fiscal policy, and a low-inflation environment.

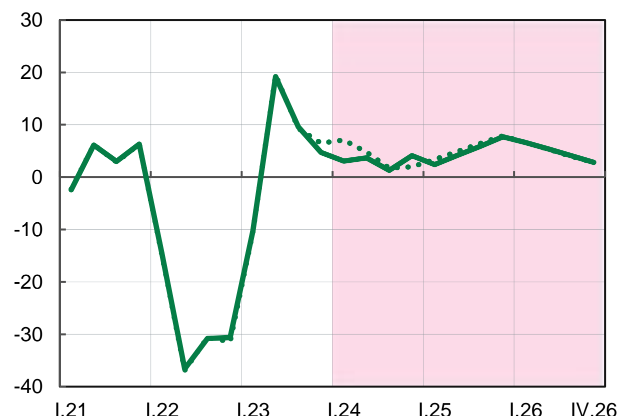
The continued loose fiscal policy was reflected in a significant negative cyclically adjusted primary balance. That said, it narrowed markedly compared to Q1 and Q4 2023. Measures to accumulate budget revenues continued,[5] which, on one hand, had a certain restraining effect on the economy as they tightened the financial resources of some businesses. On the other hand, these measures were taken to support budget expenditures, which, having a higher multiplier, in general, continued to drive economic activity.

At the same time, expenditures at the beginning of the year were moderate because of the less regular international financing and its smaller volumes. Security and defense and social programs were financed first of all, while other areas of expenditures were funded to the extent possible. As a result, the consolidated budget deficit in Q1 narrowed significantly compared to 2023 – to almost UAH 206 billion, excluding grants in revenues, or about 13% of GDP (in Q1 2023, it was over UAH 314 billion or about 23% of GDP). Given the increased role of the public sector in the economy, which reflected an ultra-loose fiscal policy for several years in a row (in 2023, the share of

[5] An increase in the corporate income tax rate for banks, advance transfers of dividends from some state-owned enterprises to the budget – 50% of the annual dividend amount.

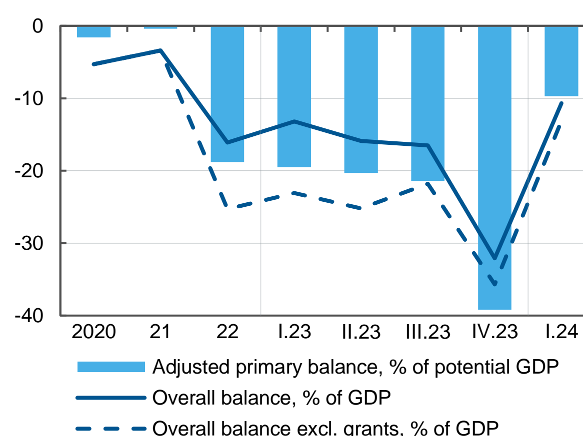
government consumption rose to almost 42% of GDP, while the share of GVA in public administration, security, and defense reached 22% of GDP), restrained budget spending was the main factor behind the weaker economic growth. However, the momentum from the extremely loose fiscal policy in late 2023 continued and partially offset the impact of the less expansionary fiscal policy in early 2024.

Figure 2.1. Real GDP, % yoy



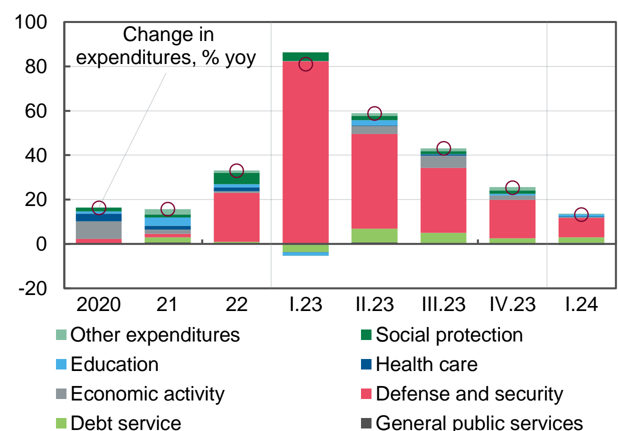
Source: SSSU, NBU staff estimates.

Figure 2.2. Consolidated budget balance*, % of GDP



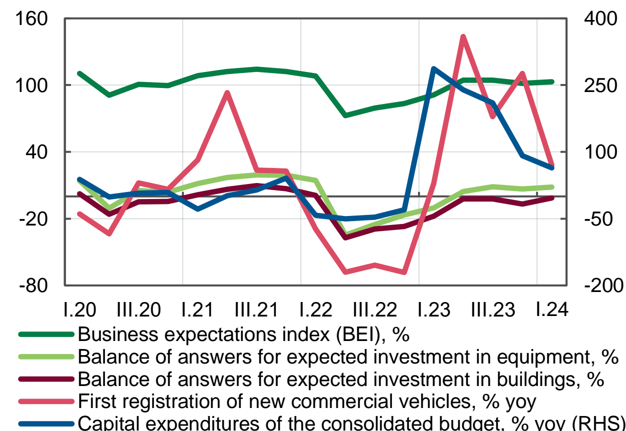
* Overall balance is the consolidated budget balance. Cyclically adjusted primary fiscal balance (CAPB) is the difference between seasonally adjusted revenues, in the structure of which tax revenues are adjusted for cyclical changes in GDP, and seasonally adjusted primary expenditures. Additionally, one-off proceeds are subtracted from revenues (such as the funds from special confiscation, effects from the Stockholm Arbitration, etc.). A negative value indicates expansionary fiscal policy. 2024 GDP figure is the NBU's estimate. Source: STSU, SSSU, NBU staff estimates.

Figure 2.3. Contributions to the annual change in expenditures of the consolidated budget, pp



Source: STSU, NBU staff estimates.

Figure 2.4. Selected indicators of investment demand



Source: SSSU, STSU, NBU, Ukravtoprom.

Investment activity at the beginning of the year was supported by spending from both the budget and private companies. Unlike other budget expenditures, capital expenditures continued to grow at a high rate. They were directed both to the defense sector, including for the development of localized weapons production and the construction of fortifications, and to the rebuilding of destroyed infrastructure.[6] Private sector also continued to invest thanks to improved financial results in 2023 and companies' more benign business expectations, including investment expectations. Investments were made to develop mining of energy resources, projects in the metallurgical industry amid an improvement in export opportunities, the food industry, and to construct agricultural and logistics infrastructure.[7] This had a positive impact on the GVA of construction sector, primarily construction of non-residential buildings.

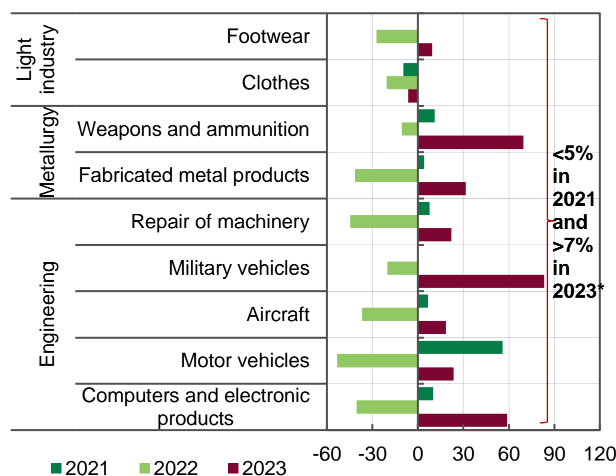
[6] The balance of expectations for equipment investment over the next 12 months improved in Q1 2024, to 8.3%, (compared to 6.6% in Q4 2023, while that of construction investment grew to (-1.5%), compared to (-6.9%).

[7] In Q2 2024, the food industry also continued to invest (in the construction of a number of facilities for food production, food processing, feed production, and so on), construction of agricultural infrastructure (grain and vegetable storage facilities) as well as construction of commercial real estate in the western regions took place. The expansion of logistics capabilities on the western border also continued.

Meanwhile, however, restrictions on transportation across Ukraine's western border restrained the growth of investment in commercial vehicles.

Investments in the development of localized defense production and defense orders from the government ensured workload for industrial companies in a number of areas (production of weapons and ammunition, military vehicles and aircraft, clothing and footwear, etc.). As a result, the share of industries that can be regarded as part of the defense sector[8] has been gradually rising (from less than 5% in 2021 to more than 7% in 2023). Despite its still small share, the high production growth of the defense sector has a positive spillover effect on economic activity in other sectors of the economy.

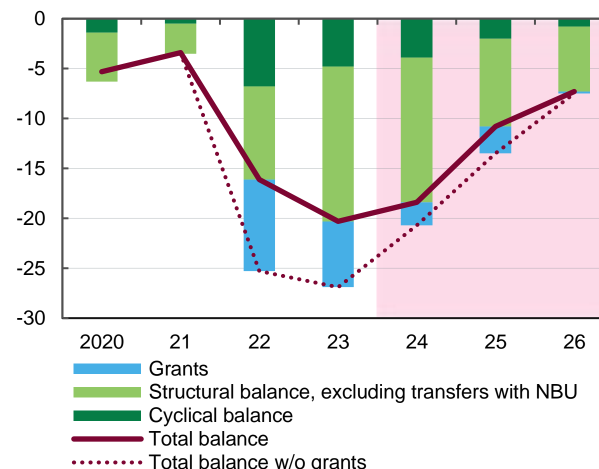
Figure 2.5. Production volumes in selected industries, % yoy



* Share of these activities in industrial production.

Source: SSSU, NBU staff estimates.

Figure 2.6. Consolidated budget, % of GDP



Source: STSU, NBU staff estimates.

Government spending will continue to play a significant role in economic growth. The budget deficit will remain significant, primarily due to high defense and security expenditures. However, a further normalization of economic conditions will lead to a corresponding strengthening of the domestic resource base. The forecast scenario also envisages measures to mobilize additional fiscal revenues of 2.5% of GDP over the forecast horizon to ensure a non-monetary source of budget financing. This will make it possible to maintain significant spending, in particular on reconstruction and social care, but also to reduce the budget deficit from 20.7% of GDP in 2024 to 7.5% of GDP in 2026. As a result, budget support will remain a significant factor in the economic recovery, but the fiscal stimulus will gradually decline over the forecast horizon.

In the short term, investment activity will remain restrained and will be driven primarily by spending on repairs to infrastructure and the further expansion of the defense industry's production capacity. Intensified European integration will increase the country's investment attractiveness and boost business and consumer sentiment, which will stimulate a faster recovery in investment demand and private consumption.

The economy will grow thanks to private consumption amid still significant budget expenditures, improved employment, and higher wages in the face of shortages of workers

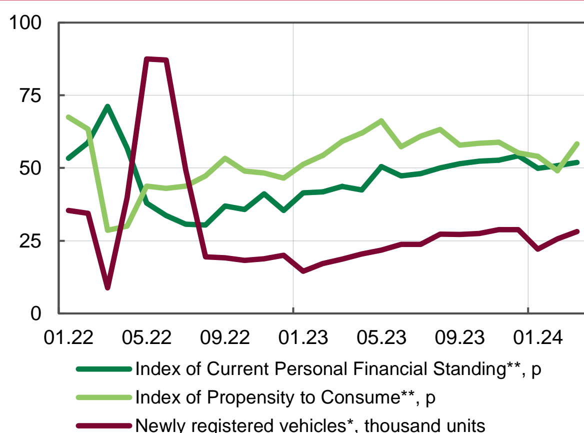
Private consumption continued to increase in Q1 2024. This was evidenced by robust consumer sentiment, including improved expectations about propensity to consume, as well as an increase in new car registrations. However, consumption growth was dampened by the blockade of Ukraine's western borders and a weaker fiscal impulse at the beginning of the year. The latter was due to the cautious spending of budget funds amid uncertainty about the inflow of international financial assistance. This also affected the performance of the services sector.

[8] The estimate of the share of the defense sector does not include the food industry, as it is currently impossible to identify those sub-industries that are fully involved in the fulfillment of defense orders. Other industries, such as mechanical engineering, may also not be fully accounted for in defense sector estimates. Including the above industries in full would artificially inflate the share of the defense sector in the industrial production. More specifically, with the entire mechanical engineering industry taken into account, the share of the defense sector would have been about 10% in 2022 and 14.2% in 2023.

An important factor in the growth of household consumption was the improvement in employment due to the ongoing rise in labor demand, as evidenced by the rapid increase in the number of vacancies on job search sites in 2024. At the same time, the number of resumes continued to decline. Labor supply is constrained by further migration abroad, mobilization, the slow adaptation of IDPs in their new places of residence, and growing labor market mismatches. Thus, in Q1, the number of migrants continued to rise (by about 150,000, to 6.5 million people, according to the UN, which slightly exceeded the NBU's estimates in the January 2024 Inflation Report). This limited not only the supply of labor, but also curbed the growth of consumer demand.

As a result, the number of applicants per vacancy in early April 2024 was lower than that before the full-scale invasion. In some professions (logistics, blue collars, retail, and hotels and restaurants), this ratio is already below one, indicating a significant shortage of personnel. Even in those sectors where demand remains subdued, such as education, design, IT, and arts and culture, the figures are considerably lower than in April last year. Given the further recovery in economic activity and the limited labor supply, labor market mismatches will persist over the forecast horizon, which will depress economic activity.

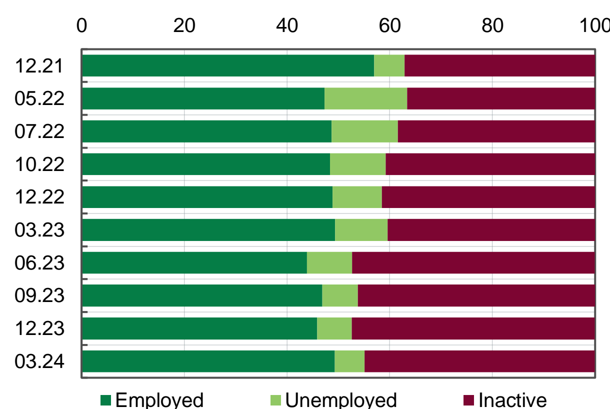
Figure 2.7. Selected indicators of consumer demand



* New and used ones, excluding cars imported with violation of customs regulations. ** Change of the survey method from face-to-face to the phone interview from March 2022.

Source: Info Sapiens, Ukravtoprom.

Figure 2.8. Surveyed respondents by economic activity status*, % of responses



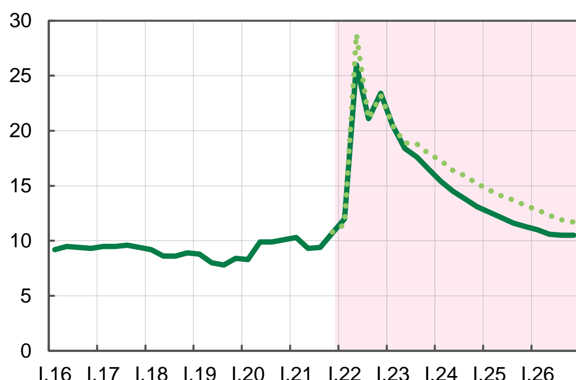
* The "employed" category includes those who chose the following options: "Employed", "Self-employed", "Registered private entrepreneur", and "Other". The "unemployed" category includes those who chose a "Temporarily unemployed but looking for a job" option.

Source: InfoSapiens, NBU staff estimates.

At the same time, the decrease in resumes may indicate the success of job searches and growth in employment of Ukrainians, as evidenced by surveys of households. Thus, according to survey-based estimates, in Q1 2024, the labor force participation rate resumed growth after a long period of decline. The changing economic structure and likely higher GDP growth rates in the western and central regions and in Kyiv have also led to slightly higher labor force participation rates than in the eastern and southern regions (for more details, see the Box 2 *How the Labor Market Has Changed over Two Years of Full-Scale War* on page 23).

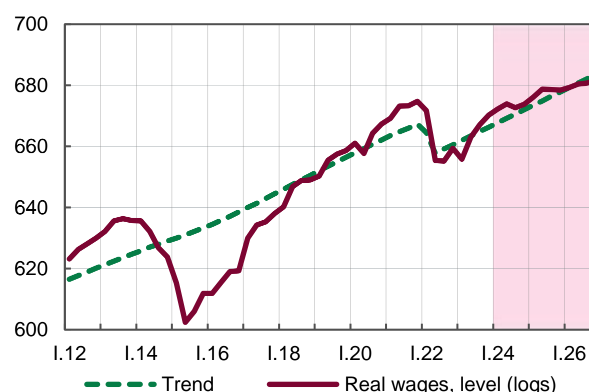
The rapid growth in demand for workers coupled with limited supply has also reduced the unemployment rate. This steady trend, which has been reflected in household surveys since H2 of last year (these surveys are the benchmarks for the labor market situation in the absence of official statistics), led to a revision of the NBU's unemployment rate estimates for 2023 (to 18.2%), and to an upgrade in the forecast. Thus, the unemployment rate will decrease to 14.2% in 2024 and to 10%-12% in 2025–2026. However, it will still be higher than before the full-scale invasion due to structural changes in the economy, external and internal migration, uneven recovery across regions and sectors, and consequently a growing mismatch between employers' needs and workers' skills. There will continue to be a substantial structural component of unemployment, and this will prevent unemployment from declining over the forecast horizon. The slow return of migrants to Ukraine due to their adaptation to life abroad and the resumption of labor migration will be factors creating difficult conditions on the labor market.

Figure 2.9. ILO unemployment rate, sa, %



Source: SSSU, NBU staff estimates.

Figure 2.10. Real wages, level (logs)



Source: SSSU, NBU staff estimates.

Due to the mismatch between labor demand and supply, in early 2024, as in 2023, there was upward pressure on wages from both job seekers and employees. Wages grew at a high rate, as evidenced by both indirect indicators of household income and the increase in wages offered in vacancies and asked for in resumes on job search sites. Further salary growth in 2024 due to stronger competition for employees, especially highly skilled ones, is also confirmed by the plans of companies[9]. In addition to the shortage of staff[10], the increase in wages was also affected by an increase in the minimum wage (by 6% since January and by another almost 13% since April 2024).

Difficulties in finding skilled workers by employers in the context of the economic recovery will lead to further wage rises in the private sector. Therefore, as early as 2025 real wages in the economy will exceed their pre-war levels and will continue to rise, in particular due to stronger competition for labor with foreign employers.

Over the forecast horizon, a loose fiscal policy, coupled with a further increase in real wages in the private sector, will drive private consumption growth at 5%-9% per year. Consumer demand will be fueled by increased employment and the return of migrants to the country.

The stable functioning of the sea corridor and further expansion of export opportunities will support economic growth over the forecast horizon

The stable operation of the sea corridor with a wider range of goods compared to the grain corridor has made it possible to significantly increase the volume of exports of goods and services. Thus, exports of both grains and iron ore and metals products increased considerably. The resumption of export shipments of iron ore and metals products by sea, which is a more cost-effective way of transporting these products, has helped to boost the workload of ore mining companies and step up steel production. All this not only compensated for the loss of exports from the blockade of Ukraine's western borders, but also returned these goods to their traditional export markets: Asia and Africa for food products, and Asia and the United States for ores and metals. The new sea route also contributed to an increase in domestic rail transportation, in particular cargo to the ports of Big Odesa, and in wholesale trade turnover.

The optimization of logistics and production processes will continue. The restoration of damaged production facilities and infrastructure, accompanied by the renewal of capital assets, the introduction of new technologies in production through further cooperation with international partners, and the attraction of foreign investments will drive the revival of production activity and exports in particular. This will primarily affect the development of machinery in the defense, transportation, and construction equipment sectors, but productivity is expected to increase in other activities as well.

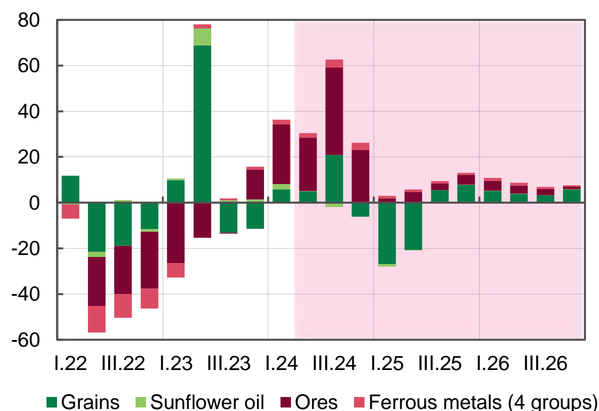
Stable maritime transportation will stimulate further growth in exports of iron ore and metals products. Improved supply chains for raw materials will bolster a gradual

[9] According to the Q1 Business Outlook Survey, the majority (77%) of respondents plan to raise salaries in 2024, with the most commonly cited range being 5%-10% (38% of respondents). There is a significant divergence in the plans to increase wages across economic sectors, with the largest wage increases expected in 2024 in trade and manufacturing.

[10] According to the SSSU, the average wage increased by 17% in 2023. In sectors that experienced a more significant shortage of personnel, the rate of wage increases was higher (37% in trade, 29% in construction, and 25% in transportation).

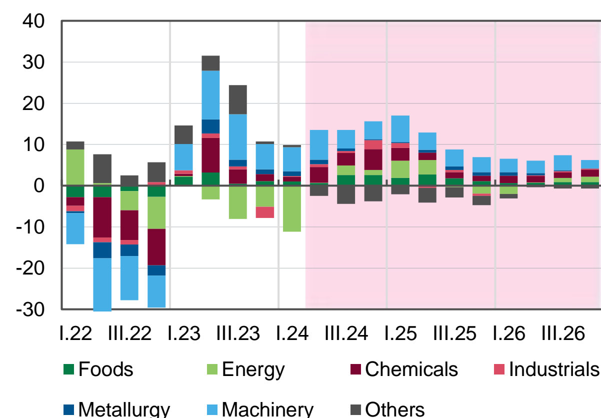
increase in chemical exports. Expanding exports will improve the financial results of enterprises and help boost the sustainability of the FX market. However, in 2025–2026, total export growth is expected to slow somewhat, due to lower exports of agricultural products amid lower harvests in 2024 and a gradual recovery in domestic consumption. The destruction and damage to production facilities and logistics, as well as shortages in the energy system, will hamper a rapid recovery in exports. Problems with electricity will further hamper the growth of IT services exports.

Figure 2.11. Contributions of selected commodities to the annual change in exports volumes, pp



Source: SCSU, NBU staff estimates.

Figure 2.12. Contributions to the annual change in imports, pp



Source: SCSU, NBU staff estimates.

At the same time, the blockade of Ukraine's western borders impeded imports of goods because of the significant share of road transport in their transportation routes. This somewhat restrained production and investment activity, as well as the activity of the service sectors, but especially trade. The impact of the blockade was manifested not only through a decrease in volumes of supplies, but also indirectly through longer delivery times and more expensive supplies via alternative routes. Some of the imports of goods by road were reoriented to other modes of transport and routes and replaced by domestically produced goods, which reduced the negative impact of the blockade on economic activity. Given the possibilities of reorientation and the availability of stocks, the effect of the blockade will be largely offset by the end of the year (for more details, see the Box 3 *Impediments to Ukraine's Trade with Poland: Causes and Effects for the Ukrainian Economy* on page 26). An additional factor behind the decline in imports of goods and services in Q1 was a reduction in the spending of Ukrainians abroad, including due to the gradual loss of their residency, which was reflected in a decrease in imports of travel services.

In future, imports will return to growth, as the blockade is lifted and domestic demand continues to be robust. To meet the needs of the defense sector and rebuild production facilities and logistics infrastructure, purchases of machinery, chemicals, and industrial goods will increase throughout the forecast horizon. The shifting of farmers to growing oilseeds and the increase in planted areas from 2025 will push up fertilizer imports. To balance the domestic energy system and revive domestic production, the need for energy imports will increase. However, further reductions in spending by Ukrainians due to their adaptation abroad, as well as the deregistration of people who have lost their tax residency, will hinder import growth over the entire forecast horizon. As a result, the positive contribution of net exports to GDP growth will decline in 2024, and will turn negative in 2025.

Significant support for Ukraine's economic growth in 2024–2026 will come from the revival of external demand and the growth of global trade

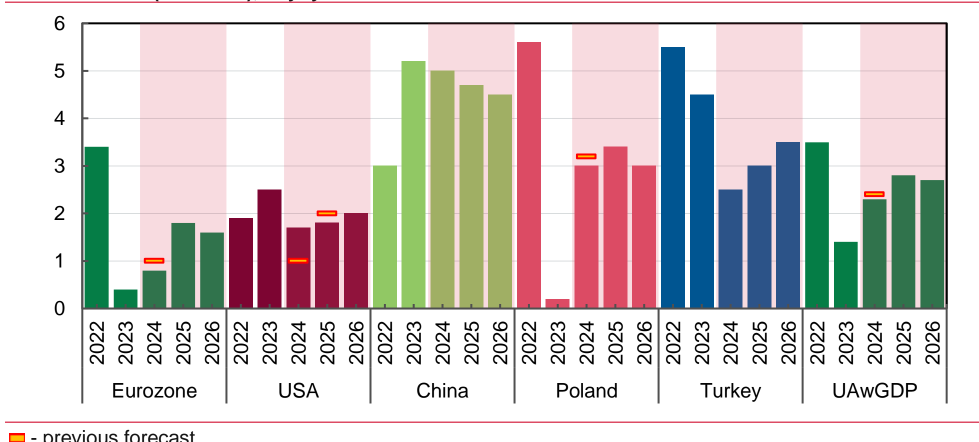
Thanks to the stable operation of the sea corridor and the expansion of export opportunities, Ukraine is gradually returning to its traditional markets. Therefore, the external economic environment will resume its role as a significant factor influencing the Ukrainian economy.

External demand, as measured by the weighted average annual economic growth rate in Ukraine's MTPs (UAwGDP), is gradually rebounding. Leading indicators show an improvement in the economic situation in both advanced economies and in emerging

markets. Moreover, the economic activity of the latter recovered not only in the services sector but also in manufacturing. In addition, an increase in new orders, primarily export orders, reflected improved terms of trade in emerging markets. The level of business confidence in the world was the highest in the last two years.

For the first time in almost a year, global supply chains are close to full capacity, and manufacturers, especially of consumer goods, are ramping up production. Global demand for raw materials, commodities, and components showed signs of recovery in mid-Q1 2024 after a nearly two-year decline due to destocking and high inflation.

Figure 2.13. Real GDP of selected countries and weighted average of annual GDP growth in Ukraine's MTP countries (UAwGDP), % yoy



- previous forecast.

Source: National statistical offices, NBU staff estimates.

Global trade is slowly recovering, albeit more weakly than the WTO and the NBU had expected, as evidenced by the WTO's Goods Trade Barometer. The escalation of the conflict in the Middle East amid numerous economic barriers and the spread of protectionism are holding back its recovery. In the coming years, growth will accelerate, but due to increased trade fragmentation, the growth rate will remain below its historical trend. In addition, the impact of disruptions to shipping in the Red Sea is assessed as limited due to a number of mitigating factors. First, there is plenty of available shipping capacity given the relatively subdued global demand for goods and the expansion of the cargo vessel fleet. Second, the degree of congestion in ports around the world remains broadly unchanged, signaling their capacity to cope with rerouted vessels. Finally, manufacturers' high stocks of inventories are cushioning the impact of longer delivery times on production. However, the deterioration of the situation in the Middle East may have a deeper effect, hindering the recovery of global merchandise trade and curbing external demand.

The weaker-than-expected recovery in external trade has resulted in a downward revision in the real GDP growth rate for the euro area and CEE countries in 2024. In the current conditions, these countries determine the dynamics of the UAwGDP index (their weight in the index has now reached almost 70% compared to 46% in 2021). In the future, economic activity in Europe is expected to pick up. Disinflation and slow wage growth will support household consumption. Additional factors will be the waning impact of the energy shock and the financing of countries under the NGEU project.

On the other hand, the resilience of the U.S. economy, primarily due to the labor market, has made it possible to revise its GDP forecast upward. The U.S. economy is expected to continue to grow thanks to strong consumer demand, shored up by the further spending of the savings accumulated during the pandemic and a gradual easing of financial conditions, which will promote investment growth.

China's economic growth will slow, reflecting weaker consumer demand and a sluggish real estate market. However, additional fiscal stimulus will prevent the economy from cooling significantly. In contrast, the accelerated growth of India's economy will gradually compensate for the weakening of external demand from China.

External demand is expected to pick up over the forecast horizon, driven by steady employment, rising real incomes, and an expected decline in interest rates. Together with the recovery of global trade, this will help Ukraine to maintain sustainable economic growth.

Destruction in the energy sector was the main reason for the downward revision in the growth forecast for 2024–2025

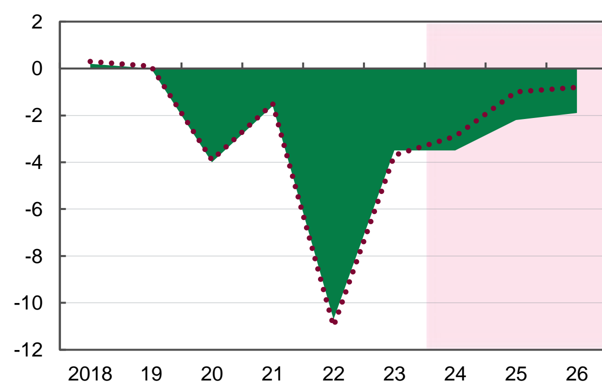
Early warming and favorable weather conditions supported the economy in Q1 2024, which resulted in a faster resumption of construction work and an early start of the sowing season. The latter generated demand for fertilizers and plant protection products, supported fuel trade, and so on. Favorable weather also resulted in virtually no power shortages during the quarter, despite a significant increase in electricity consumption amid last year's blackouts. In particular, consumption rose in the industrial sector, transportation, and construction, which indicated further growth in economic activity in these sectors.

However, at the end of Q1, the risk of new destruction of energy and port infrastructure due to russian attacks was realized, and the duration of air alerts increased[11]. The deterioration of the energy supply situation in some regions was only partially reflected in the overall level of economic activity in Q1. However, the latest destruction has worsened assumptions about electricity shortages in 2024–2025 (for more details, see Part 4 *Assumptions and Risks to the Forecast* on page 35). Risks of further missile attacks on energy, mining and port infrastructure worsen the prospects for these sectors and industrial recovery. The negative contribution of the revised estimates of electricity shortages to the change in real GDP is estimated at 0.6 pp in 2024, and at 0.5 pp in 2025. On the other hand, the impact of a smaller grain harvest in 2024 on GDP will be insignificant due to the greater focus of agricultural producers to more marginal crops, such as oilseeds.

Substantial losses of capital, markets, and labor since the start of the full-scale invasion have caused a drop in potential GDP. However, thanks to the economy's adaptation to the new realities, potential GDP has resumed growing, and this will continue throughout the forecast period. The growth will be facilitated by the gradual return of forced migrants and the restoration of production facilities. European integration processes will also be a significant factor in the growth of economic potential. However, due to large-scale losses, potential GDP will not reach its pre-war level over the forecast period. Only if a large-scale reconstruction plan is implemented with the participation of international investors will potential GDP growth accelerate significantly.

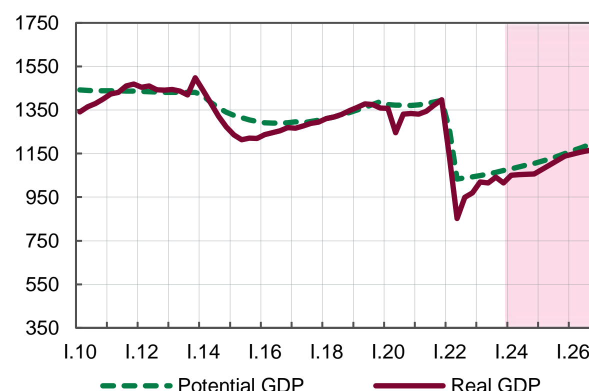
The GDP gap will remain negative due to high uncertainty amid security risks, which are depressing the recovery in investment activity and consumer demand, as well as due to logistical difficulties for exports. Some production facilities will remain underutilized even in the postwar period because of logistical constraints, the partial loss of markets, and persistent labor market mismatches.

Figure 2.14. Output gap, % of potential GDP



Source: NBU staff estimates, SSSU.

Figure 2.15. Real and potential GDP, sa, at 2021 constant prices



Source: SSSU, NBU staff estimates.

[11] According to the Ukrainian Council of Shopping Centers (UCSC), in Q1 2024, the average duration of air raids relative to the working hours of shopping centers was the highest in the period of observation (from Q1 2023 to Q1 2024) and amounted to 11.8%.

Box 2. How the Labor Market Has Changed over Two Years of Full-Scale War

Economic crises have direct and indirect impacts on the labor market, including through causing job losses, higher unemployment, and decreases in labor income. However, the effects of the COVID–19 pandemic and the full-scale war unleashed by russia have features both common and specific to each. Business outlook surveys reveal that both crises have led to staff shortages, but that their causes have been radically different. The full-scale war's adverse effect on business activity is also much stronger than was the pandemic's. Remote-work patterns that emerged during the COVID-19 crisis made it possible to maintain a certain amount of stability in production processes during the full-scale invasion. At the same time, competition for workers is currently more intense, forcing companies to raise wages at rates higher than productivity growth. Labor shortages are likely to remain significant, restraining long-term economic recovery.

Over the past five years, Ukraine has experienced two major crises: the COVID-19 pandemic in 2020 and the full-scale invasion by russia since February 2022. Both shocks had direct and indirect effects on the economy, including the labor market. Specifically, the slump in economic activity during these crises led to a significant weakening of demand for labor, driving the unemployment rate higher. However, each crisis came with its own unique features. Due to the absence of SSSU data since the labor force survey was suspended at the start of the full-scale war, business outlook survey results have been used to estimate labor market developments.[12]

Both in 2021 and in 2023, companies complained about a lack of staff. Specifically, during the COVID-19 crisis, only 12% of respondents said they had no shortage of personnel. In 2023, the share of such enterprises was an unexpected 36%. This can be attributed both to the subjectivity of assessments in the survey and to the fact that a large number of enterprises are operating below full capacity during the full-scale war, and that the overall economic shock to companies of the war and invasion was much stronger than the pandemic's. At the same time, the adverse impact of this factor on doing business during the full-scale war far surpasses the estimates made in the course of the COVID-19 crisis: in Q1 2022, only 26% of businesses said a lack of workers limited their activities, while in Q1 2024, the share of such enterprises increased to 38%. In particular, the share of companies that said that job seeker skills did not match qualification requirements increased from 2% in 2021 to 16% in 2023, and another 11% cited insufficient qualifications of existing employees.

Such differences between the two crises are likely due to a more significant narrowing of the labor market since the onset of the full-scale invasion. In 2021, for instance, businesses experienced staff shortages due to being unable to offer employees hybrid work options while under quarantine restrictions, the reason being the specifics of production processes and the lack of workers who met vaccination requirements (23% and 22% of responses, respectively, having placed first and second in the rating). In 2023, the key reasons for this were war-related: layoffs due to mobilization (44%, the biggest reason) and migration (24%, the second most cited reason). Although labor migration recovered in 2021 after the COVID-19 crisis,[13] this factor had almost no restraining effect on doing business: pressure from migration was experienced by less than 4% of surveyed enterprises. After 24 February 2022, migration soared to unprecedented levels,[14] and the average migrant's profile changed significantly [1, 2].

Both in 2021 and 2023, the shortage of personnel was unevenly distributed by sector. In 2023, this deficit was experienced more often by enterprises in sectors historically employing mostly men (construction, transport, mining). Companies in such sectors

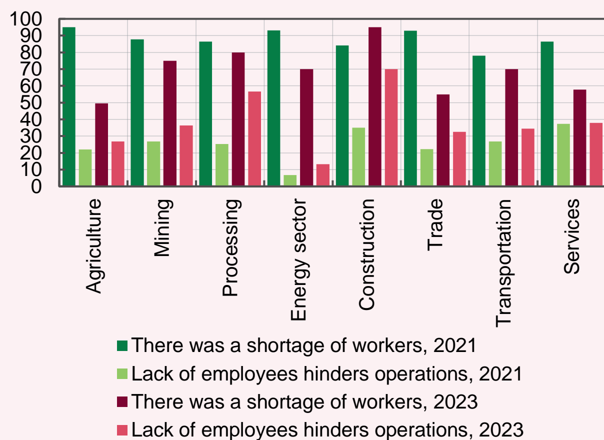
[12] As part of the quarterly business outlook surveys, additional surveys on labor market conditions were conducted between 31 January and 23 February 2022 (prior to the full-scale war) and from 31 January to 27 February 2024, with almost identical sets of questions. In 2022, 593 businesses in 22 regions of Ukraine were surveyed (excluding the Autonomous Republic of Crimea and the city of Sevastopol, and Donetsk and Luhansk regions), and in 2024, 661 companies in 21 regions (additionally excluding Kherson Oblast).

[13] Labor migration slowed during the COVID-19 crisis due to quarantine restrictions on border crossings, but began to pick up in 2021.

[14] In 2017–2018, the number of labor migrants was estimated at 2.6–2.7 million. The number of migrants due to the full-scale war was more than twice as high (6.5 million people) at the end of Q1 2024, according to UNHCR estimates. This data also includes persons outside the labor force (children, students, retirees, and others).

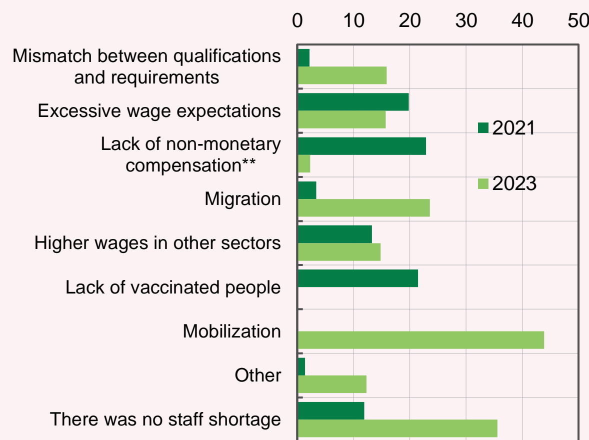
more often attributed the lack of employees to mobilization, rating its adverse impact on their business as higher than anything else. According to company comments, the biggest problems are related to the mobilization of highly qualified individuals trained in narrow fields, and the considerable time required to train replacements, as well as the increasing propensity of men to seek informal employment.

Figure 1. Assessment of personnel availability and the impact of personnel shortages on the companies' operations in 2021 and 2023 by type of activity, % of responses



Source: NBU.

Figure 2. Reasons for staff shortages in 2021 and 2023, % of responses*



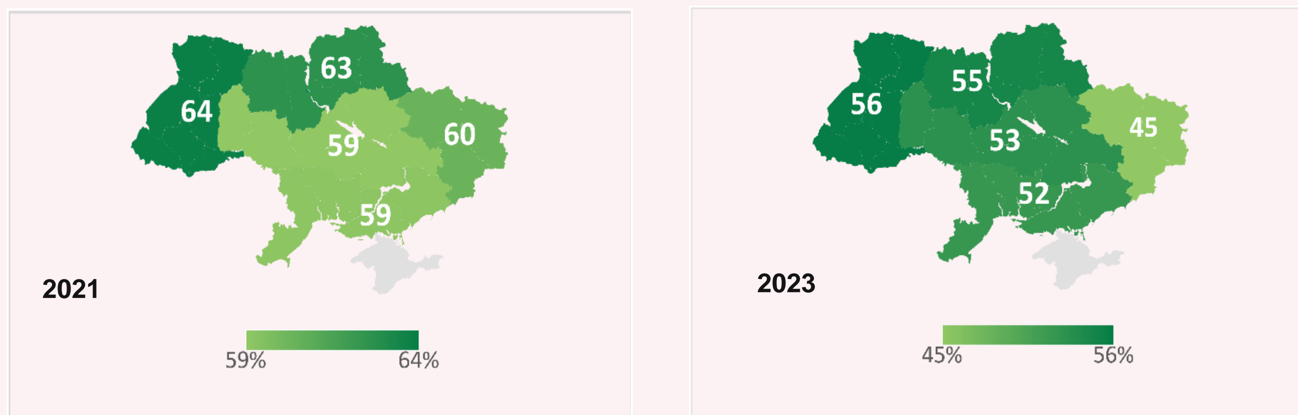
* More than one answer is possible.

** Non-monetary compensation includes insurance, transportation and/or hybrid work formats: remote work, reduced working hours, etc.

Source: NBU.

However, the impact of mobilization on labor market conditions after the full-scale invasion began was much smaller than that of migration. Specifically, the labor force aged 15–70 shrank by more than a quarter in 2023 compared to 2021, the NBU estimates. Almost half of this decrease was driven by external migrants exiting the labor force, although the estimates do take into account that some of those people continued to work in Ukraine remotely (according to CES surveys of migrants, the share of such migrants was 8%–10% in 2023). A significant role (accounting for about 40 pp of the labor force decrease in 2023 from 2021) was played by demographic losses and occupation, as well as the transition into the economically inactive population (likely due to IDPs' difficulties in finding work, the need to care for family members, an increase in the number of pensioners, and a lack of the skills currently in demand in the labor market). The shrinking of labor force participation was widespread in all regions of Ukraine, most noticeably in the regions where active fighting is ongoing.

Figure 3. Share of people included in the labor force among respondents by macro-region in March of the respective year, % of responses

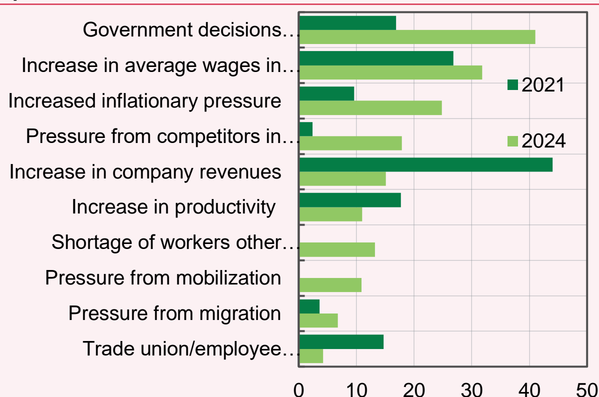


Source: InfoSapiens, NBU staff calculations.

In addition to staffing problems, enterprises noted other impediments to work as the war drags on: the difficult psychological condition of employees, work stoppages during air raids, power outages, and so on. Businesses also quoted mounting problems with ensuring productive performance of employees and the growing need for additional investments and innovations to improve productivity.

Remuneration was an important factor in the search for personnel in both 2021 and 2023. But companies are showing a change of attitude: whereas in 2021 they indicated inflated salary expectations as reason to refrain from hiring workers, in 2023 competition for employees picked up, and businesses are willing to raise salaries to retain existing staff. Specifically, Higher Wages in Other Sectors became the second most important factor in driving wage growth in 2023, even though the financial standing of companies had worsened. This confirms the NBU's estimate that the labor market has contracted much more significantly than the economy as a whole over the two years since the full-scale war began.

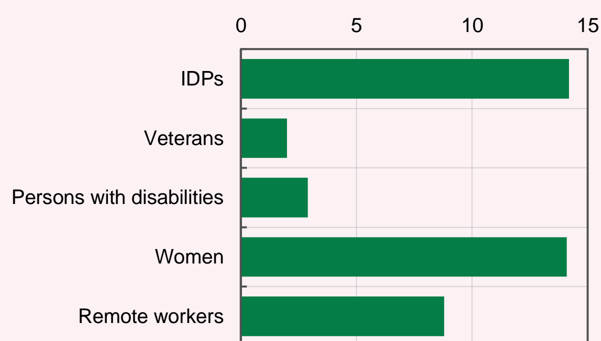
Figure 4. Factors driving wage increases in 2021 and 2024, % of responses*



* More than one answer is possible.

Source: NBU.

Figure 5. Categories of employees that saw an increase at the enterprises in 2023, % of responses*



* More than one answer is possible.

Source: NBU.

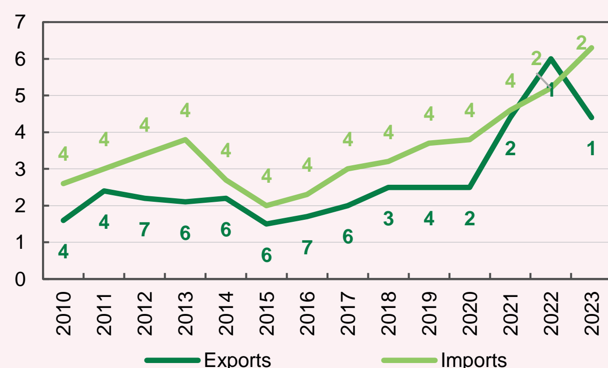
The shortage of personnel is forcing companies to attract population groups that previously had a smaller representation in the labor market. By way of example, the hiring of women and people who work remotely has increased, while the involvement of veterans and individuals with disabilities acquired prior to the war has been insignificant so far. Going forward, the return of migrants, the involvement of veterans in civilian life, and the expansion of labor force participation of persons with disabilities will be a significant resource for improving labor market conditions in Ukraine, especially during a rapid recovery. The effectiveness of these groups' involvement will depend on joint efforts by businesses and the state, in particular through measures to integrate such individuals into the labor market by expanding barrier-free access and adjustment opportunities at the workplace, including remote work, retraining options, and more. Otherwise, the shortage of personnel will continue to significantly restrain the country's recovery.

Box 3. Impediments to Ukraine's Trade with Poland: Causes and Effects for Ukrainian Economy

Poland took a comprehensive approach to supporting Ukraine after russia launched the full-scale war. During its first year, Poland accepted the largest number of forced migrants, provided financial and military assistance, and became one of the main transport hubs, helping keep the Ukrainian economy from taking an even deeper plunge in 2022, and contributing to the return to growth in 2023. In particular, Poland became Ukraine's largest trade partner, generating 12% of the country's external trade turnover in 2022 and 11% in 2023. In addition, the transit of Ukrainian goods to/from other European countries is carried out through Poland. Exports of food products from Ukraine had the strongest impact on scaling up the volume of trade with Poland in 2022. Amid a significant drop in global prices for foodstuffs, however, this also led to difficulties in trade relations between the two countries: first, the imposition of restrictions on imports of certain food products from Ukraine, and then protests by Polish farmers and truckers and a blockade of Poland's border crossings with Ukraine. The western border blockade had a limited effect on the Ukrainian economy at the beginning of 2024, but this impact will taper off too before the year is out.

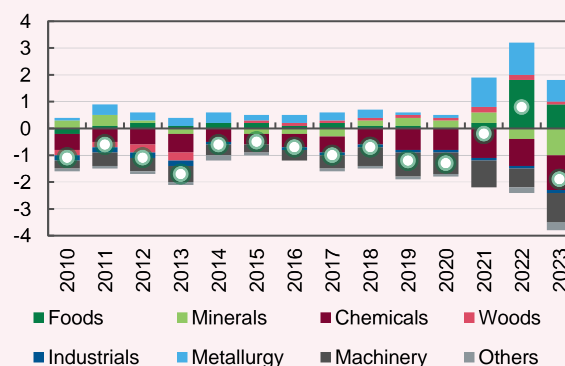
Because of its geographical and cultural proximity, Poland had already been playing a significant role in Ukraine's external trade before the full-scale war. During it, Poland's role has risen substantially. After the full-scale invasion started, Poland became Ukraine's largest trade partner amid a blockade of seaports and active hostilities in Ukraine's east. In 2022, Poland accounted for almost 15% of Ukraine's goods exports, the highest of all partner countries, and for 10% of Ukraine's goods imports, placing second in terms of this indicator. In recent years, Ukraine has primarily exported to Poland raw materials, such as ferrous metals, fats and edible oils, grains, ores, oilseeds, wood, and animal feed. Imports from Poland have been dominated by goods with a high degree of final processing: various machinery products (vehicles, electrical and mechanical equipment), petroleum products, chemical products (plastic, fertilizers), and processed foods.

Figure 1. Trade with Poland, USD bn (data labels – ranks in trade among partner countries)



Source: SCSU, NBU staff estimates.

Figure 2. Ukraine's trade balance with Poland, USD bn



Source: NBU.

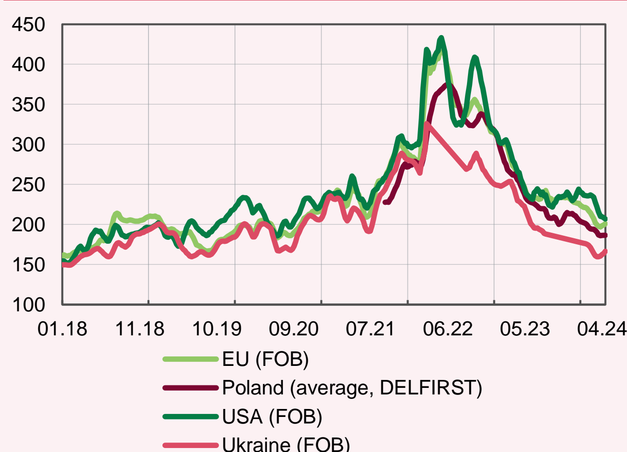
Ukraine has traditionally run a trade deficit with Poland as the value of imports exceeded that of exports. Only in 2022 did the trade balance move into surplus, primarily due to a significant increase in exports of food products. The disruption of habitual supply chains for Ukraine's typical food exports forced the country to switch to delivering these goods via land routes. Considering the length of the land border and the terrain, Ukraine's most developed land transport infrastructure was precisely on the border with Poland. Unsurprisingly, it was this border that saw the biggest increase in Ukrainian external trade flows after russia launched the invasion. Additional drivers of the growth in goods exports were the liberalization of customs tariffs and the EU Solidarity Lanes.

As a result, in 2022, exports of food products to Poland surged to USD 2.6 billion, which was 2.7 times the 2021 level. The largest contribution to this increase came from grain crops, oilseeds, and vegetable oils. The breakdown of Poland's food imports also

underwent considerable changes: Ukraine's share of grain imports leapt to 54% in 2022 from 3% in 2021, oilseeds – to 33% from 7%, and oils – to 29% from 21%, respectively, according to UN Comtrade. Similar developments were observed in exports to other EU countries: exports of food products to the EU in 2022 rose to 1.7 times the level of 2021. That includes a 2.4-fold increase in grain exports. Moreover, the main destinations for Ukraine's EU-bound grain exports were Romania and Spain, while Poland placed third.

In addition, high security risks led to a significant drop in the Ukrainian export price for grain, which resulted in the widening of the spread between Ukrainian and Polish grain prices and put downward pressure on Polish prices. However, the key driver of the plunge in domestic wheat prices, both on the Polish market and in the EU in general, was the decrease in global food prices. Wheat prices peaked at the end of H1 2022 due to the significant limitation of Ukraine's role in the world market after the full-scale invasion began, but by the end of the year they had already fallen by more than 25%, and in 2023 – by another 30%. These developments were driven by the arrival of the new harvest, primarily the record volumes of supplies from russia, and increasing deliveries from the United States.

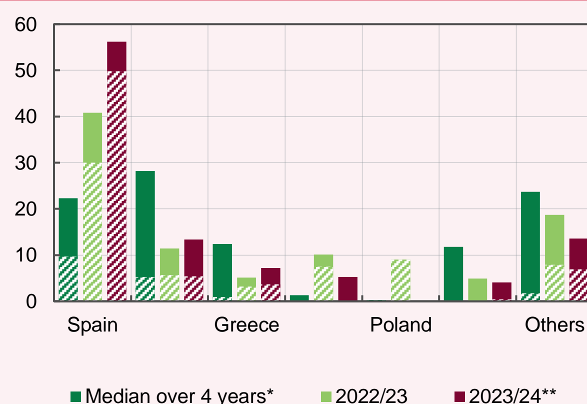
Figure 3. Prices* of feed wheat, EUR/MT, four-week moving average



* DELFIRST – delivered to first customer (silo, processing plant), FOB – export prices.

Source: European Commission.

Figure 4. Extra-EU imports of wheat by EU countries, % of total



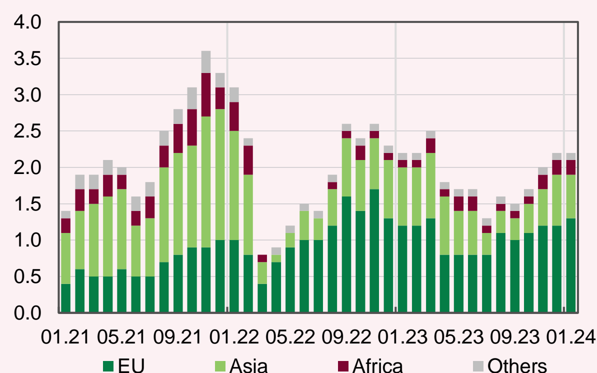
Shaded part of the bar shows imports from Ukraine.
* MY 2018/19 to MY 2021/22. ** Preliminary data.
Source: European Commission.

Poland is one of Europe's largest producers and suppliers of agricultural products. At the same time, the EU market is very important for Poland: about 75% of its food exports go to other EU member states. According to research by the Institute of Agricultural and Food Economics (Warsaw, Poland), before 2022, only part of the agricultural products exported by Ukraine showed a high level of mutual Polish-Ukrainian competitiveness on the EU market: on average, 36.6% of Polish food exports were competing with 31.4% of Ukrainian exports. This concerned primarily wheat, poultry, eggs, rapeseed, corn, and natural honey. After February 2022, however, a sizeable share of other Ukrainian foods was rerouted to EU countries. Exports of food products excluding grain, oilseeds, and edible oil to EU countries increased in volume by 20% in 2022, and by another 33% in 2023. The logical consequence was intensified competition between Ukrainian and Polish goods on the European market.

To protect its domestic market, in April 2023, Poland, as well as its EU neighbors, put a temporary ban on imports of grain and other food products from Ukraine. In May 2023, the European Commission adjusted these restrictions by introducing a ban on imports from Ukraine of four agricultural crops to five European countries, including Poland. The ban lasted until September 2023. In November 2023, Polish farmers petitioned their government to change the European Green Deal, which mandates a reduction in the use of chemicals in agricultural production, which may blunt the competitive edge of Polish products compared to producers from outside the EU, including Ukraine. The blockade of the Polish-Ukrainian border began soon afterwards. The blockade has since relented on an on-and-off basis, but its termination is not expected before Q2 2024.

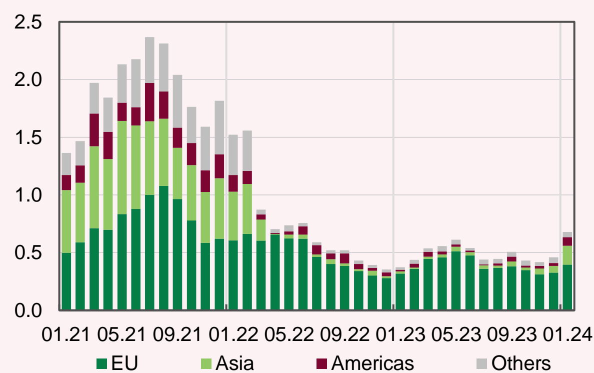
The border blockade has had a tangible impact on Ukraine's external trade, primarily on goods imports. In the first month of the blockage, the country sustained USD 500 million in net losses of goods imports and USD 160 million in losses of goods exports. It became possible to partially make up for the loss of imports by ramping up deliveries via different routes, including railways, and for the loss of exports, by increasing supplies via the new sea corridor. The full operation of the sea corridor will make it possible not only to compensate for the losses from the border blockade and the imposition of grain licensing, but also for Ukrainian exports to return to their traditional markets far overseas. Such developments have already been observed in recent months: food products are returning to markets in Asia and Africa, and metals-and-mining products are making their way back to the markets in Asia and the Americas.

Figure 5. Exports of food products by region, USD bn



Source: NBU.

Figure 6. Exports of metallurgy products by region, USD bn



Source: NBU.

Under the NBU's baseline scenario, the blockade will end in Q2 2024 without having a significant impact on export-oriented sectors. At the same time, import losses were more noticeable for the economy, restraining some of the sectors that rely on imports of intermediate- and final-consumption goods. However, this short-lived impact on economic activity is expected to be offset by the drawing down of existing stocks and a catching up of supplies in later periods.

Part 3. Monetary Conditions and Financial Markets

- The inflow of official financing kept international reserves high. This allowed the NBU to continue to compensate for the structural deficit of foreign currency. As a result, in recent months, the exchange rate has been fluctuating moderately, and in both directions.
- The progress in reducing inflation and improving inflation expectations, the situation in the FX market remaining under control, and the accumulation of a comfortable level of international reserves have created space for further steps in liberalizing the FX market and easing the interest rate policy. This will help support the development of lending and economic recovery.

Managed flexibility regime contributes to moderate exchange rate fluctuations and increased depth of the FX market

Keeping the situation in the FX market under control remains an important means of influencing inflation and exchange rate expectations and maintaining moderate inflation over the forecast horizon. The NBU's interventions compensate for the structural deficit of foreign currency and smooth out excessive exchange rate fluctuations. At the same time, the direction of exchange rate movements is determined by the balance of foreign currency supply and demand.

After a temporary surge at the end of last year, demand for foreign currency declined in January – early March. This was the result of weaker economic activity due to seasonal factors usually seen at the start of the year, and more moderate budget spending. An additional factor was the continued blockade of some checkpoints on Ukraine's western border, which primarily limited imports of goods. The improved exchange rate expectations of households amid the controlled situation in the FX market, along with positive developments in obtaining international financial assistance, also played a role. At the end of February, the Council of the European Union launched a EUR 50 billion Ukraine Facility instrument for 2024–2027. Agreement was also reached on the third revision of Ukraine’s program with the International Monetary Fund.

Net demand for foreign currency rose again from mid-March. This was driven by a seasonal increase in demand for foreign currency from importers of fertilizers and plant protection products during spring field work. The need for energy imports also increased due to intensified enemy attacks on the energy sector. In addition, budget expenditures grew, including after the inflows of significant amounts of international financial assistance. The end of the annual tax payment period, with the tax volumes being higher than last year amid a revival in economic activity and improved financial results of enterprises, also contributed to the growth in demand for foreign currency.

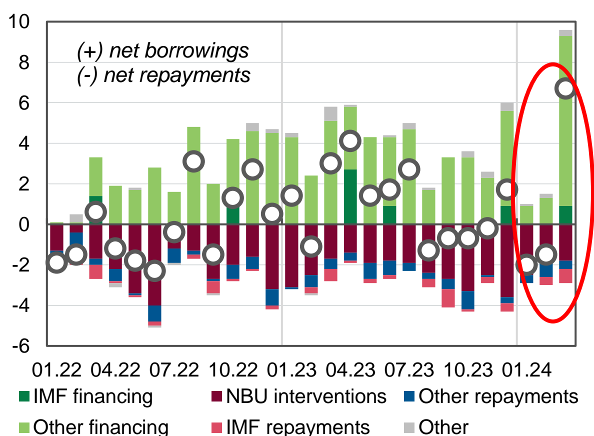
At the same time, this was partially offset by an inflow of export revenues due to the stable functioning of the sea corridor. The tightening of currency supervision, including measures to return FX earnings to Ukraine, also had a positive effect. As a result, the official UAH/USD exchange rate fluctuated in both directions, but took on a moderate depreciation trajectory, with the hryvnia weakening by 4.3% on average over the quarter. However, in April, the US dollar also strengthened on the global financial markets, which weakened the currencies of most of Ukraine's MTPs. As a result, the hryvnia almost stabilized against the currencies of Ukraine's MTPs, while the depreciation of the nominal effective exchange rate (NEER) observed since the start of the year slowed.

Moreover, Ukraine's FX market continued to show positive structural changes. In particular, its depth grew – the volume of transactions by banks without the NBU's participation was more than three times higher in March than before the transition to managed flexibility. In addition, the difference between the cash and official exchange rates remained low: it did not exceed 2.9% in Q1 2024, and fell to 0.3% at the end of March. Both factors indicated that the FX market was becoming more resilient to situational factors.

Moderate demand for foreign currency throughout most of Q1 2024 allowed the NBU to significantly reduce its FX sales (the negative balance of the NBU's FX interventions fell to USD 5.8 billion, compared with USD 9.3 billion in Q4 2023), and to further ease FX restrictions, while updating and calibrating some of them.

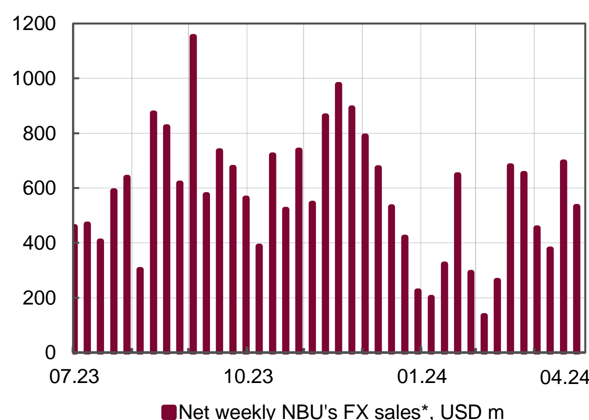
As budget spending grew, the NBU's FX interventions increased in late March and in April. However, given their moderate volume in Q1 and the record-high levels of international assistance received in March, reserves had reached a high level of USD 43.8 billion as of the end of March 2024.

Figure 3.1. Change in gross international reserves, USD bn



Source: NBU.

Figure 3.2. Net NBU's FX sales*, USD m



* Deal date.
Source: NBU.

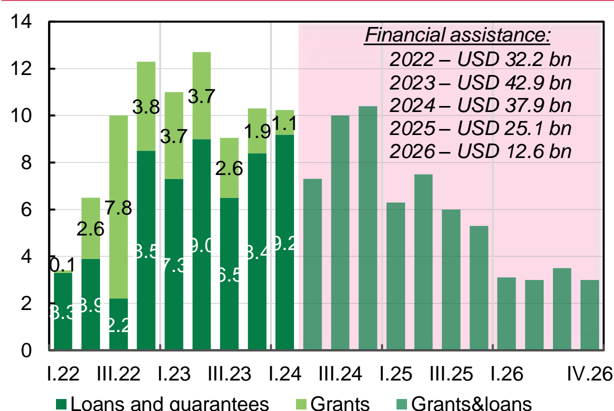
The NBU's interventions will continue to be the main mechanism for balancing the FX market, which will help maintain sustainability and ensure exchange rate fluctuations are moderate.

Despite a slight decline in official financing in 2025, gross reserves will remain at the level of 2024 due to a reduction in FX outflows from the private sector. Starting in 2026, financial assistance from international partners will decrease significantly, which will be the main factor behind the decline in reserves to USD 39 billion by the end of the year

Despite declining, the structural deficit of foreign currency will persist over the forecast horizon, although it will gradually narrow as the economy continues to normalize. As economic uncertainty decreases, private sector investment and debt borrowings will rise. In addition, imports of travel services will decline as Ukrainians adapt to living abroad, change their residency, or gradually return home. Also, households' demand for FX cash is expected to decline due to improved exchange rate expectations amid lower uncertainty about international assistance.

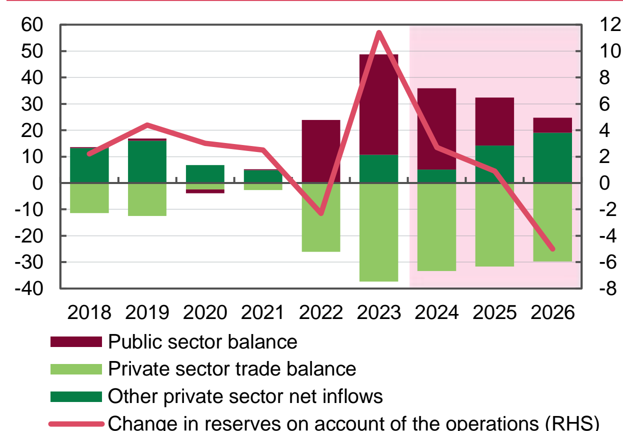
However, the merchandise trade deficit will widen over the forecast period, after narrowing slightly in 2024. Proceeds from exports will recover slowly amid limited production capacity and a gradual decline in global prices for most commodities. At the same time, demand for imported goods will remain strong for the repair and rebuilding of infrastructure, meeting the needs of the defense sector, and ensuring the stable functioning of domestic production. Further gradual steps toward FX liberalization will also have a moderate impact on the FX market, although this will help attract foreign capital in the medium term.

Figure 3.3. International financial assistance, USD bn



Source: NBU, MoF, data from open sources, NBU assumptions.

Figure 3.4. Gross international reserves, changes on account of selected operations, USD bn



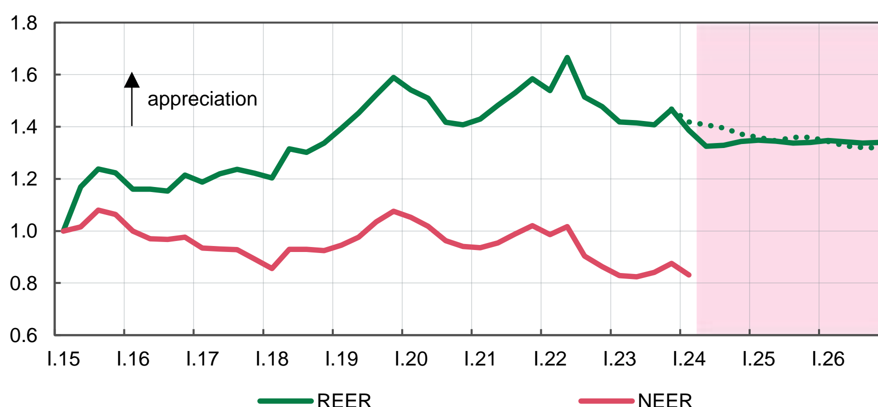
Source: NBU staff estimates.

The weakening of the hryvnia's REER will support external trade and, consequently, stable FX inflows in 2024

The hryvnia's REER has weakened since the start of 2024 as Ukraine's currency depreciated against the currencies of its trading partners, as well as due to relatively lower inflation. As a result, in 2024, its average value will be weaker compared with 2023, which will contribute to a certain improvement in Ukraine's external trade balance, and this will be an additional factor in maintaining stable inflows to the Ukrainian FX market.

However, in 2025–2026, the hryvnia's REER will remain almost unchanged amid favorable terms of trade, continued regular inflows of financial assistance, a slowdown in the interest rate cut cycle, improved depreciation expectations, and a gradual restoration of attractiveness for foreign investors given the normalization of conditions in which the Ukrainian economy operates, and the country's prospects related to European integration processes.

Figure 3.5. REER and NEER indices, Q1 2015=1



Source: IMF, national statistical offices, NBU staff estimates.

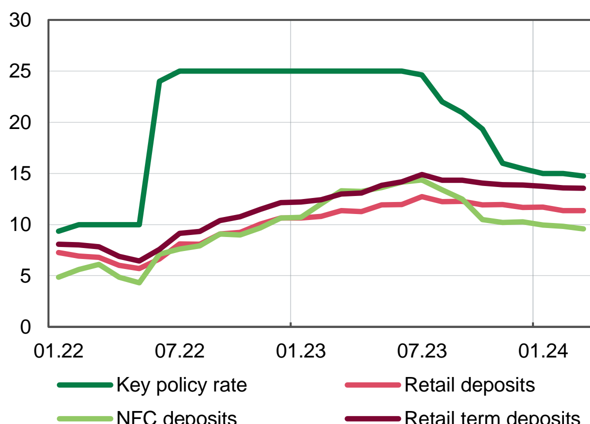
The favorable macrofinancial conditions have created a window of opportunity for faster monetary policy easing and further liberalization of FX restrictions. This will support lending development and economic recovery without posing risks to price and financial stability

The slowdown in inflation, maintenance of the sustainable situation in the FX market, and positive developments in obtaining external assistance created the preconditions for the NBU to resume the easing cycle of its interest rate policy earlier than expected.

In March, the NBU cut the key policy rate by 0.5 pp, to 14.5%, and reduced by 1 pp the difference between the key policy rate and the rates on its operations – namely on three-month certificates of deposit and refinancing loans. The NBU also further modified the parameters of operations with three-month CDs to encourage the banks to increase

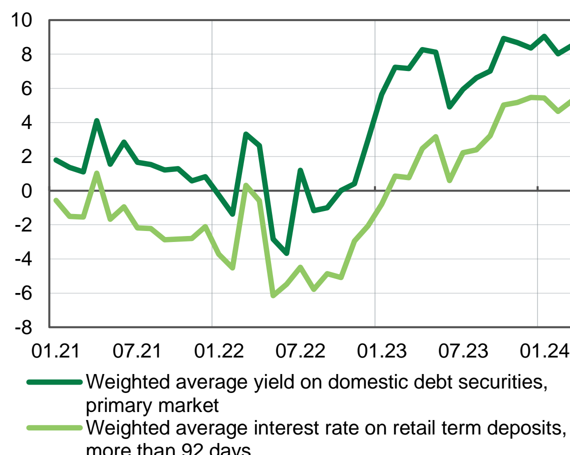
their portfolios of households' hryvnia term deposits. The easing cycle continued in April: the NBU cut its key policy rate to 13.5%. This will support the development of lending and economic recovery, without posing additional risks to price and financial stability.

Figure 3.6. Weighted average interest rates on hryvnia deposits and monthly average key policy rate, %



Source: NBU.

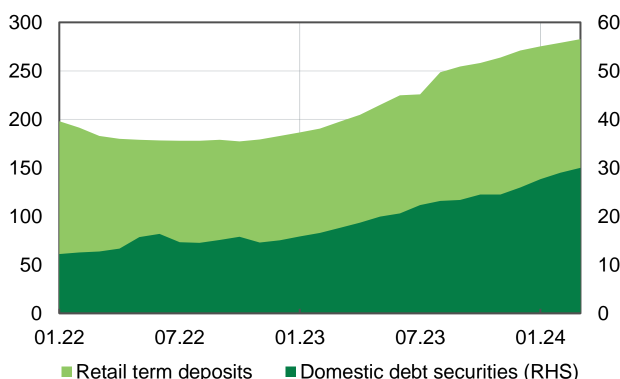
Figure 3.7. Real interest rates* on hryvnia domestic debt securities and retail term deposits, %



* Deflated by households' 12-month-ahead inflation expectations.
Source: NBU staff estimates.

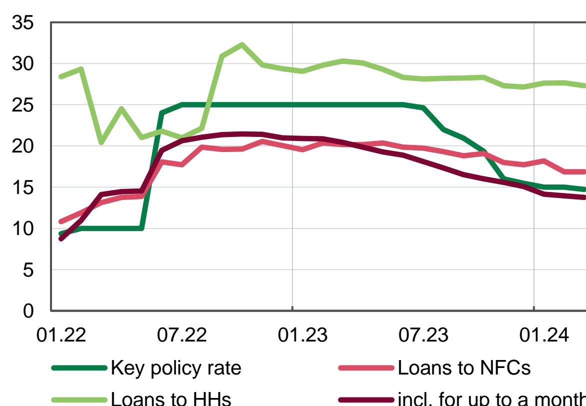
The easing of interest rate policy and changes in the operational design of monetary policy, as expected, gradually decreased nominal yields on hryvnia deposits and domestic government debt securities. At the same time, on the back of the overall improvement in inflation expectations, these instruments remained in demand.

Figure 3.8. Stock of hryvnia domestic debt securities held by individuals and hryvnia retail term deposits, UAH bn



* At outstanding nominal value.
Source: NBU.

Figure 3.9. Weighted average interest rates on hryvnia loans and monthly average key policy rate, %



Source: NBU.

The pass-through to market rates was most pronounced in the cost of attracting corporate deposits, the declining yields of which do not put additional pressure on the FX market. The weighted average rate on hryvnia term deposits of non-financial corporations decreased by 0.7 pp in Q1, while the rate on retail deposits dropped by only 0.3 pp. The yield curve of hryvnia domestic government debt securities also responded to the key policy rate cut, more significantly in April, but this was accompanied by a shift in the maturity structure of placed securities toward longer maturities. As a result, the weighted average primary market yield has remained almost unchanged compared to December. Real yields on hryvnia instruments remaining positive supported households' interest in them. This was evidenced by the continued growth in term deposits (up by 4.4% qoq) and the increase in the portfolio of domestic government debt securities (up by 15.7%). This restrains demand for FX, thus reducing the pressure on international reserves.

Usually, amid uncertainty, a high risk premium significantly restrains the decline in lending rates associated with an easing of interest rate policy. However, improved expectations, including due to prudent monetary policy, have contributed to there being

a stronger link between the key policy rate and the cost of lending. The weighted average interest rate on hryvnia loans to non-financial corporations decreased by 0.8 pp in Q1, and by 1.3 pp on ultra-short-term loans (up to 1 month). At the same time, the banks increased their risk appetite and are ready to expand their loan portfolios.[15]

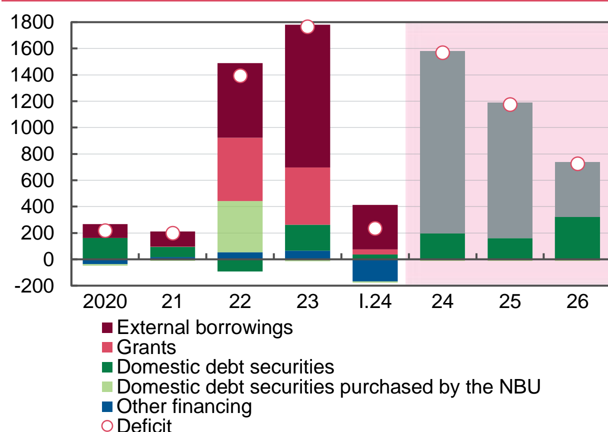
Thus, the banks' lending activity is gradually recovering. Lending to SMEs is growing the fastest. By type of activity, the most rapid growth is seen in loans to wholesale and retail trade, manufacturing, energy, transportation, and warehousing companies. The growth in consumer loans is also accelerating.

Maintaining macrofinancial stability and lower interest rates will help expand bank lending, which will support economic growth. The implementation of the Strategy for Resuming Lending, which is expected to be approved in the near future, will also contribute to this, as will further steps toward FX liberalization.

Significant budgetary needs make it necessary to maintain adequate demand for government securities in the future

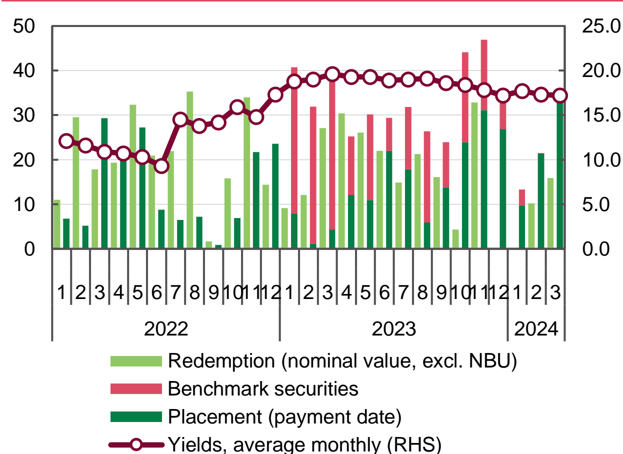
The risk of international financial assistance inflows becoming irregular materialized at the start of the year. At the same time, in March, Ukraine received record amounts of assistance – over USD 9.0 billion. This made it possible not only to finance expenditures in March, but also to create a liquidity cushion for the following months – as was done at the end of 2023, which helped cover a large part of needs in the first months of 2024.

Figure 3.10. Financing* of the state budget deficit (excluding grants in revenues), UAH bn



* Net borrowing. Hryvnia-denominated borrowings include domestic debt securities issued to increase the authorized capital of banks, the Deposit Guarantee Fund (DGF), and other state-owned enterprises. Deficit in 2024–2026 reflects the NBU's forecast. The grey color denotes external borrowing, grant funds, and other financing.
Source: STSU, NBU staff estimates.

Figure 3.11 Primary placement* and redemption of hryvnia domestic debt securities, UAH bn and YTM



* According to the results of auctions for the placement of domestic debt securities before reflecting the price effects due to the additional placement of securities. Excluding hryvnia domestic debt securities issued in 2022 for recapitalization of Ukrfinzhytlo and purchase of war bonds by the NBU.
Source: NBU staff estimates.

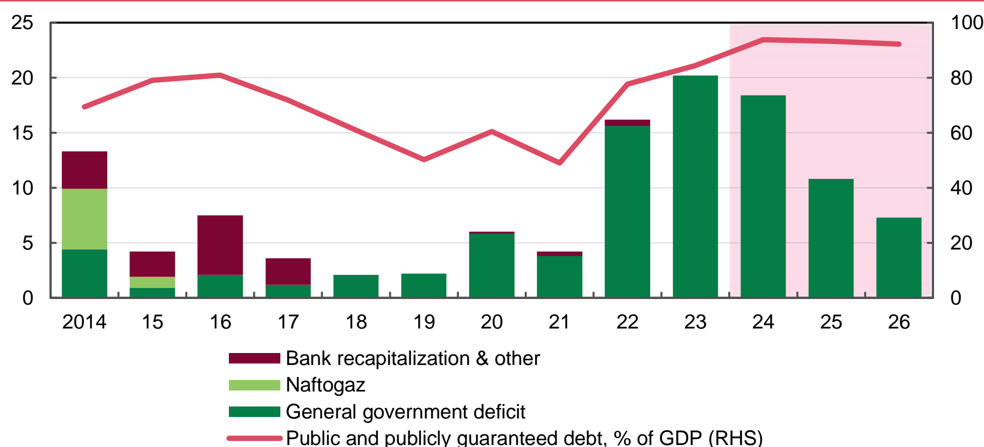
At the same time, domestic debt market borrowings were also a significant source of financing of budgetary needs. Attractive yields on government securities were the main factor behind the rather large borrowings in the national currency seen during the quarter (the rollover of domestic government debt securities in the hryvnia amounted to 187%). The role of domestic borrowing will increase over the forecast horizon. Although the budget deficit will gradually narrow as economic processes normalize, it will remain significant. Despite the expected recovery, the budget's domestic revenues will remain limited for a long time, while expenditures will continue to be high. At the same time, amounts of international assistance will also gradually decline (read more in Part 4 *Assumptions and Risks* on page 35). Thus, attractive market rates will support demand for domestic government debt securities, and the government's active debt policy will make it possible to continue to avoid monetary financing of budgetary needs.

A significant budget deficit, a decline in the share of grants in total international financial assistance, and the exchange rate revaluation effects that have already materialized will determine the growth in public and publicly guaranteed debt. At the end of 2023, it exceeded 84% of GDP, and in the medium term, it will exceed 90% of GDP. However,

[15] According to the survey, the banks expect not only further growth in the loan portfolio, but also an improvement in its quality. At the same time, the banks plan to ease their lending standards for SME loans and mortgages in April–June 2024.

thanks to debt operations with a part of the public debt, low servicing costs, and the long average maturity of borrowings obtained after the full-scale invasion on concessional terms, this level of debt will not be a restraining factor for economic recovery in the coming years.

Figure 3.12. Broad public sector deficit, public and publicly guaranteed debt, % of GDP

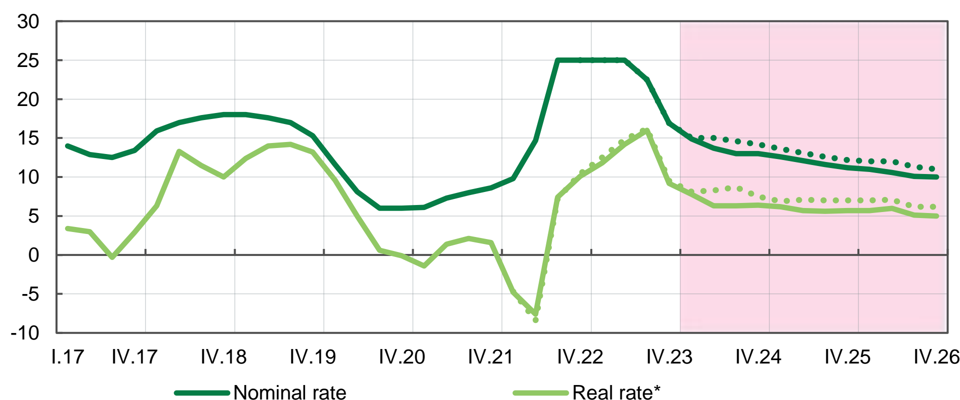


Source: IMF, STSU, MFU, SSSU, NBU staff estimates.

Further easing of interest rate policy will be consistent with maintaining a controlled situation on the FX market and moderate inflation

The room for easing interest rate policy is limited, given, in particular, the expected acceleration of inflation in H2 2024. The implementation of plans to press forward with FX liberalization will be an additional factor that will confine the size of the key policy rate cut in one move. Thus, the NBU should act carefully, maintaining sufficient yields on hryvnia assets and not putting additional pressure on international reserves.

Figure 3.13. Nominal and real key policy rate, period average, %



* Deflated by model expectations (QPM).
Source: NBU staff estimates.

The baseline scenario of the NBU's forecast envisages a cut in the key policy rate to 13% this year. This easing of interest rate policy and the planned steps to liberalize the FX market should not pose any additional threats to macrofinancial stability and FX market resilience.

At the same time, the NBU will adapt its monetary policy if the balance of risks changes significantly. Thus, lower risks to inflation and exchange rate sustainability could create preconditions for further cuts in the key policy rate and an easing of FX restrictions, which would support the development of lending and economic recovery.

Despite the faster-than-expected decline in the key policy rate compared with the previous macroeconomic forecast, the rate will remain positive in real terms. This is in line with the need to maintain a controlled situation on the FX market, preventing inflation from growing excessively in 2024, bringing it back to the target range in 2025, and keeping it close to the target thereafter.

The NBU's interest rate policy will also continue to be aimed at protecting hryvnia savings from being eroded away by inflation.

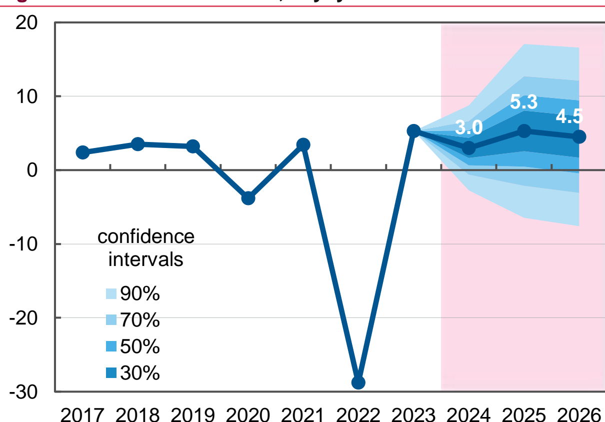
Part 4. Assumptions and Risks to the Forecast

- The main risks to current macroeconomic forecast are the course of the full-scale war, as well as any associated increase in budget requirements to improve the country's defense capabilities and restore critical infrastructure.
- The risks of insufficient international financing have eased, primarily in 2024, but they remain for subsequent years. In particular, the risks of inflows of assistance becoming irregular remain significant.

The NBU assumes that security risks will subside and that conditions in which the economy operates will normalize over the forecast horizon

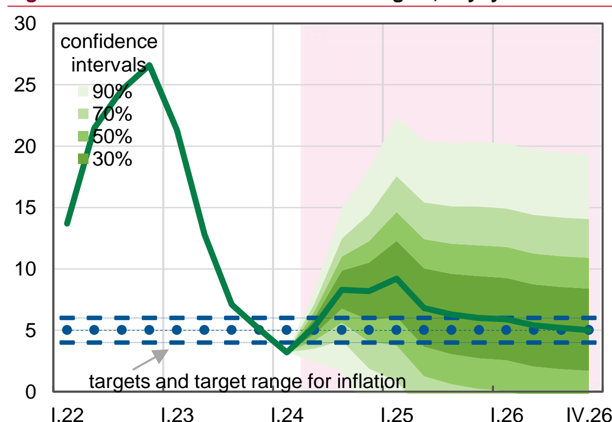
The NBU assumes a gradual normalization of economic activity, taking into account the high adaptability of businesses and households, which was one of the main factors behind the resumption of economic growth in 2023. Given the high level of uncertainty, the NBU is considering two scenarios. In the baseline scenario, the normalization of conditions for the functioning of the economy will be faster, and will be accompanied by an improvement in the migration situation and consumer and investment sentiments. At the same time, a separate scenario considers a slower normalization (read more in Part 5 *Alternative Scenario of the Forecast: Slow Normalization* on page 48).

Figure 4.1. Real GDP forecast, % yoy



Source: NBU staff estimates.

Figure 4.2. CPI forecast and inflation targets, % yoy



Source: NBU staff estimates.

The fan charts illustrate the projections for the key macroeconomic indicators. The confidence intervals, which are symmetric, represent the historical accuracy of the past forecasts dating back to 2016. They incorporate expert assessments of the recent economic conditions for the GDP projections. The confidence intervals widen over a two-year period and remain constant forward.

The NBU envisages a gradual reduction in the budget deficit, but the risks of additional spending on reconstructing infrastructure and covering defense needs remain high

The NBU is retaining its forecast of a budget deficit of 20.7% of GDP in 2024. Going forward, budget expenditures will remain high due to the still significant needs to support defense capabilities and economic recovery. The recovery of the domestic resource base amid a more rapid normalization of conditions for the functioning of the economy and the introduction of additional fiscal measures will help narrow the budget deficit to 13.5% of GDP in 2025, and to 7.5% of GDP in 2026.

At the same time, given the limited potential for optimizing expenditures, there is a significant risk that the budget deficit will widen. This is primarily due to the high probability that the needs of the defense sector will increase. In addition, this risk could materialize in the event of significant damage being done to critical infrastructure. This will require additional sources of deficit financing to be found and, at the same time, faster fiscal consolidation in the post-war period due to the growth in public debt. If main assumptions of the baseline scenario materialize and larger expenditures are needed because of the effects of the war, it is assumed that the first response will be additional measures to mobilize domestic revenues of up to 2.5% of GDP to support non-monetary

financing of defense expenditures. Moreover, the government still might increase its borrowing on the domestic debt market, with macrofinancial stability being maintained.

The NBU's forecast assumes that significant external financial support will continue, but risks remain in terms of the sufficiency of the volumes and the regularity of inflows of the assistance, especially in the upcoming years

The assumption of this macroeconomic forecast is that Ukraine will continue to receive significant external financial support from its international partners. Ukraine stands to receive USD 37.9 billion, USD 25.1 billion, and USD 12.6 billion in international financing in 2024, 2025, and 2026, respectively. Although the risk of a decline in funding in 2024 has eased markedly, it remains sizeable in the following years. In the event of a delay in external assistance inflows, the risk of the NBU resuming monetary financing of the budget would increase amid the limited capacity of the domestic financial market. Lower volumes of international assistance would also lead to a decrease in international reserves, weakening the country's external sustainability. Under such a scenario, exchange-rate and inflation expectations would deteriorate, and the NBU would pursue a tighter monetary policy than envisaged in the baseline scenario.

Given russia's recent terrorist attacks on energy infrastructure, the NBU forecasts an average electricity deficit of around 5% in 2024–2025, but risks persist of more destruction and thus of higher deficits

The increased intensity of russia's air attacks on energy infrastructure in March–April resulted in significant losses of generating capacity at thermal and hydroelectric power plants as well as damage to power grids in some regions. Against the backdrop of rising electricity consumption, which will be driven by a further recovery in economic activity, assumptions about electricity shortages[16] in 2024–2025 have been considerably downgraded. A significant electricity deficit might occur even in Q2 2024 as hydropower generation falls and with reactors at nuclear power plants having to undergo repairs. Further on, the electricity shortage may increase with the growth in consumption in summer and then during the heating season.

The integration of Ukraine's power system with that of Europe allows for the importing of 1.7 GW of capacity (as authorized by ENTSO-E), which is currently used to compensate for temporary shortages of generating capacity during peak consumption hours, and also to balance the power system. However, due to significant fluctuations in consumption, including in neighboring countries, the import capacity is likely to be less than the maximum volume. In addition, import coverage is limited because of imbalances in the grid, in particular due to low transmission capacity in some regions caused by significant damage. Electricity imports will amount to USD 0.8 billion in 2024 and USD 0.6 billion in 2025. At the same time, a gradual restoration of a part of power generation capacity, and the commissioning of new capacities, including the expansion of the renewable energy sector and/or the installation of mobile natural gas power plants, is expected to limit the electricity deficit.

The NBU estimates that, provided there is no new significant destruction, the electricity deficit – even taking into account imports and partial restoration/installation of new generating capacities – will be 5%–7% on average in Q2–Q4 2024. This will mean consumption restrictions for both households and industrial consumers. Due to uneven consumption throughout the day, the deficit may reach 25%–30% during peak hours and be higher in energy-deficient regions. The electricity deficit will continue in 2025 (on average 7% in Q1 and 3% each quarter by the end of the year).

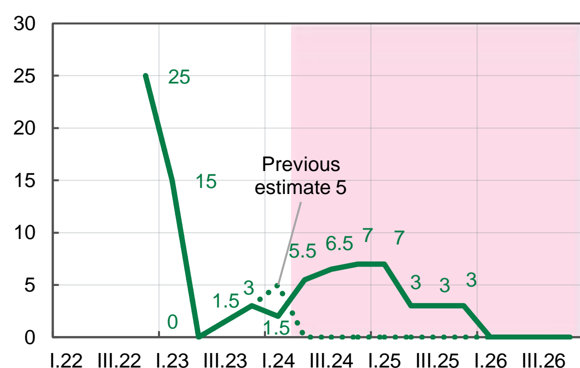
The risk of russia intensifying its attacks on energy infrastructure remains high for both production and distribution capacities. In the event of further destruction, GDP growth will be lower than envisaged in the baseline scenario, and price increases will be higher due to higher costs resulting from the use of more expensive energy sources. However, the level of preparedness of businesses and households for potential power outages is

[16] Hereinafter, "electricity deficit" refers to a shortage (outage) of electricity to end consumers due to both insufficient generation and limited transmission network capacity as a result of damage caused by russian attacks.

higher than in 2022–2023, which will limit the adverse impact of power shortages on the economy.

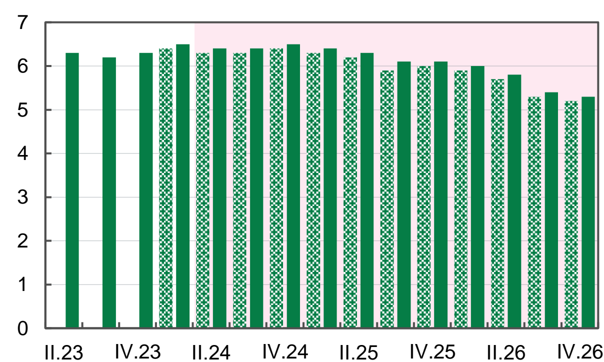
The strengthening of air defenses, faster repairs, and adapting the energy system to the challenges of war will result in a smaller deficit than expected. Developments in the energy sector will also depend on weather conditions, which may lead to both an increase in consumption (extreme heat in summer or hard frosts during the heating season) and an increase in electricity generation, including renewables (high water flows, number of sunny days, wind strength, etc.).

Figure 4.3. Electricity deficit, %



Source: NBU staff estimates.

Figure 4.4. Number of migrants staying abroad, million persons (end of quarter)



Shaded bars are assumptions from the January 2024 Inflation Report.
Source: UNHCR, NBU staff estimates.

In 2025–2026, migrants are expected to return to Ukraine, but at a rather slow pace due to their increasing adaptation to living abroad. The risk that a significant number of citizens might not return remains high

In 2024, migration from Ukraine is expected to continue, with around 200,000 people to move abroad. This assumption has been slightly downgraded compared to the previous Inflation Report, taking into account a slightly higher outflow in Q1 2024. Given the further normalization of conditions for the operation of the Ukrainian economy in 2025 and the gradual winding down of support programs for Ukrainian migrants in recipient countries, the net return of migrants to Ukraine is expected to reach about 400,000 people. In 2026, this process will intensify and, according to the NBU, will be 800,000 people. The number of internally displaced persons will also remain significant, which will be reflected in deepening imbalances in the labor market.

Risks of a larger outflow of migrants abroad and pressure on the budget and social protection system due to internal migration remain high. Migration may intensify due to an increase in the intensity of hostilities, air attacks on civilian infrastructure, and further losses for the Ukrainian economy. Given the adaptation of Ukrainians refugees in recipient countries amid a protracted war, the share of those who decide not to return or postpone their return may further increase. Emigration processes may intensify as a result of family reunifications abroad or searches for better-paying jobs. This will further degrade not only the recovery of domestic demand due to the decrease in the number of potential consumers, but also reduce the supply of labor. Disparities in the labor market will also grow, putting upward pressure on business costs for wages, with a corresponding pass-through to prices.

However, the rapid reconstruction of housing and infrastructure and an increase in the number of jobs due to Ukraine's economic growth, as well as changes in the policies of recipient countries regarding the legal status of Ukrainian migrants, may lead to a more active return.

It is assumed the new sea route will function stably going forward, but risks persist that sea transportation might be disrupted by russian attacks

The forecast assumes the uninterrupted operation of the sea route, with an average monthly capacity of around seven million tons. This will be enough to export agricultural

products and increase supplies of mining and metals products to Ukraine's traditional markets. The continued stable operation of the sea route will significantly reduce the cost of transportation for exporters and help increase FX proceeds. At the same time, the sea route can be used to bring in imported goods to optimize costs and/or in the case of the unavailability of, or certain obstacles to, other modes of transportation.

However, the risks of damage to ports, infrastructure, and ships as a result of russian attacks are still significant. If these materialize, the effectiveness of the sea route will be significantly reduced, which will affect export revenues and further operations of agriculture and the metals industry.

The NBU assumes that the partial blocking of cargo transportation at border crossings with some EU countries will be lifted by the end of May 2024. If restrictions persist for a longer period, or are tightened, it would lead to additional economic losses

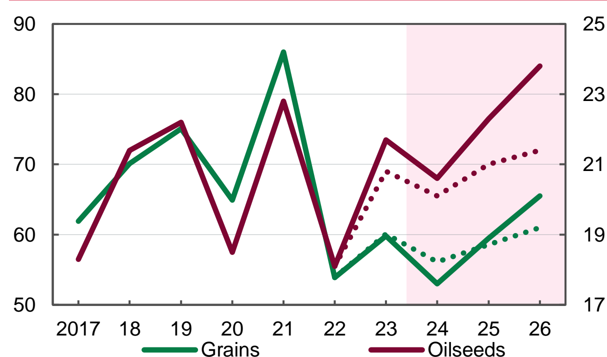
The blocking of borders with neighboring countries has the greatest effect on imports of goods. At the end of April, truck traffic resumed at a number of checkpoints. The NBU expects that the blockade on the western borders will be fully resolved by the end of May, and that import losses in Q2 2024 will be close to USD 300-400 million. A further extension of these restrictions or their intensification would lead to a greater decrease in imports, but this might be partially offset by an increase in transportation via other routes.

In 2024, the grain harvest is expected to decline due to weather conditions being assumed to be close to average climatic norms, as well as due to a shift to growing oilseeds. Going forward, harvests will rise gradually, although weather conditions and climate change may increase the volatility of their volumes

In 2023, harvests were high thank to extremely favorable weather conditions. Weather conditions are likely to be close to average climatic norms over the forecast horizon. In addition, due to the decline in the profitability of grain production, farmers are reorienting to more profitable crops. In particular, areas sown with soybean and rapeseed are expected to increase, while planted areas of spring grain crops, primarily corn, are expected to slightly shrink. At the same time, the long-term trend of increasing productivity in the agricultural sector was taken into account.

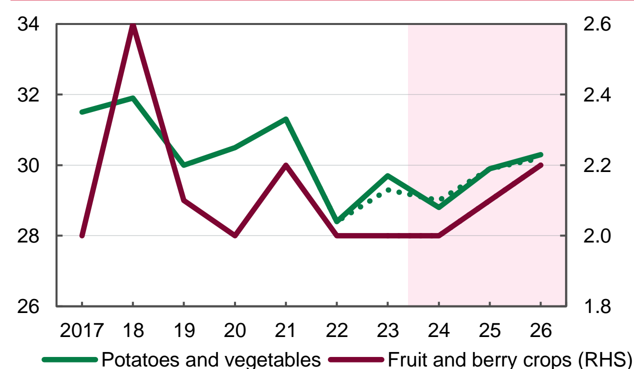
The total planted areas for 2024 are currently assumed to remain unchanged. In the future, these areas will gradually increase thanks to demining. As a result, after a temporary decline in the harvest of grains and legumes to 53 million tons in 2024, they will return to growth in the future – to 59.5 million tons in 2025 and 65.5 million tons in 2026. Oilseed harvests will increase to 20.6 million tons in 2024, 22.3 million tons in 2025, and 23.8 million tons in 2026.

Figure 4.5. Harvest of grains and oilseeds, million tons



Source: SSSU, NBU staff estimates.

Figure 4.6. Harvest of fruits and vegetables, million tons



Source: SSSU, NBU staff estimates.

Faster demining will further facilitate the expansion of cultivated areas and increase harvest volumes. However, this process is likely to be gradual, due to significant financial and time costs, meaning it will be a long time before harvest volumes reach the record figures seen in 2021. Temperature and humidity may significantly deviate

from climatic norms, which would increase the volatility of harvest volumes and have a corresponding impact on food price inflation.

Gradual increases in excise taxes and adjustments to utility tariffs are expected, but the timing and parameters of the utility tariffs adjustments are uncertain

Utility tariffs are expected to be gradually brought to economically justified levels over several years. At the same time, given the difficult situation in the energy sector, subsidized electricity tariffs for household consumers may grow faster. In particular, this forecast assumes a fairly rapid and significant increase in electricity prices. This would create additional pressure on prices and the need to raise subsidies for households. The prolonged postponement of decisions to raise utility tariffs would result in lower inflation, but would accumulate quasi-fiscal imbalances and worsen the financial standing of state-owned energy companies. This would increase the risks of instability on the domestic energy market and deteriorate the investment potential of the industry, while price pressures would only be postponed to the future.

The NBU's forecast includes moderately conservative estimates of foreign assistance and investment, while large-scale reconstruction projects in Ukraine, along with rapid European integration, could significantly accelerate economic growth

The investments needed to restore destroyed Ukrainian infrastructure and production facilities could be attracted if international lenders and donors mobilize the appropriate resources and/or decide to use immobilized russian assets for this purpose. Such projects are not included in the baseline scenario of the forecast, as the development of relevant plans and resource mobilization are only at their initial stage. The aggressor's assets frozen abroad may serve as a source of funding.

The implementation of such a program, together with European integration reforms, would significantly accelerate economic recovery. Household income would also grow much faster than in the baseline scenario, leading to an increase in underlying inflationary pressures. At the same time, the inflow of foreign currency into the country and a decline in the risk premium would create an appreciation pressure on the hryvnia, which would limit the growth in consumer prices. This would make it possible for the NBU to maintain lower interest rates in order to promote lending.

Global commodity market conditions will slowly improve for Ukraine, but geopolitical uncertainty remains a significant risk

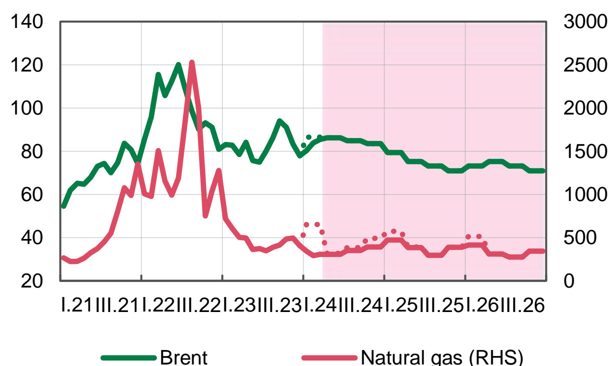
This year, global oil prices will fluctuate in the range of 80–90 USD/bbl. Record production in the United States, and steady production growth in Libya, Iran, and Angola amid sluggish demand from China will put downward pressure on prices. On the other hand, the OPEC+ supply cuts policy and the expected recovery in demand in the Unites States and Europe, in particular due to the future monetary easing by the leading central banks, will keep prices from falling. In the coming years, crude oil will fall slightly due to the formation of a supply surplus.

Natural gas prices in the European market will slowly decline thanks to an increase in LNG production (primarily in the United States and Qatar) and cheaper russian gas supplies to China and India, which reduces competition for LNG from Asian countries, as well as a rise in renewable energy generation and balanced stockpiling. However, geopolitical tensions will remain the key source of uncertainty. Threats to shipping in the Red Sea have led to higher costs and longer delivery times for suppliers. In the event of an escalation, this factor could lead to renewed price pressure on energy markets.

Global wheat and corn prices will fluctuate in a narrow range due to the balance of supply and demand. The expected increase in the global wheat supply in MY 2024/2025 due to improved weather conditions in major exporting countries – russia, the United States, Australia, Argentina, and Ukraine – as well as significant ending stocks of MY 2023/2024 will put downward pressure on prices. That said, due to its record-high harvests, russia will retain the first position in the market for the third year in a row and will additionally put pressure on prices with cheap grain. Only a significant decline in yields due to drought in North Africa (one of the largest importers) and weaker

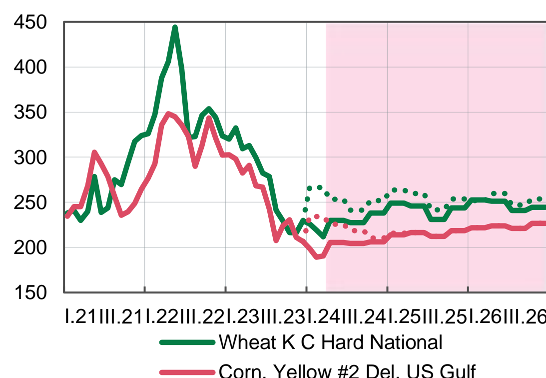
harvests in the EU (particularly in France due to rainy weather) will keep prices from falling. For its part, high corn yields in major exporting countries (the United States, Brazil, Argentina, and Ukraine) in the current MY amid relatively weak demand will lead to a significant increase in ending stocks, which will put downward pressure on prices in MY 2024/2025. In the United States alone, despite the decline in sown areas, stocks will reach a 37-year high in MY 2024/2025, according to the USDA's projections. Lower prices will stimulate consumption growth, in particular by ethanol producers in the face of tougher climate-change requirements in some countries. As a result, corn prices will increase somewhat in 2026.

Figure 4.7. **World crude oil prices (USD/bbl.) and Netherlands TTF natural gas prices (USD/kcm)**



Source: World Bank, Refinitiv, NBU staff estimates.

Figure 4.8. **World prices for wheat and corn, USD/MT, quarterly average**



Source: World Bank, IMF, NBU staff estimates.

Global prices for steel and iron ore will decline as economic activity picks up across all regions of the world, prompting a faster increase in supply amid increased competition, which will cover demand by a significant margin. On the other hand, the stepping up of emissions control policies, particularly in the EU, the United States, and China, will force steel companies to increase investments in technological process improvements and use only high-quality raw materials for steelmaking. This will keep prices from falling too far.

Global financial conditions, despite easing partially, will remain tight, given the persistence of inflation

March and April 2024 were characterized by high volatility in the global financial markets due to uncertainty about the start of interest rate cuts by leading central banks. Amid higher-than-expected inflation and the better-than-expected performance of the U.S. labor market, the Fed is likely to keep rates on hold for longer. Market expectations for the start of the rate cuts have shifted from June to September 2024. Expectations for the projected scale of easing in 2024 have also declined, to 45 bp, compared to the January forecast of around 160 bp.

Despite signals from ECB officials that the first rate cut is likely in June, markets expect such a move as late as July. Given the Fed's wait-and-see stance, the ECB is likely to be hesitant to be the first to cut its rate due to the risk of capital outflows from European markets to the U.S. market. In general, the markets anticipate the rate cuts of no more than 100 bp in 2024. The risks have shifted toward an earlier start of lowering rates for the ECB and a later one for the Fed. By the end of 2025, financial markets expect the Fed's rate to be in the range of 3.75%–4%.

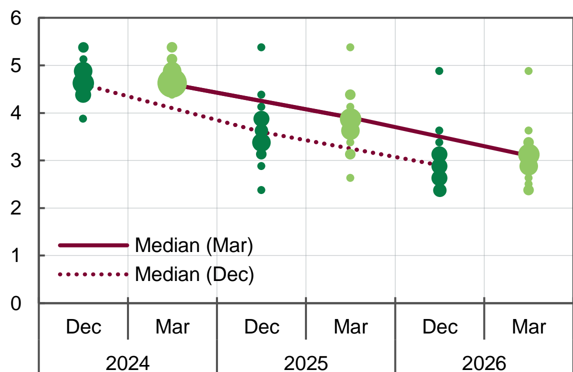
According to Bloomberg World Interest Rate Probability, it is expected that the process of lowering rates by leading central banks will take longer than expected. This is evidenced by the level of interest rates in developed countries, which exceeds the ten-year norm by more than five standard deviations.

The NBU maintains its assumptions about rate changes, expecting the Fed and the ECB to cut rates by 75 bp each in 2024, followed by further easing in 2025.

Despite the Fed and ECB rate cuts, expected real rates, inflation, and the term premium continue to point to potentially higher long-term yields in developed countries compared to their historical levels. As a result, global financial conditions will remain tight in real

terms until at least mid-2025. In contrast to developed countries, EM central banks started raising rates much earlier and more gradually (for example, Brazil in the fall of 2021). This resulted in a much lower peak in inflation compared to historical levels than in the developed countries, and allowed EM central banks to start actively easing their policies earlier (in mid-2023, including Ukraine). Given the relative persistence of inflationary pressures, as well as the work already done, the central banks of EMs are expected to cut interest rates more moderately this year, and take a wait-and-see approach next year.

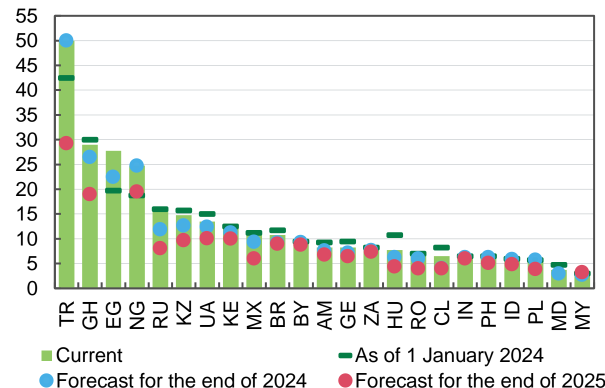
Figure 4.9. The number of FOMC members that expect the respective level of the key policy rate at the end of the year, based on the results of the meetings



* The size of the circle is determined by the number of participants supporting the respective rate level.

Source: Fed (according to the meetings in December 2023 and March 2024).

Figure 4.10. Key policy rates in selected EM countries, %



Source: official web pages of central banks, Focus Economics, Oxford Economics, as of 30.04.2024.

The balance of risks for the baseline forecast is shifted toward a worsening of Ukraine's economic growth rates and an increase in price pressure

Table 4.1.1. Probability that a risk will materialize

Degree of impact on the baseline scenario	Low <15%	Medium 15%–25%	High 25%–50%
Weak		Aggravation of the situation in the Red Sea	
Moderate		Intensified emigration More intense and prolonged blocking of cargo transportation at borders with some EU countries	
Strong		Rapid implementation of the large-scale reconstruction plan for Ukraine Lower volumes or irregular inflows of international financing	Protracted war, escalation, eco-terrorism of the occupiers Additional budgetary needs More damage to energy and port infrastructure

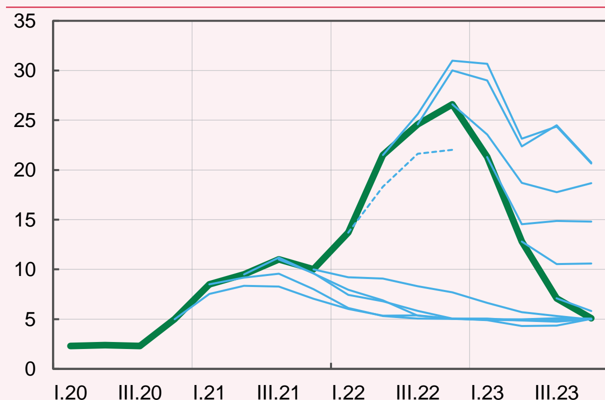
Source: NBU staff estimates.

Box 4. Accuracy of Macroeconomic Forecasts

Macroeconomic forecasts are an important component of monetary decision-making, and the effectiveness of the NBU's monetary policy depends on the accuracy of such forecasts. A well-developed forecast and the way of communicating it have a significant impact on market participants' expectations and the degree of their trust in the central bank. Even as the full-scale war grinds on, an annual assessment and analysis of the quality of projections is a necessary element in the NBU's decision-making process, as it allows not only for weaknesses to be identified in the methods and tools used, but also for areas for further improvement to be outlined. The NBU compares the accuracy of its own forecasts of four indicators – the CPI, GDP, current account balance, and the NBU's key policy rate – with the forecasts of other organizations at various time intervals. In 2023, the NBU's forecasts generally remained more conservative than those of other market participants, as the losses caused by monetary policy mistakes are asymmetrical. On the other hand, the accuracy of the NBU's forecasts is average among other rated organizations.

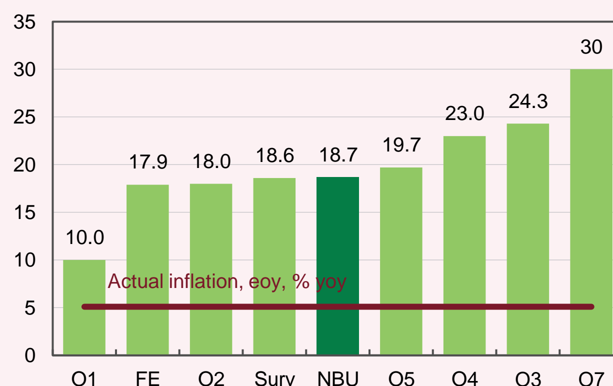
The inflation forecast for 2023 was gradually revised downward by both the NBU (see Figure 1) and other organizations. This was due to considerable uncertainty in the development of the forecasts, including changes in assumptions about security risks, the amount of international assistance, and the speed of adaptation of households and businesses to wartime conditions. In January 2023, the NBU predicted that inflation would reach 18.7% by the end of the year. The January forecasts of most organizations were close to the NBU's forecast (see Figure 2). At the same time, actual CPI growth (5.1%) was much lower than expected by the NBU and all other forecasters.

Figure 1. Forecast history: CPI (2020–2023), % yoy



Source: NBU staff estimates.

Figure 2. Comparison of the CPI forecasts for 2023 made in January 2023,eoy, % yoy[17]



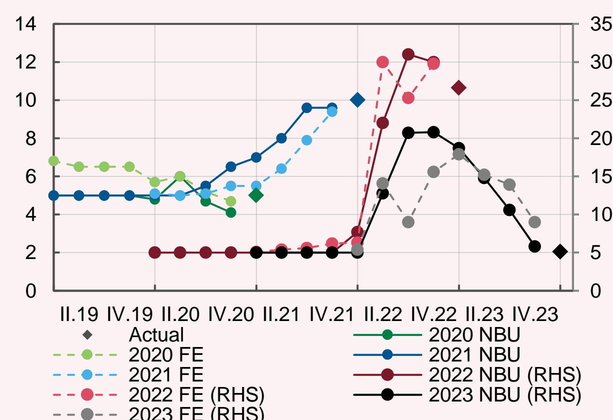
Source: NBU staff estimates.

The NBU's official inflation forecasts for 2023, developed after russia's full-scale invasion,[18] were mostly more conservative than the consensus forecasts (Focus Economics). However, starting in April 2023, the NBU was more optimistic than consensus estimates about the pace of disinflation. The accuracy of the NBU's and other organizations' inflation forecasts in 2023 remained comparable to other periods, despite the high uncertainty in which they were made.[19] Overall, the accuracy of the NBU's inflation forecasts for 2016–2023 is above average (see Figure 4). In terms of the unadjusted errors in CPI growth forecasts, the NBU's forecasts were among the

[17] Here and further, the names of organizations, except for the IMF, are obscured and replaced with codes O1–O8 (the Ministry of Economy of Ukraine, Sense Bank, ICU, Dragon Capital, Raiffeisen Bank, J.P. Morgan, OTP Bank, Goldman Sachs). Consensus forecasts are also presented [Focus Economics (FE), Consensus Economics (CE)] as well as the NBU's survey of financial analysts (Surv). The order of organizations does not correspond to the order in which the organizations appear in the figures.
[18] The NBU forecast made in April 2022 was not factored into the measurement of forecast ratings as it was developed for internal use and was not officially published. However, its indicators are shown on some figures.
[19] To avoid significant distortions in the results from comparing the NBU's forecasts with those of other leading organizations, consensus forecasts (FE), (CE), and surveys of financial analysts (Surv), the forecasts for 2022 published before the onset of russia's full-scale invasion were excluded from the analysis.

best. In general, the NBU's position in the ranking of forecasters has not changed compared to 2022.

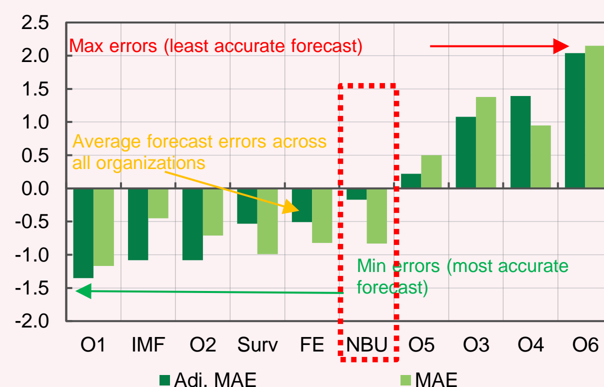
Figure 3. Forecast history: CPI (2020–2023), annual change eoy, %



Forecasts and actual data for 2022−2023 – RHS.

Source: NBU staff estimates.

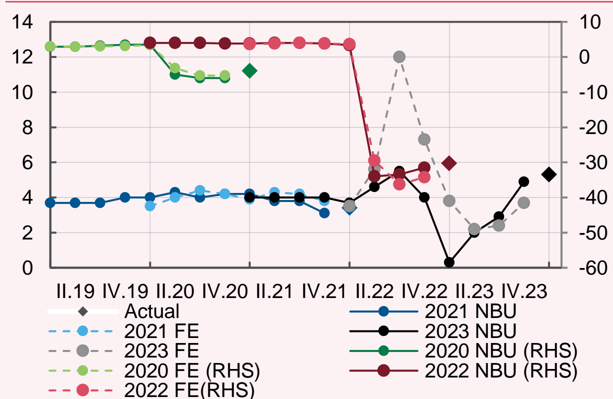
Figure 4. Forecast ranking: CPI (2016-2023), annual change eoy, %[20]



Source: NBU staff estimates.

The NBU's official forecasts for changes in real GDP in 2023, developed after russia's full-scale invasion, were mostly more conservative than the consensus forecasts. The crisis of 2020 and the full-scale war in 2022–2023 led to a wider range of variation in GDP forecasts and, accordingly, greater errors. Short-term GDP forecasting using traditional methods and models was complicated not only by high uncertainty during the war, but also by the lack of a significant amount of official statistics.

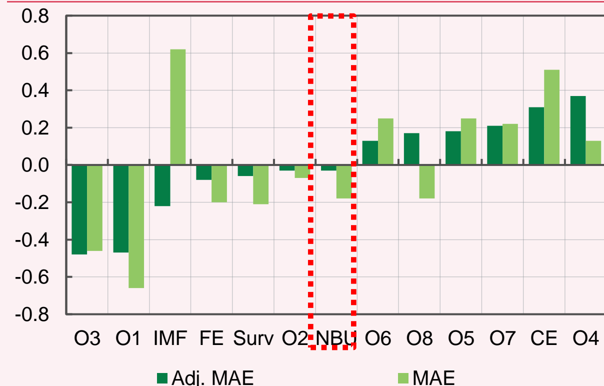
Figure 5. Forecast history: real GDP (2020–2023), % yoy



Forecasts and actual data for 2020 and 2022 – RHS.

Source: NBU staff estimates.

Figure 6. Forecast ranking: real GDP (2016–2023), %



Source: NBU staff estimates.

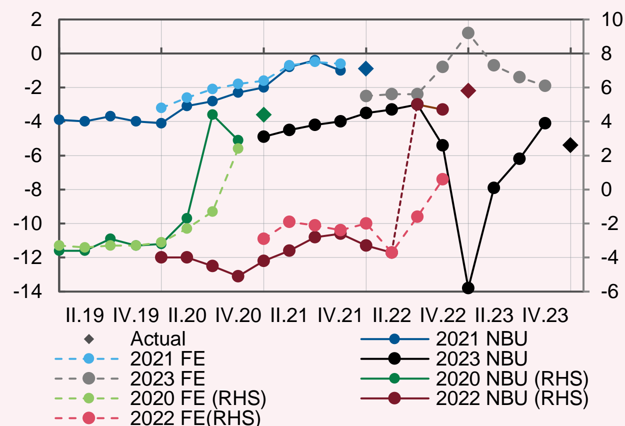
However, using alternative approaches and available high-frequency data, underpinned by the NBU's expertise, the central bank was able to make rather accurate short-term forecasts of economic activity even amid unprecedented uncertainty. In particular, the accuracy of the NBU's GDP growth forecasts remained average compared to the forecasts of all covered organizations, in terms of both adjusted and unadjusted errors.

In 2023, the consensus forecast for the current account of Ukraine's balance of payments was more optimistic than the NBU's forecast. The actual value of the current account deficit was close to the NBU forecasts published in April–October 2023. The accuracy of the NBU's forecasts of the current account balance for 2016–2023 was

[20] The ratings were produced on the basis of the forecasts' mean absolute errors (MAEs) and their values adjusted for the duration of the forecasting period (adjusted MAEs). The longer the forecasting period, the smaller the weight, meaning that greater weights are assigned to short-term forecasts (read more in the April 2020 Inflation Report). Zero values on the figures signify that the forecast errors of a specific organization correspond to the average forecast errors of all organizations; positive values mean that the average forecast errors of a specific organization are greater than the average errors of all forecasts, while negative values indicate that the organization's average errors are lower.

close to the consensus forecasts, and average when compared to other organizations (see Figure 8). When unadjusted for the timing effect, the errors generated by the NBU's forecasts are some of the smallest compared to other organizations. Compared to the previous year, the NBU's rating for the quality of its current account balance forecasts did not change in 2023.

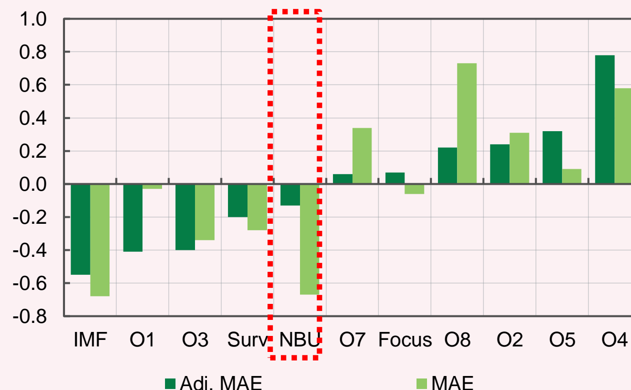
Figure 7. Forecast history: current account balance (2020–2023), % of GDP



Forecasts and actual data for 2020 and 2022 – RHS.

Source: NBU staff estimates.

Figure 8. Forecast ranking: current account balance (2016–2023), % of GDP

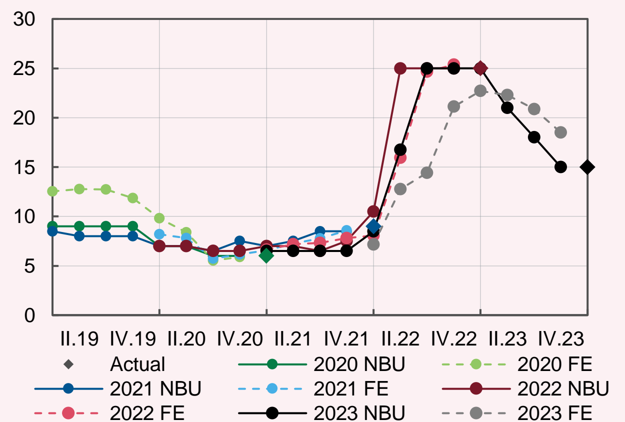


Source: NBU staff estimates.

A better energy situation than expected in early 2023, higher harvests, and a faster adaptation of businesses and households to wartime conditions contributed to the NBU's downward revision of its key policy rate forecasts and a shift to a looser monetary policy. Following the NBU, other organizations also improved their expectations for the key policy rate, which demonstrates confidence in the central bank. The accuracy of the NBU's key policy rate forecasts is traditionally higher than that of other market participants. The accuracy of the NBU's key policy rate forecasts in 2016–2023 was the second best among all forecasters in terms of adjusted errors, and the best in terms of unadjusted errors. In 2023, the NBU retained its position in the rating of key policy rate forecasting accuracy.

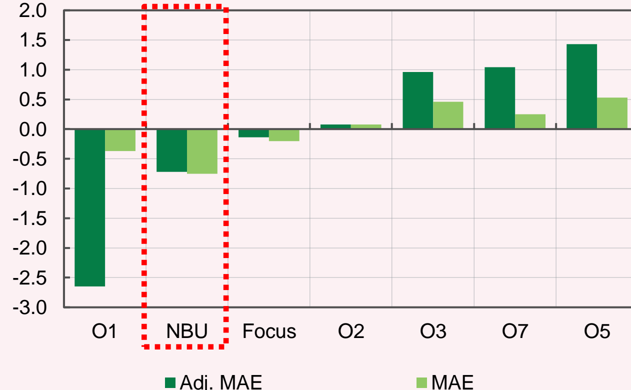
Overall, the accuracy of the NBU's forecasts of key macroeconomic indicators in 2023 remained comparable to consensus forecasts, and average among the rated forecasting organizations.

Figure 9. Forecast history: key interest rate (2020–2023), eoy %



Source: NBU staff estimates.

Figure 10. Forecast ranking: key interest rate (2016–2023), %



Source: NBU staff estimates.

Macroeconomic forecast (April 2024)

Indicators	2019	2020	2021	2022	2023		2024						2025						2026					
					act./est.	forecast 01.2024	I	II	III	IV	current forecast	forecast 01.2024	I	II	III	IV	current forecast	forecast 01.2024	I	II	III	IV	current forecast	forecast 01.2024
REAL ECONOMY, % yoy, unless otherwise stated																								
Nominal GDP, UAH bn	**3977**	**4222**	**5451**	**5239**	**6538**	6510	1571	1713	2033	2273	**7590**	7580	1776	1957	2335	2637	**8705**	8710	2026	2200	2586	2874	**9685**	9690
Real GDP	**3.2**	**-3.8**	**3.4**	**-28.8**	**5.3**	5.7	3.1	3.7	1.3	4.1	**3.0**	3.6	2.4	4.2	5.9	7.7	**5.3**	5.8	6.6	5.4	4.1	2.8	**4.5**	4.5
GDP Deflator	8.2	10.3	24.8	34.9	18.5	17.5	11.8	12.8	13.0	13.0	12.7	12.4	10.4	9.7	8.5	7.7	8.9	8.6	7.0	6.7	6.4	6.0	6.5	6.5
Consumer prices (period average)	7.9	2.7	9.4	20.2	12.9	12.8	-	-	-	-	6.2	7.0	-	-	-	-	7.3	6.8	-	-	-	-	5.5	5.4
Consumer prices (end of period)	**4.1**	**5.0**	**10.0**	**26.6**	**5.1**	5.1	3.2	5.4	8.4	8.2	**8.2**	8.6	9.2	6.7	6.3	6.0	**6.0**	5.8	5.9	5.4	5.2	5.0	**5.0**	5.0
Core inflation (end of period)	3.9	4.5	7.9	22.6	4.9	4.9	4.2	5.0	6.2	6.7	6.7	6.4	6.3	5.2	4.1	3.6	3.6	3.1	3.6	3.4	3.1	3.0	3.0	2.9
Non-core inflation (end of period)	4.8	5.9	13.5	30.6	5.7	5.7	2.4	5.9	11.3	10.1	10.1	11.3	12.8	8.9	9.0	8.9	8.9	9.0	8.7	7.6	7.6	7.4	7.4	7.2
raw foods (end of period)	3.9	4.1	11.8	41.6	2.2	2.2	-4.9	-2.6	8.5	4.9	4.9	8.0	9.1	4.3	3.7	3.2	3.2	3.0	3.3	3.3	3.0	3.0	3.0	3.0
administrative prices (end of period)	8.6	9.9	13.6	15.3	10.7	10.7	9.9	12.8	14.1	14.7	14.7	14.7	15.9	12.7	14.6	15.5	15.5	17.5	14.9	12.5	12.4	12.1	12.1	12.5
Nominal wages (period average)	18.4	10.4	20.9	6.0	17.4	17.1	20.9	16.2	11.3	11.7	14.8	16.2	15.0	15.3	15.4	11.2	14.2	12.0	9.4	9.1	8.3	7.9	8.6	8.2
Real wages (period average)	9.8	7.4	10.5	-11.4	3.7	3.5	16.3	10.9	3.4	3.1	8.1	8.7	5.6	7.3	8.3	4.9	6.5	4.9	3.4	3.3	2.8	2.6	3.0	2.7
Unemployment rate (ILO, period average)	8.2	9.5	9.8	21.1	18.2	19.0	-	-	-	-	14.2	16.2	-	-	-	-	11.9	13.9	-	-	-	-	10.6	12.2
FISCAL SECTOR																								
Consolidated budget balance, UAH bn	**-87**	**-224**	**-187**	**-845**	**-1328**	-1328	-	-	-	-	**-1395**	-1108	-	-	-	-	**-941**	-1022	-	-	-	-	**-703**	-726
% of GDP	-2.2	-5.3	-3.4	-16.1	-20.3	-20.4	-	-	-	-	-18.4	-14.6	-	-	-	-	-10.8	-11.7	-	-	-	-	-7.3	-7.5
excluding grants from revenues, % of GDP	-2.2	-5.3	-3.4	-25.3	-26.9	-27.1	-	-	-	-	-20.7	-20.7	-	-	-	-	-13.5	-13.5	-	-	-	-	-7.5	-7.5
BALANCE OF PAYMENTS (analytical presentation)																								
Current account balance, USD bn	-4.1	5.3	-3.9	8.0	-9.2	-9.7	-2.4	-6.5	-5.7	-5.6	-20.2	-16.9	-5.4	-4.6	-3.5	-4.7	-18.2	-19.8	-6.1	-6.8	-5.0	-5.2	-23.1	-23.8
Exports of goods and services, USD bn	63.6	60.7	81.5	57.5	51.1	50.9	14.1	13.4	14.2	15.4	57.0	53.3	13.7	13.6	16.0	17.4	60.8	59.4	15.0	14.8	17.1	18.6	65.6	64.3
Imports of goods and services, USD bn	76.1	63.1	84.2	83.3	88.5	88.6	21.1	21.8	23.0	24.4	90.3	90.9	22.6	22.2	23.3	24.2	92.3	90.4	22.7	23.1	24.4	25.0	95.3	94.8
Remittances in Ukraine, USD bn	11.9	12.0	14.0	12.5	11.4	11.6	2.7	2.8	2.9	3.0	11.4	12.5	3.0	3.1	3.2	3.4	12.7	13.6	3.2	3.3	3.5	3.7	13.7	14.8
Financial account, USD bn	-10.1	3.3	-4.4	11.1	-18.5	-19.1	-5.1	-2.3	-5.9	-6.1	-19.4	-13.7	-3.8	-5.9	-5.2	-4.6	-19.6	-22.1	-3.7	-4.3	-4.7	-4.8	-17.6	-18.0
BOP overall balance, USD bn	**6.0**	**2.0**	**0.5**	**-2.9**	**9.5**	9.5	2.7	-4.2	0.2	0.5	**-0.8**	-3.2	-1.6	1.4	1.8	-0.2	**1.4**	2.3	-2.5	-2.4	-0.3	-0.3	**-5.6**	-5.8
Gross reserves, USD bn	**25.3**	**29.1**	**30.9**	**28.5**	**40.5**	40.5	43.8	41.6	42.1	43.4	**43.4**	40.4	41.5	42.9	44.2	44.3	**44.3**	42.1	42.0	39.7	39.6	39.3	**39.3**	36.9
Months of future imports	4.8	4.2	4.5	3.9	5.4	5.3	5.7	5.4	5.5	5.6	5.6	5.4	5.4	5.5	5.6	5.6	5.6	5.3	5.5	5.4	5.4	5.8	5.8	5.5
MONETARY ACCOUNTS (cumulative since the beginning of the year)																								
Monetary base, %	**9.6**	**24.8**	**11.2**	**19.6**	**23.3**	23.3	3.1	6.8	8.8	14.4	**14.4**	11.6	2.4	5.8	8.1	13.0	**13.0**	10.1	-0.5	2.5	3.5	8.4	**8.4**	9.0
Broad money, %	**12.6**	**28.6**	**12.0**	**20.8**	**23.0**	23.0	1.7	6.6	7.9	14.1	**14.1**	10.2	2.0	4.4	6.0	12.5	**12.5**	8.3	0.6	1.8	3.8	7.6	**7.6**	5.5
Velocity of broad money (end of year)	**2.8**	**2.3**	**2.6**	**2.1**	**2.1**	2.1	-	-	-	-	**2.2**	2.2	-	-	-	-	**2.2**	2.4	-	-	-	-	**2.3**	2.5

Comments on the dynamics of the main indicators in the macro forecast and factors behind their revision

Indicators	2024	2025	2026	Factors behind the revision
Inflation, %, eop	**8.2**	**6.0**	**5.0**	More significant supply of food products in 2024; improving expectations thanks to a controlled situation on the FX market and a weakening of external inflation pressure; higher pressure due to mismatches in the labor market in 2025
	-0.4	*0.2*		
Real GDP growth, %	**3.0**	**5.3**	**4.5**	Higher energy deficits due to attacks on energy sector
	-0.6	*-0.5*		
Nominal GDP, UAH bn	**7590**	**8705**	**9685**	Revision in 2024 due to higher base of 2023; in 2025-26 - due to lower real economic growth
	10	*-5*	*-5*	
Consolidated budget balance (excluding grants from revenues), % of GDP	**-20.7**	**-13.5**	**-7.5**	The estimates of budget needs in the baseline scenario remained unchanged
Current account balance, USD bn	**-20.2**	**-18.2**	**-23.1**	Redistribution of financing towards larger amounts of loans in 2024 and of grants in 2025-2026
	-3.3	*1.6*	*0.7*	
Gross international reserves, USD bn	**43.4**	**44.3**	**39.3**	Higher international financing and a better trade balance in 2024
	3.0	*2.2*	*2.4*	
Key policy rate (period average), %	**13.6**	**11.9**	**10.4**	Lower inflation pressures than expected and better inflation expectations
	-1.1	*-1.0*	*-1.2*	

The indicator has been revised downwards (pp)

The indicator has been revised upwards (pp)

Forecast assumptions

Indicators		2021*	2022*	2023*	2024	2025	2026
Official financing	USD bn		32.2	42.9	37.9	25.1	12.6
Migration (net, excluding russia and belarus)	m			-0.2	-0.2	0.4	0.8
Real GDP of Ukraine's MTP (UAwGDP)	% yoy	6.5	3.5	1.4	2.3	2.8	2.7
Consumer inflation in Ukraine's MTP (UAwCPI)	% yoy	6.4	13.8	7.6	5.5	3.9	2.7
World prices:**							
Steel price, Steel Billet Exp FOB Ukraine	USD/t	615.0	618.1	539.7	527.3	508.1	494.3
	% yoy	57.9	0.5	-12.7	-2.3	-3.6	-2.7
Iron ore price, China import Iron Ore Fines 62% FE	USD/t	161.7	121.4	120.6	109.5	87.6	76.2
	% yoy	48.5	-24.9	-0.7	-9.2	-20.0	-13.0
Steel price, No.1 Hard Red Winter, ordinary protein, Kansas City	USD/t	265.8	360.2	272.3	229.1	242.5	247.3
	% yoy	43.3	35.5	-24.4	-15.9	5.8	2.0
Corn price, Yellow #2 Delivery USA Gulf	USD/t	259.4	318.4	252.7	202.2	215.3	223.3
	% yoy	56.7	22.7	-20.6	-20.0	6.5	3.7
Oil price, Brent	USD/bbl.	70.4	99.8	82.6	84.4	74.7	73.1
	% yoy	66.4	41.8	-17.2	2.2	-11.5	-2.1
Natural gas price, Netherlands TTF	USD/kcm	574.8	1355.9	465.6	340.8	384.7	336.5
	% yoy	399.8	135.9	-65.7	-26.8	12.9	-12.5
Volumes of gas transit	bcm	41.6	20.6	15.0	15.0	0.0	0.0
Harvest of grain and leguminous crops	t m	86.0	53.9	59.8	53.0	59.5	65.5
Minimum wage**	UAH	6042	6550	6700	7775	8370	8950

** Actual data*

*** Annual average*

Part 5. Alternative Scenario of the Forecast: Slow Normalization

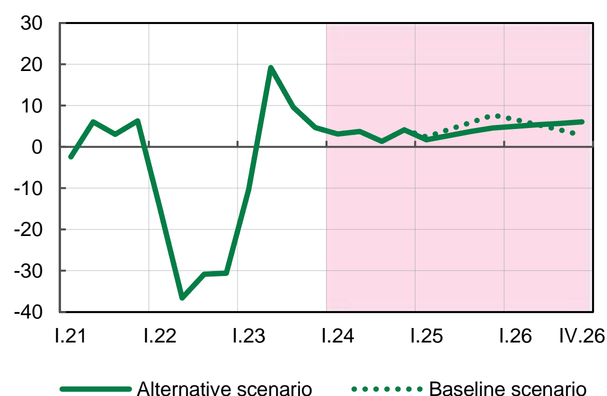
- The alternative scenario of the forecast is based on the assumption of higher security risks and, accordingly, a slower return of the economy to normal conditions over the forecast horizon.
- Under this scenario, Ukraine's economy will recover more slowly in 2025 compared to the baseline scenario. However, the inflation trajectory will differ only slightly.
- Ensuring macrofinancial stability will require somewhat larger amounts of international assistance and, at the same time, significantly higher spending from the NBU's reserves to maintain a controlled situation on the foreign exchange market and moderate inflation.

According to the alternative scenario, the economic recovery will be weaker, even under conditions of more significant budget deficits

The alternative scenario of the forecast assumes that Ukraine's GDP will continue to grow slowly in 2024-2025 (by around 3% annually), accelerating only in 2026 (to 5.6%). Greater mismatches on the labor market amid a worse migration situation compared to the baseline scenario would restrain consumer and business activity, and increase pressure on businesses' labor costs. Under this scenario, the recovery of industrial production from the damage and losses it has suffered will be slower, as will the recovery of cultivated areas. Economic activity will also be adversely affected by energy shortages. However, it is assumed these will be at the same level as in the baseline scenario (around 5% in 2024–2025).

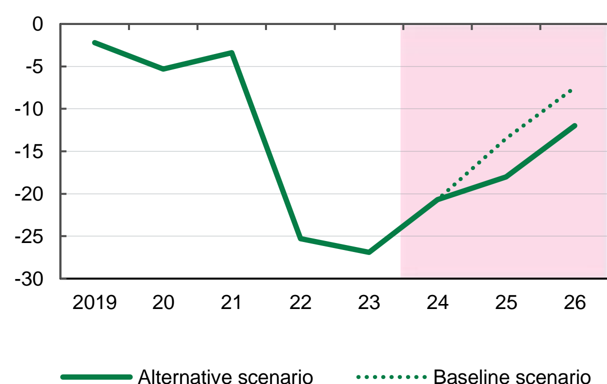
The main factor supporting the economy will be fiscal policy being kept looser than in the baseline scenario and maintained for a longer time. The budget deficit, excluding grants from revenues, will be 18% of GDP in 2025 and 12% in 2026. The government will maintain significant expenditures to rebuild infrastructure, support the population, and meet defense and security needs. The impact of this spending on the budget deficit will be partially offset by additional measures to mobilize budget revenues to the level of 3.5% of GDP. The wider budget deficits in 2025–2026 will be financed by more borrowing, both domestic and foreign. Specifically, the alternative scenario envisages USD 28.7 billion in international assistance in 2025, and USD 18.5 billion in 2026. As a result, this will make it possible not to resort to monetary financing of the budget.

Figure 5.1. Real GDP, % yoy



Source: SSSU, NBU staff estimates.

Figure 5.2. Consolidated budget balance, % of GDP

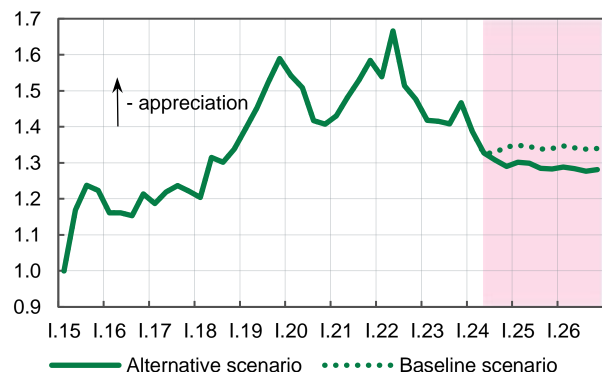


Source: STSU, NBU staff estimates.

The recovery will also be supported by the economy's continued adaptation to security risks, growth in real household incomes, albeit slower than under the baseline scenario, and a pickup in external demand. The gradual establishment of optimal logistics routes will help improve the financial standing of businesses, while an increase in agricultural production and the recovery of the energy system will help accelerate GDP growth in 2026.

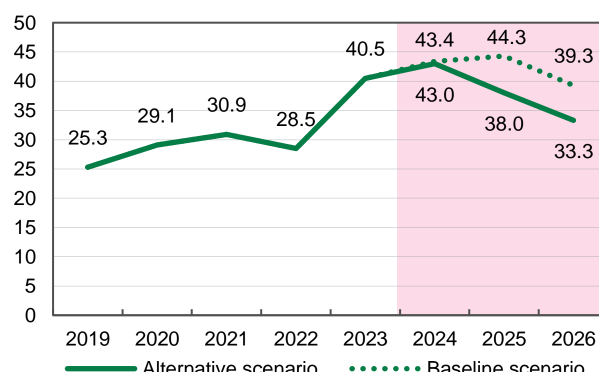
Significant budget deficits will lead to an increase in public and publicly guaranteed debt, which will approach 100% of GDP by the end of the forecast period.

Figure 5.3. Hryvnia's REER index forecast, Q1 2015=1



Source: IMF, national statistical offices, NBU staff estimates.

Figure 5.4. International reserves, USD bn



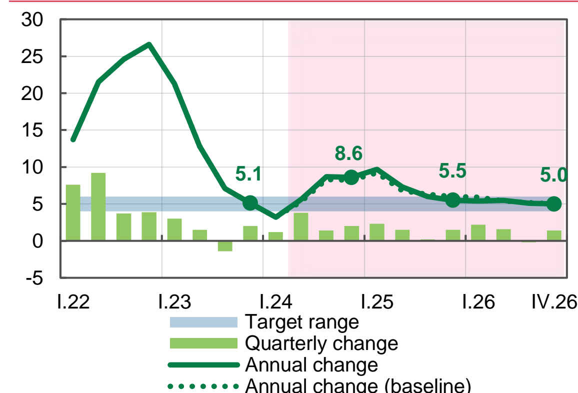
Source: NBU staff estimates.

The inflation trajectory will be similar to the baseline scenario, but it will require significantly higher spending of international reserves

Consumer inflation will temporarily accelerate to 8.6% in late 2024. In addition to temporary supply factors wearing off, inflation, especially its core component, will be further pressured by the weakening of the hryvnia's REER amid a slow recovery in the competitiveness of Ukraine's economy. The slower normalization of economic processes will put the brakes on the recovery in exports, hamper the inflow of foreign investment and debt capital to the private sector, and generate greater demand for FX cash. Exports of both foods and metals will also recover more slowly, while continued negative migration trends will restrain the decline in imports of travel services.

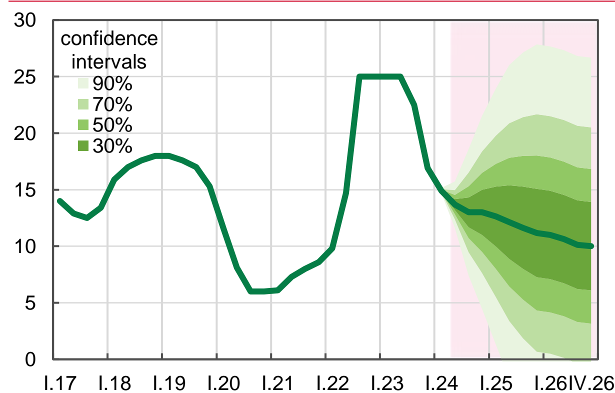
The NBU will have to spend more of its international reserves to cover a wider structural deficit on the FX market. Therefore, despite larger external financial assistance, reserves will remain almost unchanged in 2024, and will decline over 2025–2026 to USD 33 billion. At the same time, these volumes of reserves will be sufficient for the NBU to continue to gradually ease FX restrictions.

Figure 5.5. CPI, %



Source: SSSU, NBU staff estimates.

Figure 5.6. Key policy rate, %



Source: NBU staff estimates.

In addition, there will still be room for reducing the key policy rate. Its path will remain similar to the baseline scenario. In real terms, the key policy rate will also remain positive in order to maintain attractiveness of hryvnia assets and to protect savings from being eroded by inflation. The NBU is expected to gradually normalize its monetary policy at the end of the forecast horizon. Inflation, driven by supply-side factors and monetary policy measures, will slow, reaching the bounds of target range in late 2025 and remaining close to the target in 2026. Moreover, the decline in inflation will be driven by a more moderate and later adjustment of tariffs than in the baseline scenario.

Alternative scenario of the macroeconomic forecast (April 2024)

Indicators	2022	2023		2024						2025						2026					
		act./est.	forecast 01.2024	I	II	III	IV	current forecast	forecast 01.2024	I	II	III	IV	current forecast	forecast 01.2024	I	II	III	IV	current forecast	forecast 01.2024
REAL ECONOMY, % yoy, unless otherwise stated																					
Nominal GDP, UAH bn	**5239**	**6538**	6510	1571	1712	2033	2274	**7590**	7580	1763	1929	2285	2563	**8540**	8710	1989	2171	2570	2890	**9620**	9690
Real GDP	**-28.8**	**5.3**	5.7	3.1	3.7	1.3	4.1	**3.0**	3.6	1.7	2.7	3.7	4.6	**3.3**	5.8	5.0	5.4	5.7	6.1	**5.6**	4.5
GDP Deflator	34.9	18.5	17.5	11.8	12.8	13.0	13.0	12.7	12.4	10.4	9.7	8.5	7.7	8.9	8.6	7.4	6.8	6.4	6.3	6.7	6.5
Consumer prices (period average)	20.2	12.9	12.8	-	-	-	-	6.2	7.0	-	-	-	-	7.4	6.8	-	-	-	-	5.3	5.4
Consumer prices (end of period)	**26.6**	**5.1**	5.1	3.2	5.6	8.7	8.6	**8.6**	8.6	9.7	7.3	6.0	5.5	**5.5**	5.8	5.4	5.5	5.1	5.1	**5.1**	5.0
Core inflation (end of period)	22.6	4.9	4.9	4.2	4.9	6.3	7.3	7.3	6.4	7.1	6.1	4.8	4.5	4.5	3.1	4.4	4.1	3.7	3.2	3.2	2.9
Non-core inflation (end of period)	30.6	5.7	5.7	2.4	4.4	10.9	9.5	9.5	11.3	12.3	9.9	7.5	6.6	6.6	9.0	6.5	7.1	6.7	7.2	7.2	7.2
raw foods (end of period)	41.6	2.2	2.2	-4.9	-2.6	8.5	5.0	5.0	8.0	9.1	4.3	3.9	3.3	3.3	3.0	3.5	3.4	3.0	3.0	3.0	3.0
administrative prices (end of period)	15.3	10.7	10.7	9.9	12.8	14.2	14.8	14.8	14.7	16.1	12.9	11.6	10.6	10.6	17.5	10.3	11.3	10.8	11.9	11.9	12.5
Nominal wages (period average)	6.0	17.4	17.1	20.5	16.3	11.6	12.3	14.9	16.2	15.6	15.7	15.1	9.9	14.0	12.0	10.1	9.1	8.7	10.1	9.5	8.2
Real wages (period average)	-11.4	3.7	3.5	15.8	11.5	4.2	3.7	8.5	8.7	6.0	6.7	7.8	4.0	6.1	4.9	4.4	3.5	3.3	4.7	4.0	2.7
Unemployment rate (ILO, period average)	21.1	18.2	19.0	-	-	-	-	14.2	16.2	-	-	-	-	12.5	13.9	-	-	-	-	11.4	12.2
FISCAL SECTOR																					
Consolidated budget balance, UAH bn	**-845**	**-1328**	-1328	-	-	-	-	**-1395**	-1108	-	-	-	-	**-1303**	-1022	-	-	-	-	**-1131**	-726
% of GDP	-16.1	-20.3	-20.4	-	-	-	-	-18.4	-14.6	-	-	-	-	-15.3	-11.7	-	-	-	-	-11.8	-7.5
excluding grants from revenues, % of GDP	-25.3	-26.9	-27.1	-	-	-	-	-20.7	-20.7	-	-	-	-	-18.0	-13.5	-	-	-	-	-12.0	-7.5
BALANCE OF PAYMENTS (analytical presentation)																					
Current account balance, USD bn	8.0	-9.2	-9.7	-2.2	-6.5	-5.6	-5.8	-20.2	-16.9	-5.3	-4.7	-4.4	-5.8	-20.3	-19.8	-6.5	-6.9	-5.8	-6.1	-25.3	-23.8
Exports of goods and services, USD bn	57.5	51.1	50.9	14.1	13.4	14.0	15.1	56.7	53.3	13.2	12.8	14.6	16.1	56.7	59.4	14.3	14.2	16.2	17.6	62.3	64.3
Imports of goods and services, USD bn	83.3	88.5	88.6	21.1	21.8	22.7	24.2	89.9	90.9	22.4	21.7	23.1	24.1	91.2	90.4	22.3	22.6	24.1	24.7	93.8	94.8
Remittances in Ukraine, USD bn	12.5	11.4	11.6	2.6	2.8	2.9	3.0	11.3	12.5	3.0	2.9	3.0	3.1	12.0	13.6	3.0	3.2	3.4	3.6	13.2	14.8
Financial account, USD bn	11.1	-18.5	-19.1	-5.3	-2.3	-5.9	-5.9	-19.4	-13.7	-3.2	-5.0	-4.1	-3.4	-15.7	-22.1	-3.8	-5.0	-5.5	-5.7	-20.1	-18.0
BOP overall balance, USD bn	**-2.9**	**9.5**	9.5	3.2	-4.2	0.3	0.0	**-0.7**	-3.2	-2.1	0.3	-0.4	-2.4	**-4.6**	2.3	-2.7	-1.9	-0.3	-0.4	**-5.2**	-5.8
Gross reserves, USD bn	**28.5**	**40.5**	40.5	43.8	41.6	42.2	43.0	**43.0**	40.4	40.6	40.9	40.1	38.0	**38.0**	42.1	35.4	33.7	33.5	33.3	**33.3**	36.9
Months of future imports	3.9	5.4	5.3	5.8	5.5	5.5	5.7	5.7	5.4	5.3	5.3	5.2	4.9	4.9	5.3	4.7	4.6	4.7	5.0	5.0	5.5
MONETARY ACCOUNTS (cumulative since the beginning of the year)																					
Monetary base, %	**19.6**	**23.3**	23.3	3.1	6.8	9.2	15.7	**15.7**	11.6	2.1	5.1	6.6	11.6	**11.6**	10.1	0.5	3.8	5.0	9.7	**9.7**	9.0
Broad money, %	**20.8**	**23.0**	23.0	1.7	6.6	9.2	16.4	**16.4**	10.2	1.5	3.9	5.0	11.5	**11.5**	8.3	1.6	3.3	5.1	9.5	**9.5**	5.5
Velocity of broad money (end of year)	**2.1**	**2.1**	2.1	-	-	-	-	**2.1**	2.2	-	-	-	-	**2.1**	2.4	-	-	-	-	**2.2**	2.5

Terms and Abbreviations

GDP	Gross domestic product
IDP	Internally displaced person
HPP	Hydropower plant
STSU	State Treasury Service of Ukraine
SCSU	State Customs Service of Ukraine
CD	Certificate of deposit
SSSU	State Statistics Service of Ukraine
STA	Single Treasury Account
EU	European Union
ECB	European Central Bank
BOI	Business Outlook Index
IER	Institute for Economic Research
CPI	Consumer Price Index
MPC	Monetary Policy Committee
IMF	International Monetary Fund
Ministry of Agrarian Policy	Ministry of Agrarian Policy and Food of Ukraine
ILO	International Labour Organization
MY	Marketing year
MFU	Ministry of Finance of Ukraine
NBU	National Bank of Ukraine
NEER	Nominal effective exchange rate
NFC	Nonfinancial corporation
UN	United Nations Organization
OPEC	Organization of the Petroleum Exporting Countries
MTP	Main trading partner
VAT	Value-added tax
PFU	Pension Fund of Ukraine
REER	Real effective exchange rate
russia	russian federation
U.S.	United States of America
Fed	U.S. Federal Reserve System
CB	Central bank
EM	Emerging market
IT	Information technologies
ITC	International Trade Centre
PMI	Purchasing Managers' Index
UAwCPI	Weighted average of the CPI in Ukraine's MTP countries
UAwGDP	Weighted average of economic growth in Ukraine's MTP countries
UIIR	Ukrainian Index of Interbank Rates

m	million
bn	billion
UAH	Ukrainian hryvnia
USD	U.S. dollar
p	point
bp	basis point
pp	percentage point
bbl	barrel
yoy	in annual terms; year-on-year change
qoq	in quarterly terms; quarter-on-quarter change
sa	seasonally adjusted
mom	in monthly terms; month-on-month change month-on-month
RHS	Right-hand scale