

Despite the full-scale war's challenges, the NBU remains committed to its mandate to ensure price and financial stability – the key to achieving sustainable economic recovery. These goals are being achieved by a coordinated combination of interest rate policy and exchange rate policy tools, as well as FX restrictions in accordance with <u>Monetary Policy Guidelines for the Duration of Martial Law</u> and the <u>Strategy for Easing FX Restrictions</u>, <u>Transitioning to Greater Flexibility of the Exchange Rate, and Returning to Inflation Targeting</u> (hereinafter referred to as the "Strategy").

In particular, monetary policy aims to bring inflation, as measured by the year-over-year change in the CPI, to its target of 5% within a forecast horizon that spans the current and the next two years. In some periods, inflation may deviate from its quantitative target due to domestic and external factors beyond the effective reach of the NBU's monetary policy. However, the central bank is focused on avoiding an unanchoring of inflation expectations and on returning inflation to its target within the forecast horizon.

The NBU is taking steps to strengthen the effectiveness of monetary transmission channels and to continue to revive the key policy rate's performance as the core monetary instrument. Decisions to change the key policy rate or adjust the operational design of interest rate policy are 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.

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 as market conditions change. Coupled with smoothing out excessive exchange rate volatility, this contributes to keeping inflation expectations and exchange rate expectations in check, maintaining confidence in the hryvnia, and ensuring favorable inflation developments. Concurrently, exchange rate flexibility makes it possible to fortify the Ukrainian economy's and the FX market's resilience against domestic and external shocks and reduces the risk of accumulation of foreign-trade imbalances.

Aware of the need to minimize FX market distortions, improve conditions for doing business in Ukraine, enable Ukrainian companies to tap into new markets, and support economic recovery, the NBU has been easing its FX restrictions. The loosening of the FX controls is guided by the availability of macroeconomic prerequisites, rather than by specific deadlines.

The analyses laid out in the current (July 2024) Inflation Report are based on cutoff dates for the data, meaning that the time horizons of the analyses may differ for some indicators. The cutoff date for most indicators in this report is 24 July 2024. The Inflation Report presents a forecast for 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 July 2024.<sup>1</sup>

The NBU Board makes decisions on the key policy rate and other monetary tools in line with <u>the schedule</u> <u>published in advance</u>. 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 makes its decisions based on assessments of risks and uncertainty that take into account the economic developments in Ukraine and abroad 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 and presentations of the Inflation Report, the forecast of the main macroeconomic indicators, and data in tables and figures are available <u>here</u>.

<sup>&</sup>lt;sup>1</sup> NBU Board decision No. 271–D *On Approval of the Inflation Report* dated 25 July 2024. Inflation Report | July 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 will keep providing sufficient financial support. The NBU assumes that security risks will subside and that economic conditions will normalize within the forecast horizon, resulting in the full unblocking of sea ports, the expansion of opportunities for investment and economic activity, and the gradual return of forced migrants to Ukraine.

#### Inflation has expectedly accelerated and approached 5% in recent months

After a long period of decreases, inflation returned to growth in May and picked up to 4.8% yoy in June. This inflation trajectory came out only slightly below the NBU's forecast published in the April 2024 Inflation Report. The lower-than-expected gain in food prices made up for a more significant increase in household electricity tariffs.

At the same time, core inflation (at 5% yoy in June) was in line with the NBU's forecast. Underlying price pressures intensified as businesses incurred greater costs of labor and electricity. In addition, developments in some of the core CPI's components reflected a weakening of the hryvnia's exchange rate.

### Inflation will pick up going forward, but will begin to ease next year already and will head to the NBU's 5% target

Price pressures will persist in the coming months, fueled by further increases in business costs, higher excise taxes, the fading effects of last year's large harvests, and the adverse impact of a summer drought on this year's crop yields. Early estimates of inflation in July confirm that it is trending higher.

However, inflation will remain moderate, at 8.5% at the end of the year, the updated forecast shows. This will be facilitated by the NBU's measures to safeguard households' hryvnia incomes and savings from inflation and ensure the sustainability of the FX market. The extension of the moratorium on increases in utility tariffs for natural gas, heating, and hot water supply will also have a restraining effect on prices.

The NBU's balanced interest rate and exchange rate policies and the weakening of external inflationary pressures will make it possible to slow inflation to 6.6% as soon as 2025. In 2026, inflation will return to its 5% target as the economy gradually normalizes and the energy situation continues to improve.

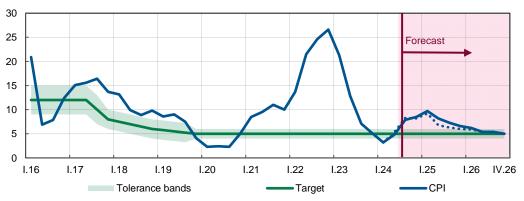


Figure 1.<sup>2</sup> CPI change (end of period, % yoy) and inflation targets

Source: SSSU, NBU staff estimates.

### Economic recovery will carry on, but will be restrained by the war's impact, including extensive damage to the energy system

Economic growth continued in H1 2024, but has decelerated in recent months, impeded by russia's massive attacks on energy infrastructure. However, businesses have partially

 $<sup>^{2}</sup>$  Unless specified otherwise, a dashed line in the figures indicates the previous forecast.

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adapted to regular power outages. The smooth operation of the sea corridor has also significantly bolstered economic activity.

Despite power shortages and smaller harvests compared to a year ago, the NBU has even slightly upgraded its economic growth forecast for this year, to 3.7%. This was made possible by better Q1 results and an anticipated expansion of budget stimuli, as well as by the development of distributed power generation, including thanks to support from large-scale lending programs.

The gradual normalization of economic activity and the fiscal policy's remaining loose, combined with the development of export routes and the revival of external demand, will help speed up real GDP growth to 4%–5% in 2025–2026.

### The continuation of international financial support will enable the government to finance the budget deficit, and the NBU to maintain a comfortable level of reserves

Under the forecast's baseline scenario, Ukraine will keep receiving substantial external financing inflows, though they will slowly decline as the country builds up its capacity to use domestic resources to finance budget expenditures. According to our assumptions, international partners will provide about USD 38 billion in soft loans and grants to Ukraine this year, and no less than USD 31 billion next year.

Such volumes of aid, coupled with growing domestic borrowing, will make it possible to cover a significant budget deficit of about 23% of GDP in 2024 and 18% in 2025. The NBU, for its part, will be able to maintain a sufficient level of international reserves to make sure that the FX market remains sustainable and inflation moderates.

## Given the need to ensure the sustainability of the FX market and to bring inflation closer to its 5% target within the forecast horizon, the NBU kept the key policy rate unchanged at 13%

Despite a gradual decline in hryvnia deposit rates and in interest rates on domestic government debt securities, the yields on these instruments currently protect households' hryvnia savings from being eroded by inflation. In particular, interest rates on these instruments exceed both the NBU's inflation forecast and households' inflation expectations.

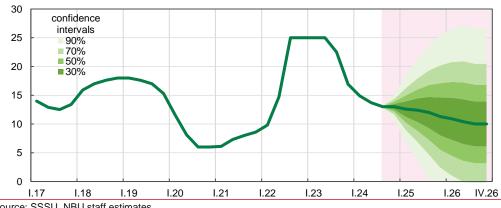
However, the growth in hryvnia retail term deposits halted in June. Considering that a further acceleration of inflation could worsen expectations and decrease the real yields on hryvnia instruments, it is viable to keep the key policy rate at 13%.

The NBU will also maintain an active presence on the FX market to cover the structural deficit of foreign currency, support two-way fluctuations in the exchange rate, and smooth out excessive volatility. The NBU aims to ensure that the FX market is in such a state that the central bank will be able to control inflation expectations and achieve its inflation target within the forecast horizon.

## Although the forecast's baseline scenario assumes that the NBU will return to its easing cycle of the key policy rate no earlier than 2025, the NBU will respond flexibly to changes in the balance of risks to inflation and the FX market

If the risks to inflation and the FX market abate, in particular as a result of Ukraine receiving more financial support, the NBU will consider resuming the easing cycle of the key policy rate earlier. At the same time, the NBU will be ready to tighten its monetary policy in the event of a significant increase in price pressures and risks of expectations becoming unanchored.

Figure 2. Key policy rate, quarter average, %



Source: SSSU, NBU staff estimates.

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

The duration and nature of russia's aggression will continue to have a notable impact on Ukraine's inflation and economic development. A protracted high-intensity war will make it impossible for the economy to return to normal, and difficult for the NBU to bring inflation to its target.

There are other risks, most of which are also directly or indirectly related to the war, including:

- the emergence of additional budget needs, mainly those to maintain defense capabilities
- the pass-through to prices of certain new business taxes whose introduction is currently being discussed at the state level
- further damage to infrastructure, especially the energy grid and ports, which will curb economic activity and put supply-side pressures on prices, and
- more adverse changes in migration flows.

There is also a risk that international partners will reduce their support for Ukraine more significantly, in particular due to the effects of the election cycles in many countries.

At the same time, a number of positive scenarios are also likely to materialize. These scenarios are related to the further expansion of export opportunities, the acceleration of European integration processes, the implementation of a large-scale recovery program, and a faster pace of repairs in the energy sector.

In addition, the practical implementation of the Extraordinary Revenue Acceleration Loans (ERA) mechanism, secured by future revenues from immobilized russian assets, could provide Ukraine with additional financial resources starting in 2025. This will reduce risks to the timely and regular inflows of international financing.

#### Part 1. Inflation Developments

- In Q2 2024, inflation expectedly rose and came close to 5%. Price growth will continue to accelerate due to the effects of last year's bumper harvests wearing off, significant pressure from business costs amid energy and labor shortages, the effects of revised administrative tariffs and excise taxes, and the negative impact of the summer drought on this year's harvest.
- Inflation will reach 8.5% by the end of 2024. However, from the middle of next year it will start to decline and reach its target by the end of 2026, thanks to the NBU's monetary policy measures, an easing of external price pressures, and improvements in the energy sector.

### Headline inflation will accelerate over the next three quarters, but will remain moderate. In the future, it will be on track to reach its 5% target thanks to the NBU's monetary policy measures

After a long period of low consumer inflation, its trajectory reversed in May, and in June inflation accelerated to 4.8% yoy (compared to 3.2% yoy in March). This pace of growth in consumer prices was only slightly slower than the NBU had expected (<u>April 2024</u> <u>Inflation Report</u>), primarily due to lower-than-forecast inflation in April and May.

The increase in food inflation due to this year's drought and the waning effects of the 2023 harvest will be one of the main drivers of headline inflation acceleration by the end of 2024. However, food price inflation will remain relatively low in the future, thanks to a gradual increase in harvests and improved logistics.

In the coming years, administered price inflation will grow by more than 10% due to the need to bring tariffs to the level of production costs. Therefore, to ensure that headline inflation remains at 5%, monetary policy should aim to keep other CPI components (primarily core CPI) at around 3%.

The NBU's monetary policy measures, aimed at limiting underlying price pressures, amid more favorable factors on the food supply side and lower inflation in Ukraine's MTPs will help slow inflation in Ukraine to 6.6% in 2025. In 2026, inflation is expected to return to the NBU's 5% target as the economy gradually normalizes and the energy sector recovers.

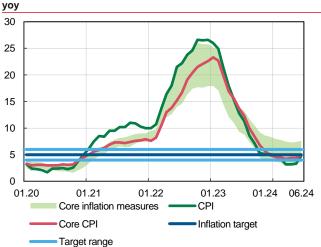


Figure 1.1. Consumer inflation and underlying inflation trends\*, %

Figure 1.2. Raw food inflation, %



\* Read more in the <u>January 2017 Inflation Report</u> (pages 20–21). Source: SSSU, NBU staff estimates.

Source: 5550, NBO stall estimates

### Food inflation will accelerate in the short term, but will remain relatively low after that

The more moderate-than-expected food inflation in Q2 was driven by the effects of the warm weather early this year, which pushed up the supply of some fruits and vegetables. The pressures generated by business spending on feed remained moderate, propelled by last year's large harvest. Additionally, the supply of raw foods was affected by the temporary shifting of producers of certain products to the domestic market because of the blockade of Ukraine's western border. As a result, raw food prices continued to decline (by 6.5% yoy in June compared to a 4.9% yoy drop in March). Second-round effects from bumper harvests and cheaper raw foods kept processed food prices from rising. In particular, the rise in the price of meat products continued to slow, and sunflower oil prices continued to fall, although it has slowed in recent months because of price trends on global markets and the expansion of exports. At the same time, the rate of growth in prices for processed foods accelerated overall (to 5.9% yoy in June from 5.3% yoy in March). For example, prices for cheese and butter rose more rapidly due to increased exports of dairy products, as well as higher production costs and raw material prices in the previous months. Prices for bread and certain flour products grew at a faster pace, propelled by high production costs for labor and energy.

The impact of the temporary factors that have been holding back consumer inflation for a long time, primarily favorable weather conditions and last year's bumper harvests, will soon wear off. This will fuel both food price and headline inflation. What is more, a reduced supply of vegetables and higher business costs due to the drought and abnormal heat this summer will put additional pressure on food prices. The rise in raw food prices will also affect the prices of processed foods included in the core CPI through second-round effects. The pass-through effect to prices of the weaker hryvnia and higher business costs for electricity will also have a moderate impact. After accelerating temporarily, food price inflation (raw and processed foods combined) will decline to around 4% in 2025 and around 3% in 2026, thanks to a gradual increase in food production, further logistics improvements, and falling global food prices.

### Administrative factors and rising business costs will be the main drivers of consumer inflation over the forecast horizon

The difficult situation in the energy sector due to targeted attacks by russia, as well as a revision of the electricity tariffs for households<sup>3</sup>, which was larger than assumed in the previous forecast, significantly accelerated administrative inflation (to 13.3% yoy in June from 9.9% yoy in March).

A considerable rise in electricity prices for non-household consumers put additional pressure on prices. The rise in prices on the day-ahead and intraday markets, as well as the coverage of the electricity shortages by imports from the EU at higher prices than in Ukraine, increased pressures on business costs.

This was evidenced by a significant hike in producer price inflation (to 26.7% yoy in June, compared to a 0.2% yoy decline in March), with the largest contribution to inflation being made by higher prices for electricity, gas, steam and air conditioning supply (by 48% yoy in June). In addition, prices for mining products rose at a faster pace than in March. In particular, rising global oil prices and higher natural gas prices in Europe have significantly accelerated the year-on-year price growth in crude oil and natural gas production. Power shortages did not have a decisive impact on prices in metal ore mining in April–May due to the availability of stocks, but in June price growth accelerated rapidly. Prices in food processing also rose at a more significant pace. This was especially true of dairy products, because of the intensification of their exports and higher raw milk prices in previous periods. The fall in sugar prices slowed markedly due to the expansion of its exports. In turn, accelerating producer price inflation will put pressure on consumer prices through second-round effects – primarily higher production costs.

<sup>&</sup>lt;sup>3</sup> Compared to the April forecast, the larger-than-expected increase in tariffs made an additional contribution of 0.35 pp to consumer inflation in annual terms, which is taken into account in the current forecast.



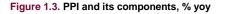


UAH/MWh

Figure 1.4. Electricity prices for non-household consumers,

06.24

280 6000 70 60 240 5000 200 50 4000 160 40 30 120 3000 20 80 2000 10 40 1000 0 0 -10 -40 0 01.22 07.22 01.23 07.23 01.24 06.24 01.22 07.22 01.23 07.23 01.24 PPI Day-ahead market Intraday market Processing industry Long-term contracts market Mining industry (RHS) Electricity, gas, steam and air cond. supply (RHS)

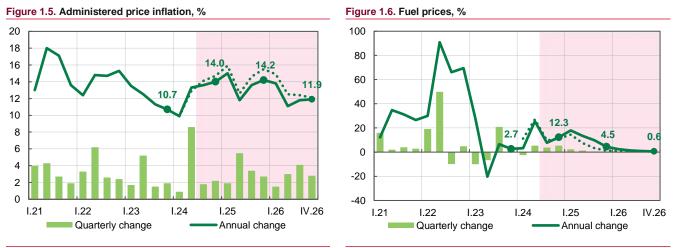




Source: Ukrainian Energy Exchange, Market operator.

Supply-side factors, including reduced pressures from business costs for raw materials and licenses, as well as competition from shadow supplies, which were key to the faster decline in alcoholic beverage prices in Q2 2024, will gradually fade. The impact of the exchange rate has already slightly decelerated the decline in prices for alcoholic beverages and a rise in tobacco prices at the end of the quarter. The moratorium on raising certain tariffs on utilities for households will limit the growth of administered prices for some time to come. However, the gradual adjustment of these prices to market levels, which is assumed to start in 2025 (for more details, see the *Assumptions and Risks to the Forecast* on page 35), will become a significant inflationary factor in 2025–2026.

High administered price inflation over the forecast horizon will also be driven by a number of tax changes. In view of the need to expand the domestic resource base to finance substantial budgetary needs and to fulfill Ukraine's European integration obligations, excise taxes on tobacco products will be gradually increased. The adjustment of the excise tax (linking it to the euro instead of the hryvnia) for alcoholic beverages will also have a certain impact. Prices for tobacco products and alcoholic beverages will also rise as a result of increased efforts to combat shadow market products.



Source: SSSU, NBU staff estimates.

Higher excise taxes<sup>4</sup> will propel fuel price growth. At the same time, due to base effects, which were also caused by tax changes,<sup>5</sup> fuel price growth will slow down significantly in the coming months – from 25.5% yoy in June to 12% yoy in December. A substantial

<sup>5</sup> Starting from July 2023, the VAT rate was reinstated at 20%, compared to 7% applicable since March 2022. Excise duty rates were also raised.

Source: SSSU, NBU staff estimates.

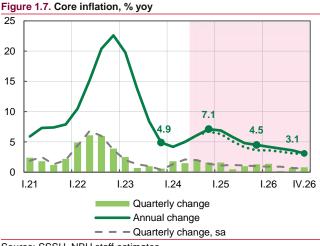
<sup>&</sup>lt;sup>4</sup> On 18 July 2024, the Ukrainian parliament adopted Law No. 11256-2, which provides for an increase in excise taxes on fuel from September 2024.

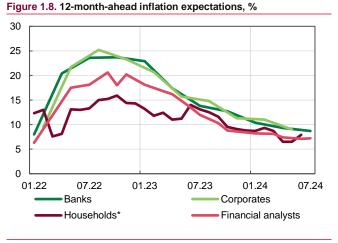
supply of fuel resulting from the stocks built up ahead of the excise tax increase will also put downward pressure in the short term. However, as the stocks are exhausted and due to higher excise taxes and the pass-through effect of the hryvnia depreciation in previous periods, fuel prices will rise in late 2024 and early 2025. Higher fuel prices will put additional pressure on the cost of certain goods and transportation services through impacting production costs. However, starting next year, a decline in global oil prices will offset the further increase in the excise tax burden. As a result, the growth in fuel prices will slow significantly, to 4%.

Other government tax initiatives aimed at increasing budget revenues may also push up inflationary pressures. However, at present, the effects of price pass-through of new taxes or hikes in existing taxes (except for excise taxes) are only considered as risks in the baseline scenario (for more details, see the Assumptions and Risks to the Forecast on page 35).

Core inflation will temporarily accelerate due to rising business costs, but it will decline in the future, primarily under the influence of monetary policy measures

In June, core inflation rose to 5.0% yoy (from 4.2% yoy in March), which was in line with the NBU's forecast. Underlying inflationary pressures have remained persistent for a long time and have begun to intensify as expected, confirming the temporary nature of low consumer inflation in previous months.





Source: SSSU, NBU staff estimates.

\* In March 2023, the survey method was changed from face-to-face to telephone interviews. Source: NBU, Info Sapiens.

The persistence of underlying inflationary pressures largely reflected further growth in business costs due to continued high security risks, higher wages amidst staff shortages, and the difficult situation in the energy sector<sup>6</sup>. The effects of last year's bumper harvests were also gradually wearing off. In particular, these factors contributed to the accelerated rise in the price of processed foods (to 5.9% yoy in June from 5.3% yoy in March), while service inflation remained stable (9.9% yoy in June compared to 9.7% yoy in March).

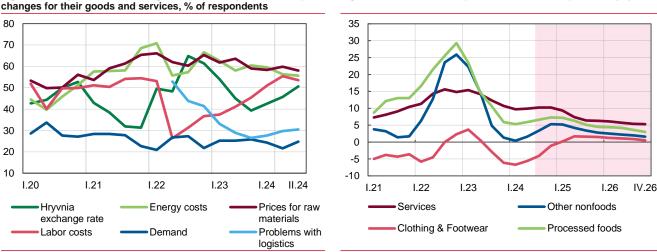
Price pressures were also supported by the pass-through effects of a weaker hryvnia, although inflation expectations showed some resilience to depreciation. Thus, inflation expectations continued to improve throughout most of H1, despite the impact of the exchange rate depreciation on business prices, according to the latest business outlook survey. However, exchange rate effects, together with an increase in other business costs and a stronger demand impact (see Figure 1.9), still caused non-food prices to return to growth (up 0.4% yoy in June, compared to a 0.9% yoy decline in March).

By the end of this year, core inflation is expected to temporarily accelerate to around 7%, due to the time lag of the hryvnia depreciation effects in H1, second-round effects of rising raw food prices, and pressures from business costs. Driven by the faster growth

<sup>&</sup>lt;sup>6</sup> According to the latest business outlook survey, rising energy costs and wages remained among the main factors shaping companies' intentions to raise their selling prices.

Figure 1.9. Major factors affecting businesses' expectations of price

in other CPI components in the coming months, headline inflation will reach 8.5% by the end of 2024.



Source: NBU.

Source: SSSU, NBU staff estimates.

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

At the same time, core inflation will begin to slow in mid-2025, thanks to monetary policy measures aimed at maintaining the attractiveness of hryvnia assets and lower inflation in Ukraine's MTPs. Looking ahead, this will also be facilitated by reduced uncertainty about the security situation and the optimizing of logistics and production processes. The slowdown in core inflation to almost 3% at the end of the forecast period will be a key factor in achieving the inflation target by the end of 2026, given the high growth rate of administered prices.

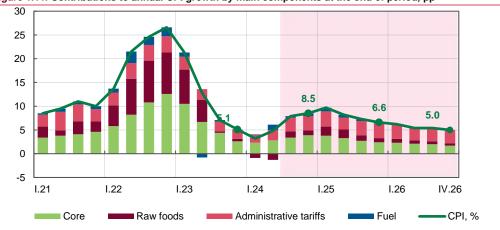


Figure 1.11. Contributions to annual CPI growth by main components at the end of period, pp

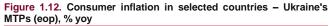
Source: SSSU, NBU staff estimates.

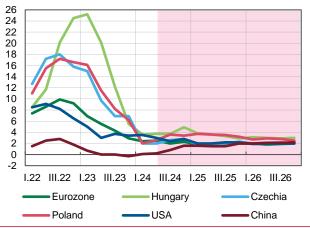
### The easing of inflationary pressures from Ukraine's MTPs will also facilitate the slowdown in inflation in the coming years

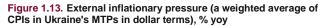
The inflation developments in Ukraine's MTPs, with the exception of China, continue to be fairly synchronized, while inflation drivers, including strong labor markets, remain similar. Accordingly, inflation in many countries will remain close to the upper bound of the target range in the near term, and will temporarily rise in late 2024 and early 2025 due to base effects. Significant employment growth in the face of weak economic activity has decreased labor productivity. The main reasons for this were <u>increased profit</u> margins during the post-pandemic recovery, which enabled companies to retain their workers, and lower real wages. Accordingly, strong labor markets, mainly in the services sector, kept inflation from slowing.

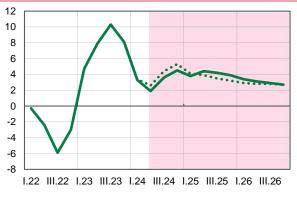
With the economic recovery in Ukraine's MTPs, <u>labor productivity</u> is also expected to recover slowly, while labor market pressures will ease. In particular, the gap between productivity and real wage growth will narrow, leading to a reduction in new job

openings. In addition, labor shortages have recently eased, making it easier to find new workers, and the number of still inactive population who could be involved in the labor force has shrunk significantly.









Source: NBU staff estimates.

Wage growth in Ukraine's MTPs is projected to slow over the forecast horizon, although it will remain above its historical levels due to still strong labor market conditions, inflation compensation, and minimum wage increases. Moderate nominal wage growth, combined with higher productivity growth, will ease the pressure on business costs. Together with the <u>expected decline in profit margins</u>, this will help reduce inflation.

Most core inflation rates continue to decline, reflecting the fading impact of previous large shocks, as well as weak demand amid tight monetary policy. An additional factor in restraining inflation is the levels of long-term inflation expectations, which remain generally stable in Ukraine's MTPs. Inflation is expected to return to its targets on a sustainable basis by the end of 2025.

China will remain an exception, where the expected slowdown in economic growth will force the government to stimulate the economy more and more with fiscal and monetary measures. This, in turn, will gradually push up inflationary pressures. However, given the current ultra-low inflation rate, this increase will only bring inflation closer to its target.

Overall, the factors influencing inflation are becoming more balanced. However, high geopolitical tensions (read more in see the *Assumptions and Risks to the Forecast* on page 35) could affect the energy markets and food prices. In addition, still significant pressures from rising labor costs and housing rents will limit the decline in service inflation. As a result, external inflationary pressures for Ukraine, as measured by the annual change in the weighted average CPI in Ukraine's MTPs in dollar terms, will decrease, albeit relatively moderately, to 4.5% by the end of 2024, and to 3.9% and 2.7% by the end of 2025 and 2026 respectively.

Source: National statistical agencies, NBU staff estimates.

#### Part 2. Economic Developments

- After rapid growth in early 2024, the economy will continue to recover, but at a slower pace due to significant power shortages. At the same time, a loose fiscal policy and the further development of export routes amid a revival in external demand will lead to real GDP growth of 3.7% in 2024.
- Rebuilding damaged energy infrastructure will require significant resources and time, so power shortages will persist over the forecast horizon and will hamper economic growth. At the same time, due to the continued expansionary fiscal policy, as well as the further normalization of the economic environment, real GDP will grow by 4%-5% in 2025–2026.

### A much more difficult than previously expected situation in the energy sector will restrain economic activity over the forecast horizon

At the beginning of 2024, Ukraine's economy had significant growth momentum. In Q1, real GDP grew by 6.5% yoy, significantly exceeding the NBU's estimates (<u>the April 2024</u> <u>Inflation Report</u>). An important factor in these dynamics was the stable energy situation (as opposed to the significant power shortages that persisted in January–February 2023<sup>7</sup>). This made it possible for businesses of almost all types to ramp up their production of goods and services, and also led to high annual growth rates in the energy sector.

Despite a more restrained fiscal policy in early 2024, the momentum from the increase in budget spending at the end of the previous year remained strong<sup>8</sup>. That is why the fiscal stimulus was one of the main factors ensuring robust economic growth in Q1 2024. In particular, budget expenditures on security and defense, coupled with further improvements in companies' financial performance, helped boost investment demand. For example, the construction of fortifications and companies' investments in logistics infrastructure led to a surge in construction – primarily in non-residential buildings and engineering structures. Housing reconstruction projects contributed to an increase in construction of residential buildings and areas of residential buildings put into service in Q1. The growth in construction, accordingly, supported an increase in the quarrying and production of construction materials. Production continued to grow in a number of mechanical engineering subsectors, including military goods (production of military vehicles, electronic and optical products, and so on).

Consumer demand remained resilient thanks to further growth in real household incomes. This shored up the retail and the service sectors.<sup>9</sup>

The stable functioning of the sea corridor in the face of high carryover stocks supported the recovery in metallurgical production and ore mining, increased processing in the food industry, and intensified transportation and wholesale trading. At the same time, the blockade of the western borders restrained imports. As a result, there continued to be a positive contribution of net exports to real GDP growth.

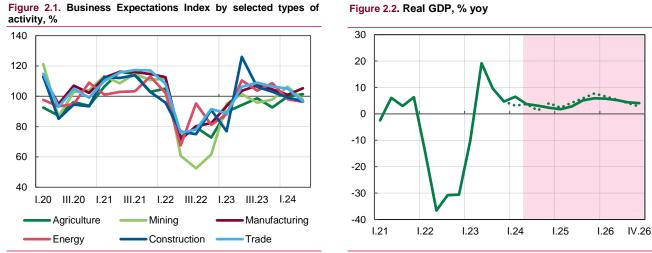
In Q2 2024, the NBU estimates that GDP growth remained relatively high (3.7% yoy). It was propelled by an increase in budget expenditures, faster-than-last-year early grain harvesting, further recovery in animal breeding, and the stable operation of the sea corridor.

In addition to waning low base effects, the slowdown in growth was primarily due to the destruction of energy infrastructure by russia, and prolonged power outages. Additional losses in the energy sector in May–June, as well as higher levels of electricity consumption, in particular this summer, have downgraded the assumptions about power shortages both in Q2 and over the forecast horizon (for more details, see the *Assumptions and Risks* on page 35). Prolonged power outages in Q2 resulted in a noticeable deterioration in business and consumer sentiment and weakened economic activity in a number of sectors – primarily energy-intensive ones, the needs of which cannot be met by autonomous power supplies (i.e. certain areas of the food industry,

<sup>8</sup> The effect of the fiscal stimulus in Q1 2024 is estimated at 0.9 pp.

<sup>&</sup>lt;sup>7</sup> Base effects resulting from the power shortages seen in Q1 2023 and their practical absence in Q1 2024 are estimated at 1.6 pp.

<sup>&</sup>lt;sup>9</sup> In Q1 2024, retail trade turnover grew by 16.3% yoy.



animal breeding, and heavy industry).<sup>10</sup> Economic activity in Q2 was also hampered by worsening staffing problems and an increase in the duration of air raids.<sup>11</sup>

Source: NBU.

Source: SSSU, NBU staff estimates.

At the same time, businesses and households are generally better adapted to power shortages than in 2022–2023. In addition, the electricity needs were met in part by increased electricity imports. Along with other factors, this helped maintain the positive dynamics of a number of sectors in Q2 2024, including metallurgy and transportation. Strong demand for fertilizers from farmers propped up the chemical industry. What is more, amid power shortages, there was an increase in sales of goods to ensure energy autonomy, restaurant attendance, and demand for courier services.

Economic activity will continue to slow in H2, primarily due to growing power shortages. The shift of the early grain harvest to June will affect agricultural and overall economic activity in Q3. At the same time, better-than-expected results in Q1 2024, slightly higher harvest estimates due to an increase in planted areas (for more details, see the *Assumptions and Risks* on page 35), and a wider budget deficit allowed to improve the forecast of real GDP in 2024, to 3.7%.

Greater-than-expected power shortages will restrain GDP growth over the entire forecast horizon. Another factor that will limit economic recovery is the shortage of workers. However, thanks to an expansionary fiscal policy, a revival in external demand, as well as the already demonstrated high adaptability of businesses and households and further normalization of economic conditions, the economy will grow by 4%-5% in 2025–2026. That said, GDP will still be below its potential level, which will restrain inflationary pressures.

The labor market will continue to face a shortage of personnel. On the one hand, this will hinder the economic recovery, and on the other hand, it will fuel consumption through higher wages, which will make the largest contribution to GDP growth over the forecast horizon

The situation in the labor market in H1 2024 was becoming increasingly tight. Although the growth in the number of job openings on job search sites slowed somewhat in Q2 2024, labor demand remained significantly higher than a year ago<sup>12</sup>, but still uneven by profession. Thus, the number of vacancy announcements in the fields of security<sup>13</sup>, construction and blue-collar jobs was considerably higher than last year, while in the IT sector it decreased noticeably.<sup>14</sup> Demand also remained subdued in education, design, art, and culture.

<sup>&</sup>lt;sup>10</sup> Q2 2024 was a record-breaking period in terms of the duration of air raids in relation to the working hours of retail chains.

<sup>&</sup>lt;sup>11</sup> In early July 2024, the number of ads in this category was 4.1 times higher than in July 2023.

<sup>&</sup>lt;sup>12</sup> More specifically, in June 2024, the average monthly number of vacancies on work.ua remained at the level of May, while it was 20% higher than in June 2023.

<sup>&</sup>lt;sup>13</sup> In early July 2024, the number of postings in this category was 4.1 times higher than in July 2023.

<sup>&</sup>lt;sup>14</sup> According to the Djinni website, which specializes in IT jobs and resumes, the number of vacancies at the end of June 2024 was 68% lower than at the end of June 2021.

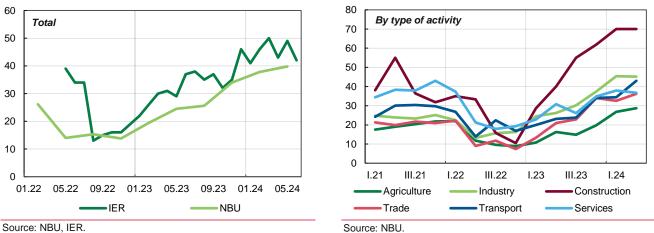
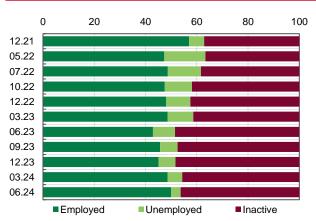


Figure 2.3. Shortage of skilled workers as one of the most influential factors limiting the ability of enterprises to increase production, % of responses

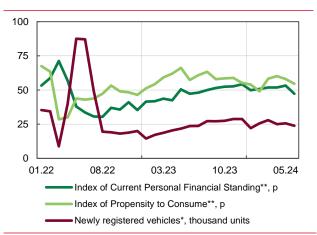
What is more, migration abroad and mobilization processes<sup>15</sup> further reduced labor supply and exacerbated the problem of labor shortages for businesses, which increasingly limited their operations.<sup>16</sup> In particular, according to the UNHCR, in H1 the number of migrants abroad increased by almost 240 thousand, to 6.6 million people,<sup>17</sup> and the labor force participation rate among men continued to decline.<sup>18</sup>

Figure 2.4. Surveyed respondents by economic activity status\*, % of responses



\* The "employed" category includes those who chose the following "Self-employed", private options: "Employed", "Registered entrepreneur", "No Answer/Refuse to answer", and "Other". The "unemployed" category includes those who chose a "Temporarily unemployed but looking for a job" option. Source: Info Sapiens, NBU staff estimates.

Figure 2.5. 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 in March 2022.

Source: Info Sapiens, Ukravtoprom.

Although the tight labor supply is holding back businesses, hampering economic recovery, the difficult labor market situation is leading to improved employment, in particular through the greater involvement of women, and is fueling wage growth. In Q1 2024 alone, real wages increased by 17.7% yoy on average. According to the available high-frequency indicators, high wage growth rates continued in Q219 despite a deterioration in business sentiment and expectations regarding both changes in the

<sup>16</sup> According to an IER monthly survey, in May 2024, 39% of surveyed companies said that it had become more difficult to find qualified workers (in May 2023, the number was 21%) and 34% reported difficulties in finding unskilled workers (previously 9%).

<sup>17</sup> As of 15 July 2024.

<sup>19</sup> For example, the private sector's unified social contribution payments (an indirect indicator of wage growth) increased by about 20% yoy in real terms in April and May.

Source: NBU, IER.

<sup>&</sup>lt;sup>15</sup> According to a survey by the Ministry of Economy of Ukraine conducted jointly with the IOM in February–March 2024, 67% and 54% of employers cited mobilization and migration processes respectively as the main reasons for labor shortages. According to a survey by the American Chamber of Commerce in Ukraine (AmCham), 81% of member companies have felt the impact of employee mobilization, noting, in particular, that exempting workers from mobilization is currently the main challenge for businesses in Ukraine.

<sup>&</sup>lt;sup>18</sup> NBU estimates based on household surveys conducted by Info Sapiens.

number of employees and labor costs.<sup>20</sup> Improved employment, higher wages, and growth in other social benefits contributed to a further rise in real household incomes, and thus to steady consumption growth.

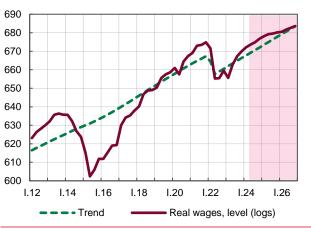
Significant mismatches in the labor market will persist over the forecast horizon. The migratory outflow of the population will continue for some time (more details, see the Assumptions and Risks on page 35). Mobilization and the relatively long process of acquiring special professional skills by new workers will also constrain the supply of labor. Even with the further normalization of economic conditions, the return of migrants to Ukraine, who are increasingly adapting to life abroad, will be slow. In addition, mismatches in the labor market will continue to vary across regions and sectors, and will be driven by changes in the structure of the economy. The return of demobilized veterans to civilian life will present certain challenges to the labor market. Therefore, the unemployment rate will decline over the forecast period, but will remain elevated compared to its pre-war levels.

At the same time, increasing competition for the available labor force, including from foreign employers, and a persistently expansionary fiscal policy will remain stable factors fueling wage growth in the private sector and, accordingly, consumer demand. Real wages are expected to surpass their pre-war levels in 2025 and rise further.









Source: SSSU, NBU staff estimates.

#### The expansionary stance of fiscal policy will remain the main driver of economic growth

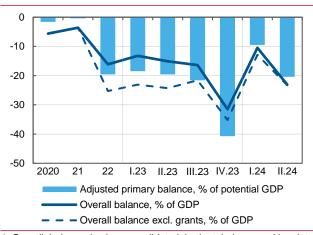
After a certain slowdown at the beginning of the year on the back of restrained budget expenditures, the stimulating effect of fiscal policy on economic activity has strengthened again.<sup>21</sup> Evidence of this was the substantial widening of the cyclically adjusted primary balance deficit in Q2 2024. Further improvement in the government's own resources, including due to the above-planned tax revenues, and disbursements of international aid made it possible to significantly increase expenditures, the amount of which for the quarter was at the second-highest since the beginning of a full-scale war. Expenditures increased in a number of areas, primarily for defense needs, the humanitarian sphere, and for measures related to the liquidation of the consequences of destruction. Therefore, the public sector will continue to provide powerful incentives for economic growth, although, under conditions of irregular inflows of international aid in 2024, the volume of expenditures fluctuates considerably, which may cause significant volatility in the growth rates of economic activity in a number of sectors.

Source: SSSU. NBU staff estimates.

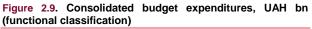
<sup>&</sup>lt;sup>20</sup> According to the NBU's latest business outlook survey, in Q2 2024, the balance of expectations regarding the number of employees in the next 12 months worsened (to (-11%) compared to (-6%) in the Q1), and the balance of expectations regarding labor costs decreased (to 55% compared to 63% Q1).

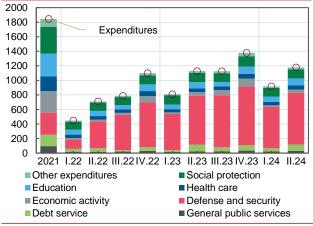
<sup>&</sup>lt;sup>21</sup> The consolidated budget deficit also widened noticeably in Q2: to almost UAH 397 billion, excluding grants in revenues, or more than 23% of GDP.

Figure 2.8. General government fiscal balance\*, % of GDP



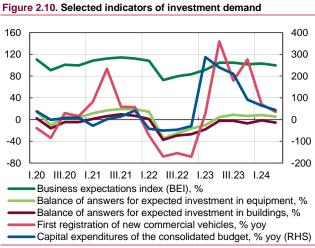
\* Overall balance is the consolidated budget balance, taking into account loans to the PFU from the STA. Cyclically adjusted primary fiscal balance (CAPB) is the difference between seasonally adjusted revenues, in the structure of which tax revenues are adjusted for cyclical changes in GDP, and seasonally adjusted primary expenditures. Additionally, one-off proceeds are subtracted from revenues. A negative value indicates expansionary fiscal policy. 2024 GDP figure is the NBU's estimate. Source: STSU, SSSU, NBU staff estimates.

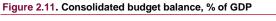


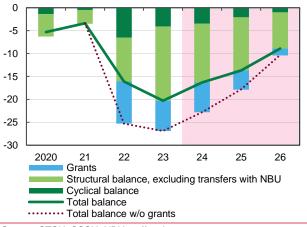


Source: STSU, NBU staff estimates.

Capital expenditures from the budget remained a significant source of investment demand under conditions of uncertainty. Investment activity continued to grow at a high rate and focused mainly on defense projects – in particular the production of weapons and the construction of fortifications – as well as the restoration of infrastructure, such as energy infrastructure. In Q2, private investment also continued, in particular in the development of transport infrastructure on the western border, and in the expansion of facilities for the storage and transportation of agricultural products. However, the weakening of economic activity due to power shortages and the deterioration of business expectations may have restrained the investment activity of companies.<sup>22</sup>







Government spending will remain a significant driver of economic growth over the forecast horizon. Large budget deficits, despite their gradual narrowing from 22.8% of GDP in 2024 to 10.3% of GDP in 2026, will result mainly due to substantial financing needs for defense and security, and later – needs for reconstruction and humanitarian projects. The budget deficit will narrow consistently thanks to the expansion of the domestic resource base, although fiscal policy will remain expansionary. This will stimulate investment activity, in particular, projects to rebuild infrastructure and boost weapons production capacity. As the economy normalizes and European integration

Source: SSSU, STSU, NBU, Ukravtoprom.

Source: STSU, SSSU, NBU staff estimates.

<sup>&</sup>lt;sup>22</sup> According to the business outlook survey for Q2 2024, the business expectations index (BEI) was 99.5%, down from 103.0% in Q1 2024.

processes intensify, the country's investment attractiveness will increase, which will contribute to the recovery of private investment.

### Favorable external demand and rebounding world trade will also support economic growth in Ukraine in 2024–2026

Leading indicators show there is a <u>reduction</u> of differences in economic growth rates between Ukraine MTPs, which is shaping a favorable external environment for the Ukrainian economy. <u>Business sentiment</u> continues to improve, and overall assessments of current conditions for doing business and expectations up until the end of the year are more optimistic, particularly due to increased employment and investment. Thus, investment growth was restrained by high real interest rates, limited fiscal space, and geopolitical risks. In addition, expectations of interest rate cuts by leading central banks delayed investment decisions in H1 2024. Easing financial conditions are expected to support moderate investment growth from H2 2024.

Growth in Ukraine's MTPs is expected to synchronize gradually in 2024–2025 amid reviving economic activity in Europe. The recovery of economic growth in European countries in 2024 will be driven by rising real incomes, and a certain revival of external trade will give additional support to industrial production in the CEE countries. By contrast, growth in the United States will gradually slow down. Despite a better-than-expected performance in early 2024, persistent inflation, some <u>depletion</u> of savings, a weaker labor market and slower wage growth will hold back consumer demand.

In 2025–2026, the simultaneous easing of global financial conditions and the revival of global trade will support the economic growth in Ukraine's MTPs. Growth in the global trade in goods and services is expected to <u>accelerate</u> primarily thanks to the recovery of demand for marketable goods (as evidenced by indices of new export orders), and improved logistics. For its part, the trade in services, the share of which has almost doubled in global trade in recent years to <u>42%</u>, will remain robust. This will be facilitated by the further growth of digital services and the easing of visa requirements by a number of countries, which will promote the development of tourism and passenger transportation.

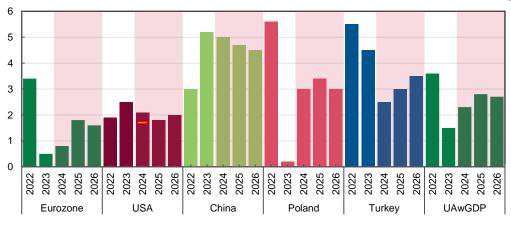


Figure 2.12. Real GDP of selected countries and weighted average of annual GDP growth in Ukraine's MTP countries (UAwGDP), % yoy

– Previous forecast.

Source: National statistical offices, NBU staff estimates.

As a result, external demand, as measured by the weighted average annual economic growth rate in Ukraine's MTPs (UAwGDP), will revive over the forecast horizon, and its growth rate will accelerate from 1.5% yoy in 2023 to 2.3% in 2024, fluctuating around 3% in the following years. Together with the recovery of global trade, this will help Ukraine maintain sustainable economic growth.

However, geopolitical tensions, political uncertainty due to multiple election cycles, and increased fragmentation may restrain the recovery of trade. Although the economic impact of the suspension of the Red Sea traffic caused by the conflict in the Middle East has been limited, certain sectors (automotive and fertilizer production, retail) have already suffered due to supply delays and higher transportation costs. What is more, fragmentation meant that bilateral trade between the United States and China, which

reached a record high in 2022, grew by a third less in 2023 than their trade with the rest of the world. Trade in services also showed signs of fragmentation. All this will hold back the recovery of global trade growth and will have an adverse impact on foreign demand. That said, the relocation of critical production to geopolitically friendly countries in the medium term could revive both external demand and the production of Ukrainian goods for export to the EU (read more in the Box <u>Friend-Shoring for the EU: An Opportunity for Ukraine?</u> on page 21).

## The damage to Ukraine's energy sector, coupled with the still limited production capacities, will mean net exports will make a negative contribution to GDP growth over the forecast horizon

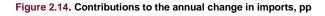
In 2024, exports of goods grew at a fast pace, thanks to the stable functioning of the sea corridor. More specifically, Q2 continued to see the exporting of grain from last year's harvest. Exports of foods were also significant, which reflected the effects of last year's large harvests and increases in the production of certain foods. What is more, the possibility of transporting a wider range of goods via this route compared to the grain corridor pushed up iron ore exports. Accordingly, active exports led to an increase in freight transportation, wholesale trading and other auxiliary activities.

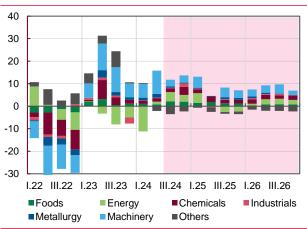
However, the loss of a number of generating capacities as a result of bombing by russia created the need for greater imports of both energy equipment and electricity. Imports for the defense sector at the expense of budget expenditures also continued. In addition, the dynamic rise of wages fueled the growth in imports of consumer goods. The easing of monetary policy, coupled with an improvement in economic activity and inflation expectations in previous periods, pushed up demand for loans and, accordingly, imports of investment goods. As a result, the contribution of net exports to GDP growth in Q2 2024 decreased, but still remained positive.

Figure 2.13. Contributions of selected commodities to the annual change in exports volumes, pp

1.22 11.22 1.23 11.23 1.24 11.24 1.25 11.25 1.26 11.26

Grains Sunflower oil Ores Ferrous metals (4 groups)





80

60

40

20

0

-20

-40

-60

Source: SCSU, NBU staff estimates.

Over the forecast horizon, exports of goods will be shored up by sufficient transport capacity, but these exports will be restrained by limited production capacities. More specifically, destroyed production facilities and power shortages will mean there are weak exports of metallurgy and machinery products. Therefore, the dynamics of exports will be determined primarily by the harvests of agricultural crops. Thus, lower harvests in 2024 will reduce food exports and overall exports in 2025, but exports are expected to resume growth as early as 2026.

The need to restore the energy sector will drive up imports of certain machinery products, while power shortages will push up imports of electricity and emergency power supply goods. In addition, given further growth of household incomes and limited domestic production due to power shortages, consumers are likely to partially shift to buying imported goods. The need to restore economic potential and high budget expenditures will widen demand for imported machinery, metallurgy, and chemical products, and for other imports. Ongoing migration will increase imports of travel services. As a result, imports will continue to grow, and the contribution of net exports to GDP growth will become negative over the entire forecast horizon.

Source: SCSU, NBU staff estimates.

#### Destroyed production facilities and labor market mismatches will curb the growth of economic potential

With the beginning of the full-scale invasion, Ukraine's potential GDP decreased significantly due to substantial losses of capital, labor, and disrupted trade and logistical chains. However, it rebounded relatively quickly thanks to the adaptation of the economy to the new realities. The adaptation will make recovery possible in the future, replacing deficient growth factors with new technologies and business optimization. When the economic conditions normalize, the drivers of potential GDP growth will be the restoration and construction of new production facilities and logistics, European integration processes, as well as the gradual return of migrants. However, due to largescale losses, potential GDP will remain below its pre-war levels over the forecast horizon.

The GDP gap will remain negative. One of the reasons for this will be significant power shortages, which will limit the activities of many companies. Another reason is the slow normalization of economic conditions, which will restrain the recovery of investment activity and consumer demand. Some production facilities will remain underutilized until the end of the forecast period due to the partial loss of markets, limited domestic demand, and persisting labor market mismatches.

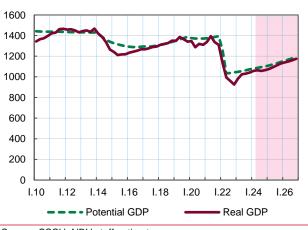


Figure 2.15. Real and potential GDP, sa, at 2021 constant prices

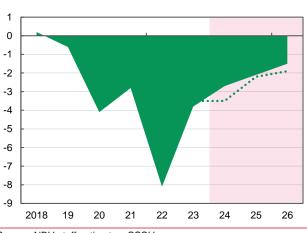
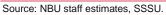


Figure 2.16. Output gap, % of potential GDP

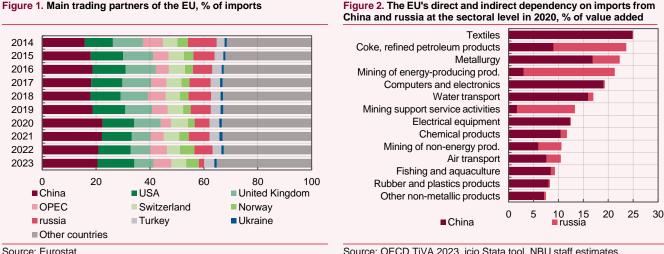
Source: SSSU. NBU staff estimates.



#### Box 1. Friend-Shoring for the EU: An Opportunity for Ukraine?

The COVID-19 pandemic and russia's war against Ukraine have demonstrated the value of sustainable access to key resources for the EU and a lack of geopolitical leverage, particularly in strategic sectors. The EU's heavy dependence on countries with a different geopolitical stance, primarily China and russia, for imports of certain goods creates space for shifting trade to more geopolitically aligned countries. The EU may be interested in cooperating with Ukraine to diversify the sources of supply of these goods and/or to relocate their production. The outlook for Ukraine is cautiously optimistic in both traditional industries (agriculture, mining, and metallurgy) and the production of technology-based goods. However, to realize these prospects, Ukrainian legislation needs to be brought in line with EU standards and significant investments have to be made in the restoration and development of production facilities. The effectiveness of Ukraine's efforts would be greatly enhanced if the EU provided unimpeded access to markets without political and regulatory risks. This would also help strengthen trade flows between countries that are geopolitically aligned with the EU.

External trade closely connects the EU with countries with other geopolitical stance. China has been providing about 20% of EU imports over the past decade. The dependence on imports from this country in value chains is high in the textile industry, computer and electronics manufacturing, and metallurgy. russia accounted for another 7% in 2015-2022. However, already in 2023, its share narrowed by 4.7 pp due to the introduction of economic sanctions by the EU and diversification of supplies (including those of gas and slabs). These dynamics are also expected to be reflected in lower dependence on imports in value chains where russia has played a significant role, primarily in the energy sector. Sectoral dependence mostly correlated with high import dependence at the level of specific goods<sup>23</sup>, which, however, accounted for less than 9% of total EU imports. In 2022, more than half of them were supplied to the EU by China, which was among the three main suppliers in 65% of cases, while the shares of other countries did not exceed 6% (that of russia being only 2.4%).



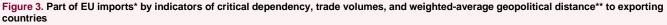
Source: OECD TiVA 2023, icio Stata tool, NBU staff estimates.

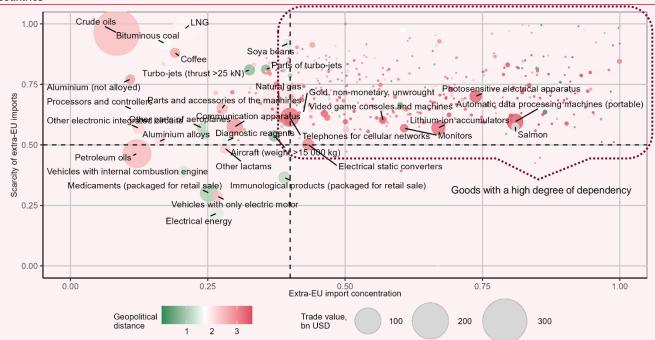
The signing of the Association Agreement with the EU in 2014 had by 2021 increased Ukraine's share in total EU imports by 0.3 pp (to 1.1%). However, these positions were partially lost with the start of the full-scale invasion due to the destruction of production facilities and the disruption of logistical links. At the same time, the EU's rather rapid rejection of russian goods indicates there is potential for shifting trade flows to countries that are more geopolitically aligned with the EU (friend-shoring), including Ukraine.

<sup>&</sup>lt;sup>23</sup> According to the European Commission's methodology, the dependency indicators – concentration (the Herfindahl–Hirschman Index with the shares of exporting countries in EU imports), scarcity (the share of extra-EU imports in total EU imports) and substitutability (the ratio of extra-EU imports to total EU exports) – of such goods exceeded the thresholds (of 0.4 p, 0.5 p and 1.0 p respectively).

The geographical location and related climatic features of countries with a different geopolitical stance make the EU highly dependent on imports of agricultural, textile, and wood products. Examples of such products include ginseng, coconut oil, certain types of fish, spices and nuts. Instead, crops that are more traditional for our region often did not meet the dependence criteria and came from geopolitically aligned or neutral countries. More specifically, in 2022, over 85% of soybeans were imported from Brazil and the United States, soybean meal from Brazil and Argentina, and sunflower meal from Ukraine and Argentina, although the share of russia was also relatively substantial. The substitution of russian agricultural products may be a priority for increasing the presence of Ukrainian producers in the European market, especially in the context of the EU's new tariffs. This also applies to processed foods from russia and belarus. At the same time, the further expansion of Ukraine's exports may require difficult negotiations with the EU to harmonize food safety regulations, including the use of pesticides and GMOs, and market access quotas that would take into account the interests of European farmers. After all, the EU's needs for products that Ukraine has the potential to increase supplies of, such as dairy products, chicken, eggs, sugar, and fruit concentrates made from crops typical of the region, have been largely met by domestic production.

In addition to imports of specific wood and textile products (such as those of bamboo, rattan, silk, and cashmere), the EU was highly dependent on imports of cotton and synthetic yarns and fabrics, and certain products made from them. The main share in these imports fell on <u>Asian countries</u>, where labor costs are several times lower than in the EU. At the same time, the introduction by the EU of tighter sanctions against <u>belarus</u> in the wood and furniture industry may open up additional opportunities for Ukraine.





\* Shows goods with a trade volume above USD 10 billion or a high degree of dependency in at least four out of five years during 2018-2022. \*\* Defined as the difference in UN votes between the respective country and the US, according to <u>Bailey et al. (2009)</u>. The Overseas Territories, Hong Kong, and Macau have the same geopolitical distance as the countries that represent them; Taiwan has the average geopolitical distance of the G7 countries. A smaller distance implies the country is closer to the US in the UN voting in 2022, while a bigger one – to China. Source: NBU staff estimates based on the BACI-CEPII database.

However, strategic dependencies between the EU and other countries exist in sectors other than agriculture or textiles, such as energy-intensive manufacturing, renewable energy, defense and aerospace, digital technologies, electronics, and healthcare. The primary source of these dependencies is the lack of significant deposits of critical raw materials (CRMs), such as magnesium, rare earth elements, platinum-group metals, and so on, in the EU (see Figure 4). Although CRMs are usually used in relatively small amounts, they are an indispensable first link in most

supply chains. In 2022, China was the largest exporter of CRMs with high degree of dependency, supplying the EU with more than 22 types of CRMs. The diversification of supplies was hampered by the worldwide concentration of mining and/or processing of CRMs, and by export restrictions (for instance, more than 70% of the global trade in <u>cobalt</u> is subject to such restrictions). However, more than half of the CRMs from the EU list were <u>available</u> in Ukraine while only some deposits were developed – primarily <u>graphite</u> and <u>titanium ore</u> deposits. Instead, lithium deposits, which <u>account for</u> almost a third of proven deposits in Europe, were not developed at all due to their <u>specific</u> <u>mineralogical nature</u>. Given the high capital intensity of deposit exploration, setting up extraction and processing facilities, the industry's development requires both a significant reduction in security risks and a <u>number of reforms</u>, including those related to the protection of property rights, corporate governance at companies with a large share of state ownership, and the drawing up of a respective regulatory framework.

Figure 4. Critical raw materials by EU dependency and weighted geopolitical distance to suppliers

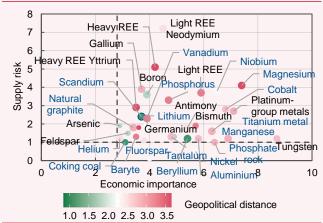
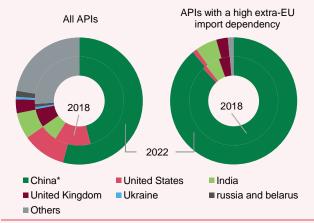


Figure 5. Distribution of active pharmaceutical ingredients (APIs)\*\* by volume of extra-EU imports, %



CRMs, deposits of which Ukraine possesses or already has under development, are in blue.

Source: European Commission, BRDO, State Service of Geology and Mineral Resources of Ukraine, NBU staff estimates.

\* Includes Hong Kong and Macau.
\*\* Definitions of APIs according to <u>ECIPE</u>.

Source: NBU staff estimates based on the BACI-CEPII database.

In addition to CRMs, the EU also depends on imports of components and assemblies made with CRM compounds. For example, in 2022, China controlled at least 75% of each of the stages in the creation of solar panels and exported more than 50% of solar panel elements to the EU. A similar situation was observed in the production of batteries, where China has established an entire cycle, from the processing of raw materials (despite having a small share in nickel and cobalt mining), to making the final product. Also, the EU, which consumes 20% of the world's semiconductors and produces only about 10%, depends on imports from Asia - mainly Taiwan and China. However, the EU's expansion of its own production facilities for the manufacturing of batteries, solar panels and semiconductors creates room for Ukraine, which already has successful experience of cooperating with European manufacturers, to be included in the supply chain. More specifically, the development of a cluster of electrical equipment production facilities for leading automotive companies in western Ukraine made a significant contribution to the growth of engineering production in 2016–2017, to the increase in the number of jobs in the region etc. This cluster demonstrated resilience even during the COVID-19 pandemic and after the outbreak of the full-scale war.<sup>24</sup> Recycling may also be a promising area for Ukraine.

The EU is also heavily dependent on imports of active pharmaceutical ingredients (APIs) from China and India, which are the world's leading producers. At the same time, the presence of a developed pharmaceutical sector in the EU does not guarantee that imported APIs can be substituted for European APIs, due to companies <u>specializing</u> on the production of certain types of drugs, and there being a twofold average difference in prices of exports out of the EU and extra-EU imports. Over the past six years, Ukraine has sporadically exported certain APIs to the EU and, given its significant

<sup>&</sup>lt;sup>24</sup> In 2020, the production of electrical equipment dropped by 0.9%, while mechanical engineering as a whole decreased by 17.6%, and in 2022 by 34.2% and 43.1% respectively.

pharmaceutical production facilities, has prospects for expanding its supplies if it receives a "pharmaceutical visa-free regime."<sup>25</sup> In particular, Ukrainian pharmaceutical companies can produce intermediates and generic drugs from the EU Critical Medicines list (antibiotics, antithrombotic agents, insulin, antipyretics, analgesics).

In contrast, the EU's demand for final consumption goods is usually lower due to its developed industrial base. The exceptions include drones. Ukraine's progress in drone development and production, including the localization of component production, may be of interest to the EU, which is lagging behind the United States and Israel in the production of military drones, and behind China in the production of civilian drones. In general, although the EU is only moderately dependent on its geopolitical opponents for finished military products, Ukraine's experience in building and localizing defense industry production facilities in times of war, as well as the immediate testing of its developments on the battlefield, significantly strengthens Ukraine's position on the global arms market. The process of establishing joint ventures with European weapons manufacturers has already begun, as has the cultivation for demonstration purposes of cotton used in the production of gunpowder. Increasing the area sown to cotton to reach industrial scale in 2025 will not only meet Ukraine's needs, but will also reduce the dependence of EU defense contractors on raw materials from China. Consequently, Ukraine's export potential could grow significantly, including thanks to the expansion of military budgets in some EU countries.

Figure 6. Production volumes in certain types of industrial activity, % yoy (the term in parentheses is the share in industry for 2023)



Source: SSSU, NBU staff estimates.

The EU's dependence on countries with a different geopolitical stance creates room for trade to be shifted to more geopolitically aligned countries. Although there have been no significant changes in the structure of EU imports so far, companies are changing their approaches to accumulating strategic stocks, diversifying suppliers, and are planning to relocate production in the next five years. Ukraine's clear declaration of its geopolitical priorities and the start of EU accession negotiations offer prospects for both further expanding access to the European market, where Ukraine can already compete for a portion of the EU's nearly USD 263 billion of imports with high degree of dependency<sup>26</sup>, and for raising investments from European partners interested in friendshoring, which could significantly increase export earnings.<sup>27</sup> This potential can be realized if security risks subside, European integration reforms are actively implemented (including reforms to protect democratic procedures and property rights), labor supply is expanded (including due to the return of forced migrants), and if the energy sector is restored. The effectiveness of Ukraine's efforts would be greatly enhanced if the EU developed cooperation mechanisms that would ensure unimpeded access to markets without political and regulatory risks. This would also help strengthen trade flows between countries that are geopolitically aligned with the EU.

<sup>&</sup>lt;sup>25</sup> To do so, three requirements must be met: the creation of a single regulatory authority, the implementation of EU standards and law, and the strengthening of the fight against the counterfeiting of medicines and medical devices.

<sup>&</sup>lt;sup>26</sup> Total imports of goods with high degree of dependency in 2022.

<sup>&</sup>lt;sup>27</sup> For comparison, in 2022, Ukraine's exports to the EU amounted to about USD 25 billion, and about USD 22 billion in 2023.

### Part 3. Monetary Conditions and Financial Markets

- Favorable inflation dynamics and the sustainable FX market made it possible for the NBU to cut its key policy rate from 25% to 13% over the past 12 months, as well as to introduce a large-scale package of FX liberalization measures. In the future, the room for easing the interest rate policy will be rather limited, given the need to ensure the sustainability of the FX market, maintain moderate inflation in 2024–2025, and bring it to the 5% target over the forecast horizon.
- The NBU will maintain an active presence on the FX market to cover the structural deficit of foreign currency, support two-way fluctuations in the exchange rate, and smooth out excessive volatility. The NBU aims to ensure that conditions on the FX market are such that the central bank will be able to retain control over inflation expectations and achieve its inflation target over the forecast horizon.
- With international aid expected to decline in the coming years, reserves will gradually decline over the forecast horizon. However, they will remain at a level sufficient to cover moderate exchange rate fluctuations in both directions, in response to changing market conditions.

### The FX market situation remains under control thanks to the NBU's interventions and the policy of protecting hryvnia instruments from inflation

In Q2, the pressure on the hryvnia exchange rate increased due to a rise in the net demand for foreign currency. Thus, exports of goods declined as expected due to the depletion of agricultural product stocks. In addition, shortages of electricity and rising domestic demand restrained exports of other goods, including products of the food, metals, and engineering industries. At the same time, goods imports increased significantly. In particular, purchases of machinery products grew due to both increased budget expenditures and robust investment demand. The need to import power equipment and electricity also rose in view of the difficult situation in the domestic energy system, as some generating facilities had been destroyed and nuclear power plants had to undergo scheduled repairs. Moreover, fuel purchases slightly intensified at the end of the quarter in anticipation of an excise tax hike. As expected, there was also an impact from transactions businesses were allowed to make under the <u>May</u> liberalization: the easing of FX restrictions led to an increase in imports of certain services and the repatriation of dividends.

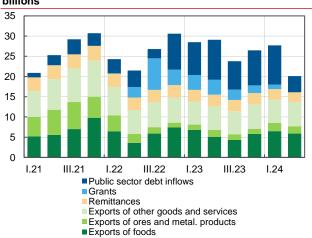
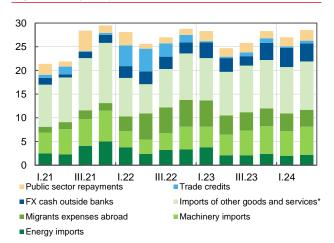


Figure 3.1. Key components of FX inflows to Ukraine, USD billions





\* Excluding humanitarian aid.

Source: NBU.

Under these conditions, the NBU ensured two-way exchange rate fluctuations remained moderate, and significantly increased its interventions, while keeping to its declared principles of managed flexibility. As a result, the NBU's net FX sales in Q2 increased to USD 8.3 billion, compared to USD 5.8 billion in Q1 2024, and the hryvnia depreciated against the U.S. dollar by 4.4% on average over the quarter. In July, due to situational and psychological factors, net demand for foreign currency was significantly higher than

Source: NBU.

the estimated structural deficit of foreign currency, which led to a significant weakening of the hryvnia exchange rate. This started to negatively affect exchange rate expectations and create additional risks to inflation dynamics. The NBU's revision of its intervention tactics to counteract temporary factors helped to balance the market.

The increase in interventions, coupled with the expected decline in foreign financial assistance, led to a decrease in international reserves to USD 37.9 billion as of the end of June. However, reserves remained at a sufficient level, exceeding the minimum required by the IMF metric by 11%.<sup>28</sup>

At the same time, Ukraine's FX market continued to show positive structural changes. In particular, the volume of the banks' transactions without the NBU's participation continued to increase. In addition, despite some situational spikes, the difference between the cash and official exchange rates in Q2 2024 did not exceed 1.4%, and at the end of June it fell to 0.7%. By minimizing the multiplicity of exchange rates and better "synchronizing" FX market segments, the NBU is improving its ability to manage exchange rate dynamics, while rising depth of the interbank FX market is increasing its ability to self-balance.

To increase investment attractiveness and support the defense capabilities of Ukraine, the NBU <u>updated</u> and <u>revised</u> a number of FX restrictions. In addition, the NBU has <u>updated</u> the regulatory framework to ensure foreign investors have direct access to Ukraine's reconstruction instruments, including municipal bonds, infrastructure bonds, bonds of international financial organizations, and so on.

The gradual normalization of the economy will help to reduce the structural deficit of foreign currency in the market, but its volumes will remain significant over the forecast horizon. Losses in production capacity, the destruction of infrastructure, and damage to the energy system will hinder the recovery in exports and create a significant need for imports. Persistently high logistics costs will be an additional factor moderating the growth of export revenues. The continued migration of Ukrainians abroad will result in FX outflows under the *Travel* item, but the outflow volume will decline as migrants adapt and gradually lose their Ukrainian tax residency. Demand for FX cash will also remain strong until the end of the forecast horizon, but it will gradually decrease due to the controlled situation on the FX market and the NBU's consistent monetary policy. Although further steps toward FX liberalization will create additional demand in the FX market, this will contribute to an increase in private sector borrowing in the medium term.



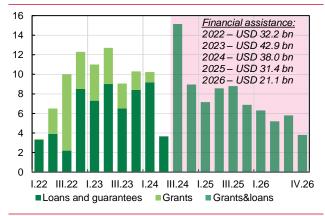
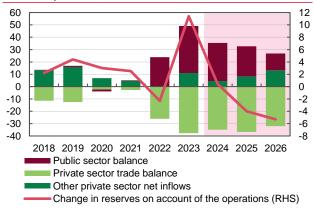




Figure 3.4. Gross international reserves, changes on account of selected operations, USD billions



Source: NBU staff estimates.

A decline in international financial assistance amid significant net FX outflows from the private sector will gradually drive international reserves down to USD 32 billion by the end of 2026. However, their level will remain sufficient to safeguard the sustainability of the FX market.

<sup>&</sup>lt;sup>28</sup> The reserves accounted for 111% of the IMF composite criterion, according to the calculations based on the ARA metric for a flexible exchange rate regime and existing FX restrictions. According to the IMF's methodology, the level of international reserves should fluctuate within 100%–150% of the composite metric.

Therefore, the NBU will continue to maintain an active presence in the FX market to cover the structural deficit of foreign currency, support two-way fluctuations in the exchange rate, and smooth out excessive volatility. Protecting hryvnia savings from inflation will also remain a priority. By taking these measures, the NBU will ensure that conditions on the FX market will be such that the central bank will be able to control inflation expectations and achieve its inflation target over the forecast horizon.

#### Gradual cuts to the key policy rate since July last year have made it possible for the NBU to balance the goals of price stability and promoting sustainable economic development

Given the restrained inflation rate, the controlled FX market situation, and sufficiently balanced risks to the inflation forecast, the NBU continued the cycle of key policy rate cuts in Q2. Thus, in June 2024, the key policy rate was cut by 0.5 pp, to 13%, while in July the rate was left unchanged. The latter decision was aimed at ensuring the sustainability of the FX market and bringing inflation closer to the 5% target over the forecast horizon, as well as at protecting hryvnia savings from inflation amid still significant inflationary risks due to the effects of the war.

The transmission of key policy rate cuts to bank retail rates increased in Q2, as expected. During the quarter, the weighted average rate on retail term deposits decreased by 0.9 pp, to 12.6%, and the rate for non-financial corporations decreased by 1.0 pp, to 8.7%. The significantly higher weighted average cost of retail deposits is due to the design of the NBU's interest rate policy and the different maturities on the deposits made by non-financial corporations and households.

Figure 3.5. Weighted average interest rates on hryvnia deposits and monthly average key policy rate, %

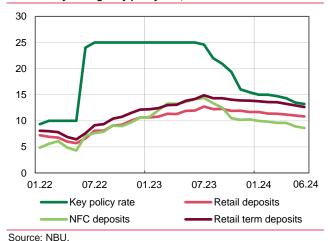
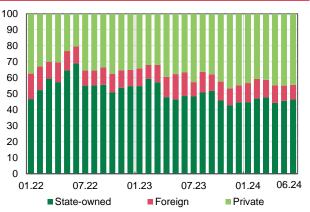


Figure 3.6. Shares of groups of banks in attracting (turnover of) hryvnia retail deposits for more than 92 days, %



In July 2023, SENSE BANK was reclassified from the group of foreign banks to the group of state-owned banks. Source: NBU staff estimates.

The placement of three-month NBU certificates of deposit, coupled with the use of the reserve requirement mechanism, created the necessary incentives for there to be more competition between the banks for longer-term retail deposits. In such a way, intense price competition<sup>29</sup> for depositors allowed private banks to increase their market share by around 12 pp since March 2023, while the share of state-owned banks was reduced.<sup>30</sup>

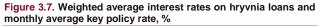
At the same time, nominal hryvnia interest rates continued to decline due to the effects of previous steps to ease the interest rate policy. With inflation expectations stalled, this is leading to a decline in real yields, thus causing risks of there being less investor interest in hryvnia term instruments. Thus, in June of this year, the growth in retail term deposits paused, and the rollover of hryvnia domestic government debt securities held by individuals decreased. This increases the risk of an outflow of funds to the FX market. Therefore, the issue of maintaining the attractiveness of hryvnia-denominated

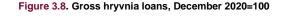
<sup>&</sup>lt;sup>29</sup> Private banks are an important conduit for monetary transmission: they responded strongly to the tightening of interest rate policy in 2022 and the introduction of an unconventional operational design, and currently maintain deposit rates at levels significantly higher than those offered by state-owned banks and those belonging to foreign banking groups.

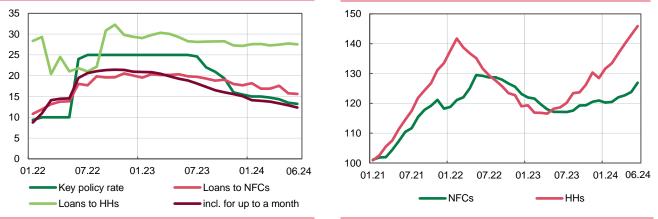
<sup>&</sup>lt;sup>30</sup> The share of private banks in attracted hryvnia retail deposits with a maturity of more than 92 days increased to 44%, up from 32%.

instruments continues to be important, and the need to protect them from inflation limits the room for further key policy rate cuts.

The easing of interest rate policy, low inflation, and intense competition for solvent clients prompted the banks to cut corporate loan rates more actively. The weighted average interest rate on hryvnia loans to non-financial corporations decreased by 1.2 pp in Q2, and by 1.4 pp on ultra-short-term loans (up to 1 month). This contributed to further growth in the hryvnia corporate portfolio, which has a positive impact on the recovery of economic activity overall. Although lending volumes are still relatively small, their growth is rapidly picking up. Thus, the year-on-year growth in gross hryvnia loans to non-financial corporations in June amounted to 8.3%, compared to 2% in March. Lending to small and medium-sized enterprises was increasing the most rapidly. Unsubsidized lending has also been gaining importance.<sup>31</sup> In absolute terms, gross hryvnia loans to non-financial corporations rose by almost UAH 20 billion over the quarter (including by UAH 12.6 billion in June). Agriculture, manufacturing, transportation, warehousing, and trade were in the lead in terms of growth in Q2.







Source: NBU.

Source: NBU.

At the same time, the cost of hryvnia loans to households remained almost unchanged in Q2. The weak response of these rates is explained by the strong demand for consumer loans. Over the past year, the retail loan portfolio has been recovering rapidly, and its growth rate has almost returned to the level seen before the full-scale invasion. The main driver of this growth is consumer demand, including for large purchases. Mortgage loans have also been growing rapidly. However, mortgages are currently being provided almost entirely through the *eOselia* program.

However, lending activity is still constrained by high risks. In addition, the destruction of energy infrastructure and interruptions to the electricity supply, as well as the lack of skilled workers, <u>are depressing businesses' investment sentiment</u>. Nevertheless, lending is expected to pick up over the forecast horizon. This will be facilitated, in particular, by measures taken under the <u>Lending Development Strategy</u>. In particular, in June, the NBU adopted <u>a set of decisions</u> to encourage the banking sector to become involved in financing projects to rebuild the country's economy. Also, in July 2024, <u>financial programs</u> were launched to increase the energy independence of consumers, including concessional lending to individuals and businesses for the purchase of energy equipment.

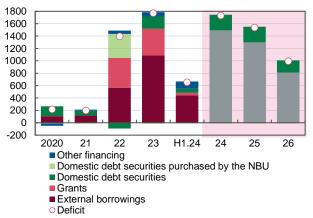
## The role of the domestic debt market is increasing as expected, both in attracting financial resources and smoothing the financing of budgetary needs, given the unevenness of international assistance inflows

Yields on domestic government debt securities also responded to the NBU's easing of its interest rate policy. However, the decline was rather moderate, reflecting the significant need for funds to finance budget expenditures. In addition, the role of domestic borrowing has increased given the change in the regularity of international assistance this year: peak periods are being replaced by pauses in the receipt of funds. Thus, following weak inflows at the start of the year, record-high volumes were received

<sup>&</sup>lt;sup>31</sup> Subsidized lending refers to preferential loans issued under the Affordable Loans 5–7–9% state program.

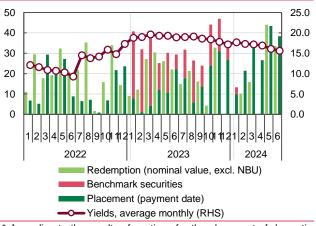
in March and moderate volumes in Q2 (USD 3.6 billion). In particular, a part of expenditures in Q2 were financed from the stock of FX funds accumulated at the end of March. In addition, inflows of assistance from the EU in late June helped to replenish resources to finance expenditures in subsequent periods. As a result, the need to accumulate and smooth out resources to finance expenditures in periods when international assistance is insignificant has increased. Market interest in government securities was maintained by their yields, which remained the highest among all other financial instruments in real terms. Thus, the rollover of hryvnia-denominated domestic government debt securities was more than 137% in Q2, and now exceeds 153% since the start of the year.

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



\* Net borrowing. Hryvnia-denominated borrowings include domestic government 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 borrowings, grant funds, and other financing, in particular, the use of relatively large cash balances on gov`t accounts at the end of the previous period.

Figure 3.11. Primary placement\* and redemption of hryvnia domestic government debt securities, UAH billions and YTM



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

Source: NBU staff estimates.

Source: STSU, NBU staff estimates.

The government's measures to increase revenues, together with the continued economic recovery and improved financial results, have contributed to a rise in domestic resources of the budget. However, they are not sufficient to cover significant expenditures. In addition, with international assistance expected to gradually decline in the coming years (read more in *Assumptions and Risks to the Forecast* on page 35) and significant budget deficits persisting, the role of domestic government debt securities as a source of financing will grow.

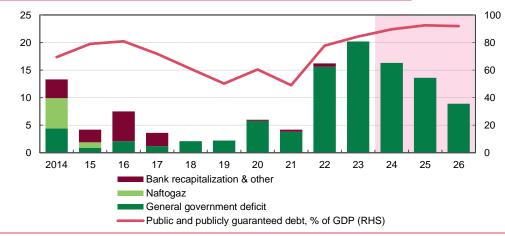


Figure 3.11. Broad public sector deficit, public and publicly guaranteed debt, % of GDP

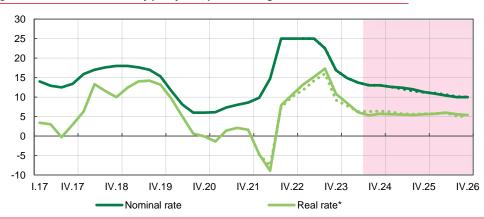
Source: IMF, STSU, MFU, SSSU, NBU staff estimates.

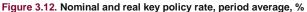
The growth in public and publicly guaranteed debt will continue to be driven mainly by the significant budget deficit, a smaller share of grants in the total volume of international financial assistance, and the effects of exchange rate revaluation. According to the NBU's estimates, public and publicly guaranteed debt was 88% of GDP at the end of June 2024, and will reach<sup>32</sup> around 92% of GDP in the medium term.

However, such a level of debt will not burden the budget and economic development in the coming years due to the low cost of servicing and long average maturity of borrowings obtained after the full-scale invasion on preferential terms, as well as a prudent domestic borrowing policy and the implementation of arrangements on the restructuring of sovereign debt securities.

## The NBU will coordinate interest rate and exchange rate policy measures, as well as the easing of FX restrictions, to maintain control over inflation expectations and achieve the 5% inflation target over the forecast horizon

The current balance of risks to inflation dynamics is tilted upward, in particular given the increase in budget expenditures, the expected pass-through effects of the hryvnia depreciation, and the deterioration in expectations due to the acceleration of inflation. Thus, the potential for key policy rate cuts this year is likely to be depleted.

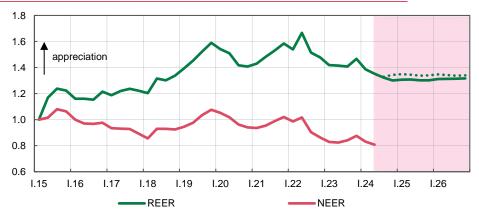




\* Deflated by model expectations (QPM). Source: NBU staff estimates.

Further FX liberalization measures and a more restrained approach to lowering interest rates by Ukraine's MTPs also limit the room for easing interest rate policy in Ukraine. Thus, given the persistence of inflationary processes, most central banks in both advanced economies and emerging markets will maintain their "higher for longer" stance. After all, <u>symmetry</u> in monetary policy responses to low and high inflation is important for central banks in their efforts to curb inflation.





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

The cycle of key policy rate cuts in Ukraine may resume in 2025 and continue in 2026, which will support economic growth. However, even if the key policy rate is cut, it will remain positive (5%–6%) in real terms. Given that the neutral level of the key policy rate was estimated at 3% to 4% in 2016–2019, the real key policy rate is not excessive under

<sup>32</sup> The forecast for public and publicly guaranteed debt takes into account the announced debt restructuring in 2024.

current conditions (high risks). In addition, after a fairly significant weakening of the hryvnia's REER since the end of 2021, its relative stabilization is expected over the forecast horizon due to the impact of productivity growth on its equilibrium level and, as a result, a gradual economic recovery. On the other hand, the stabilization of foreign trade indicators and the NBU's monetary policy measures will support the REER at a level that will create conditions for there to be a sustainable disinflationary trend.

At the same time, the NBU will respond flexibly to changes in the balance of risks to inflation and the FX market. Therefore, if the risks to the inflation trend and the FX market subside – in particular as a result of Ukraine receiving more financial support – the NBU will consider an earlier resumption of the easing cycle of the key policy rate. Alternatively, in the event of a significant increase in price pressures and risks of an unanchoring of expectations, the NBU is ready to conduct a considerably tighter monetary policy.

### Box 2. Ukraine's Gross International Reserves: How Much Is Enough in Wartime?

Even in the quite recent "relatively peaceful" past, reaching 100% of the minimum level of international reserve adequacy was a rather ambitious goal for Ukraine.<sup>33</sup> As of the end of June 2024, international reserves amounted to almost USD 38 billion, which corresponded to 111% of the minimum required level according to the IMF's composite metric. The high level of reserves has led to concerns that they may be excessive in times of war. At the same time, the NBU estimates that reserves are and will remain sufficient, and at a necessary level to ensure a stable and manageable situation in the FX market over the forecast horizon. Given the high uncertainty and shocks to the economy caused by the war, such a level of reserves provides the necessary buffer to maintain macroeconomic stability, especially if negative scenarios materialize. This buffer is also important because the source of the reserves replenishment in recent years has been foreign assistance, the volume of which is projected to decline and has so far been only partially confirmed by international partners.

Why are international reserves needed? The accumulation of reserves aims to achieve a wide range of goals. First and foremost, gross reserves can serve as a tool to protect the economy from external shocks in the face of financial crises, price fluctuations on global commodity markets, etc. In addition, central banks use reserves to maintain stability in the FX market, which is of particular importance for open economies. Reserves are also used to provide FX liquidity to the banking system in the event of a crisis. A sufficient level of reserves increases investors' confidence in the country's economic stability, which can help reduce the cost of borrowing on international capital markets.

In recent years, central banks have been accumulating reserves with a view to hedging against geopolitical risks. Indeed, current research shows that such risks lead to a narrowing of trade flows (<u>Gupta and Gozgor, 2019</u>) and negatively affect capital inflows to developing countries, and thus determine investment decisions (<u>Feng et al., 2023</u>).

Various methodological approaches are used to estimate the appropriate level of reserves, the most comprehensive of which is currently the <u>IMF's composite metric</u>. The traditional approaches are the rule of covering three months of imports, 20-percent broad money coverage, and 100-percent coverage of short-term external debt. These metrics are widely used and remain relevant. However, sometimes they do not fully reflect the specifics of a country and its macroeconomic conditions. For example, the rule of covering three months of imports is considered relevant for countries with tight restrictions on capital flows, while the ratio of reserves to broad money is, on the contrary, relevant for countries with developed financial markets and free capital flows.

The most commonly used comprehensive approach is the IMF's composite metric, which is based on four indicators: exports of goods and services, M2 money supply in the U.S. dollar equivalent, short-term external debt, and other liabilities. Each indicator is weighted differently depending on the exchange rate regime and whether capital flow restrictions are in place. Ukraine currently uses a weighting formula for a flexible exchange rate regime with capital flow restrictions.

This approach determines the minimum appropriate level of reserves. A level of reserves within 100%–150% of the composite criterion is considered adequate. Reserves below 100% pose challenges to monetary policy. At the same time, a level above 150% is considered undesirable, as it may indicate the inefficient use of financial resources, in particular for financing investments, and losses for the economy due to the high costs of holding reserves and the low yields they provide. From the end of 2023 and in H1 2024, Ukraine's international reserves averaged around 120% of the minimum necessary level, and at the end of June 2024 they exceeded 110%. With such a level of reserves, some experts warned against their use during the war. However, is

<sup>&</sup>lt;sup>33</sup> According to the IMF Stand-By Arrangement approved in June 2020, reaching just 70% of the composite metric was expected by the end of 2020, while a 100% level was forecast to be achieved only in four to five years, provided that there are no new shocks and the monetary policy is prudent.

this level of international reserves really too high in the current geopolitical, economic, and social conditions?

As financial crises have shown, there is no such thing as excessive reserves. EM economies have significantly raised their international reserves since the 2000s amid favorable conditions in global commodity markets, increased financial integration, and a considerable expansion of capital flows. In the second half of the 2000s, economists began to question the need to accumulate large reserves, and some even suggested that the level of reserves had become excessive, so the practice of countries transferring part of their reserves to sovereign wealth funds was welcomed. It was emphasized that these funds, in contrast to being held by central banks, would be invested in high-yield, albeit less liquid assets for a longer period of time, which would allow for higher returns.

However, the experience of the global financial crisis of 2008 proved that accumulated international reserves provide a buffer without which some EMs would not have been able to withstand the sudden stop in capital flows and the instability of local currency markets. The reserves were actively used at the start of the crisis, which is why they declined rapidly. In 2008-2009, EMs that had accumulated larger international reserves before the crisis experienced less depreciation of their currencies, had more stable credit ratings and access to external financing, and had lower borrowing costs. Their economies recovered faster from the devastating effects of the crisis.

Figure 1. Change in reserves in December 2008 compared to the pre-crisis maximum level, %

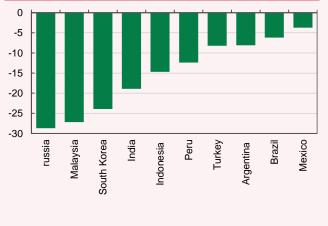
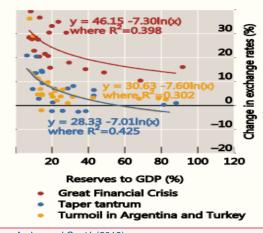


Figure 2. Change in exchange rates and gross reserves during crisis periods, %



Source: official web pages of central banks, investing.com, tradingeconomics.com.

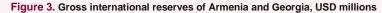
Source: Arslan and Cantú (2019).

A buffer in the form of international reserves is especially important for countries affected by military conflicts. High uncertainty and, accordingly, strong sensitivity among economic agents is reflected primarily in the FX market. At the same time, sources of FX inflows into the country narrow markedly. The economy faces the risk of or actually enters a recession, while the likelihood of sudden adverse shocks grows considerably. In addition, the economic models on which political decisions were based before are largely losing their effectiveness. In such circumstances, it depends on the reactions and actions of the central bank to minimize these adverse effects, stop the destabilization of the financial system and the economy as a whole, and anchor the behavior and expectations of economic agents and foreign partners.

The examples of Georgia (russia's armed aggression in August 2008) and Armenia (the Karabakh conflict in the autumn of 2020) demonstrate that even a short-term military conflict creates significant pressure on the FX market, and reserves start to decline immediately. For example, Armenia's gross reserves decreased by 14.3% between September and November 2020, while those of Georgia decreased by 23% in August 2008 alone. After the end of the conflict, Armenia raised its key policy rate, which, together with a decrease in the risk premium, helped to attract debt capital and, as a result, return reserves to pre-war levels. The central bank of Georgia temporarily switched to a fixed exchange rate regime, which led to significant FX interventions to support the Georgian lari. An additional loan of USD 750 million from the IMF and

USD 250 million in grants from the United States significantly mitigated the effects of the conflict, and reserves quickly recovered to pre-war levels.





Source: official web pages of central banks.

Financial assistance from partners, which makes it possible to replenish international reserves, is crucial in the case of Ukraine. Since the onset of the full-scale invasion, Ukraine has received around USD 90 billion from international partners, of which more than USD 27 billion were non-refundable grants. International assistance was the only source for raising reserves from USD 27.4 billion as of 24 February 2022 to almost USD 38 billion as of the end of June 2024. This helped to stabilize the macroeconomic situation, providing the necessary basis for the resumption of economic growth, and to finance a significant part of social and economic needs. However, Ukraine remains vulnerable to the irregularity of these inflows, as evidenced by the decline in reserves since March 2024 and the likelihood of such cases recurring over the forecast horizon. In addition, a significant portion of the assistance anticipated for coming years has not yet been confirmed by partners.

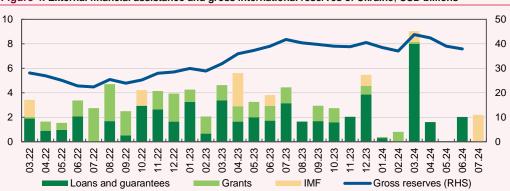


Figure 4. External financial assistance and gross international reserves of Ukraine, USD billions

Source: NBU, MFU, open sources data.

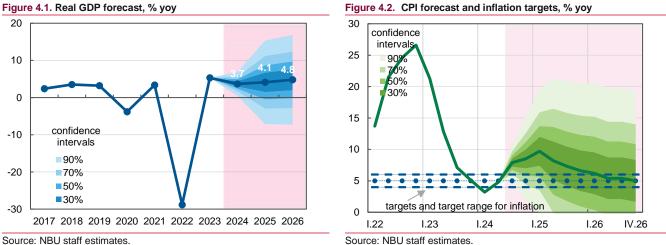
Given the persistence of high security risks, which are the main factor of uncertainty, potential additional budgetary needs, further destruction of infrastructure, and the intensification of migration processes, a prudent policy on the use of reserves is of particular importance. The current economic and social situation is fragile, and reserves serve as a necessary buffer in the event of adverse events.

#### Part 4. Assumptions and Risks to the Forecast

- The macroeconomic forecast is based on the assumptions that there will be a gradual normalization of economic conditions and a corresponding reduction in the state budget deficit. Due to significant damage to the energy system, electricity shortages will persist over the forecast horizon, which will restrain economic recovery.
- The baseline scenario foresees higher defense spending needs in 2024. They are
  expected to be covered without using monetary financing in particular by raising
  excise taxes and increasing domestic debt. At the same time, the potential passthrough effect on prices from higher production costs due to additional taxes is a risk
  to the forecast.
- The key risks to this macroeconomic forecast are related to the course of the fullscale war and the resulting additional budget needs to improve the country's defense capability and reconstruct critical infrastructure, the sourcing of financing for the budget deficit in the required amounts, and an increase or decrease in electricity shortages.

### NBU assumes there will be a gradual normalization of economic conditions over the forecast horizon

The NBU assumes there will be a gradual normalization of economic activity, taking into account the high adaptability of businesses and households, which has been one of the main factors behind the recovery in economic activity since mid-2022. Risks associated with the course of the war are crucial to this macroeconomic forecast. In particular, a prolonged high-intensity war could have a significant impact on all of the indicators in this forecast.



Source: INBU stall 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 expects significant budget deficits to persist, with their gradual narrowing over the forecast horizon. However, there are still high risks of additional spending on infrastructure reconstruction and higher defense expenditures

Due to the higher needs of the defense sector, the NBU has increased its forecast of the budget deficit for the current year to 22.8% of GDP (excluding grants in revenues). Budget expenditures will remain significant in the coming years, as defense capability and economic recovery will have to be supported further. The forecast takes into account the impact of the corresponding fiscal impulse from the widening of the deficit on faster economic growth, and, consequently, a smaller negative GDP gap, as well as the impact on inflation. This year's higher expenditures will be covered by additional

measures to mobilize fiscal revenues and by higher domestic borrowing. The impact of the revenue mobilization measures will be more pronounced next year, so the budget deficit will shrink to 17.8% of GDP in 2025. Further recovery of the domestic resource base amid the normalization of the conditions for the economy's functioning will help reduce the budget deficit in 2026 to 10.3% of GDP.

However, the risk of a larger budget deficit over the forecast period remains significant due to the high probability of growing defense sector needs in the face of the limited potential for expenditure optimization. In addition, this risk will increase in the event of further significant damage to critical infrastructure and the need for its prompt restoration. This would require additional sources of funds for financing the deficit. If this risk materializes, the government is expected to take additional measures to mobilize domestic resources so as to avoid the monetary financing of the budget deficit, in particular by increasing borrowing on the domestic debt market.

### Certain tax initiatives may have a greater impact on inflation than is currently estimated in the baseline scenario of the forecast

The financing of significant security and defense expenditures requires expanding the domestic resource base of the budget. The baseline scenario of the forecast takes into account a number of resource mobilization measures slated for 2024, including an increase in excise taxes. At the same time, initiatives to introduce new taxes or increase rates on existing ones and reduce or cancel tax benefits are currently a risk to the forecast. Each of these initiatives may have a different impact on inflation. For example, an increase in certain direct taxes (in particular, personal income tax) will reduce inflationary pressures by dampening consumption, thus offsetting the impact of higher budget spending. Consumption taxes pose more inflationary risks, as their increase will be directly reflected in consumer prices. In particular, if the VAT rate is increased, it will affect almost all components of the CPI. That said, international experience shows that this effect is usually reflected in annual inflation for 12 months, and then fades away.

The potential introduction of a military tax on corporate income poses inflationary risks. Most of this tax could be passed on by businesses to consumers. The impact on prices could have a multiplier effect, as taxation would occur at each stage of the production and distribution chain, except in the case of vertically integrated companies. The introduction of such a tax could significantly increase inflation over a relatively short period.

# The baseline scenario of the forecast assumes a gradual reduction in external financial support, but there are both risks of insufficient inflows of assistance and the possibility that larger volumes of assistance will be received in the coming years

A significant level of external financial assistance from international partners is expected to continue. The baseline scenario envisages Ukraine will receive international financing in the amount of around USD 38 billion, USD 31 billion, and USD 21 billion in the years 2024, 2025 and 2026, respectively. For the current year, the risk of not receiving the expected financing in 2024 is gradually decreasing, but this risk remains significant for the subsequent years. The materialization of this risk would increase the likelihood of monetary financing of the budget in the face of the limited capacity of the domestic financial market. In addition, lower inflows of international assistance would lead to a decline in international reserves, which would weaken the country's external sustainability and cause a deterioration in exchange rate and inflation expectations. In this case, the NBU will pursue a tighter monetary policy than envisaged in the baseline scenario.

At the same time, the practical implementation of the Extraordinary Revenue Acceleration (ERA) Loans mechanism, secured by future revenues from immobilized russian assets, could provide Ukraine with additional financial resources starting in 2025. This would reduce the risks to the timely and regular inflows of international financing and would allow Ukraine to increase its international reserves while offsetting the impact of higher budget expenditures on the FX market through the use of FX interventions. As a result, interest rate policy may be looser than in the baseline scenario.

## The risk of the further destruction of energy infrastructure materialized in Q2 2024, which gave grounds for downgrading estimates of the electricity deficit over the forecast horizon

The targeted air attacks that russia carried out in 2024 against Ukraine's energy infrastructure – on both generation and transmission capacities – led to a significant increase in losses in the power system and, accordingly, longer power outages. First of all, the attacks affected maneuverable generation – thermal power plants and hydro power plants. As expected, a sizeable deficit<sup>34</sup> had already emerged in Q2, and in early Q3 it deepened due to the hot weather and further destruction. At the same time, restoring lost capacity and/or building new facilities requires significant time and funding. As a result, the electricity deficit assumptions for 2024–2026 have been significantly downgraded: to more than 7% in 2024 (up from 5% estimated previously), around 8% in 2025 (up from 4%), and around 5% in 2026 (no deficit was previously expected).

Thanks to the integration with the European power system, electricity imports will help partially reduce the shortfall in Ukraine's own capacity. However, the price of imported electricity is higher than the domestic price, and the annual cost of such imports will be around USD 1 billion.

Further destruction and an increase in the deficit is a significant downside risk to the forecast. If this risk materializes, GDP growth will turn out lower than in the baseline scenario, and CPI growth will be higher due to higher costs resulting from the use of more expensive energy sources. At the same time, a faster reconstruction of some power generation facilities and the commissioning of new capacities, including the expansion of the renewable sector and/or the installation of mobile natural gas power plants, would reduce the electricity deficit and create an upside risk to the forecast. Other upside risks to the forecast are the expansion of the maximum electricity import capacity (from the current 1.7 GW) and businesses actively equipping themselves with autonomous power supply (APS) systems and/or increasing their electricity imports.

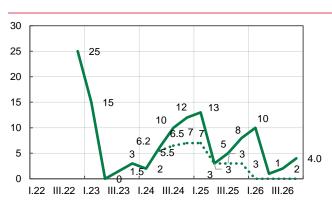
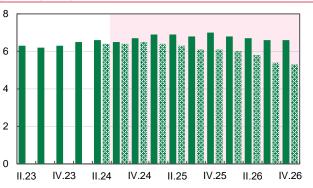


Figure 4.3. Electricity deficit, %

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



Source: NBU staff estimates.

Shaded bars are assumptions from the April 2024 Inflation Report. Source: <u>UNHCR</u>, NBU staff estimates.

### The deterioration of the energy situation and the slow normalization of economic conditions will lead to a larger outflow of migrants abroad in 2024–2025 than previously expected. They will start to return gradually in 2026

The outflow of migrants abroad is expected to continue in 2024 and 2025 (around 400 and 300 thousand people, respectively). This assumption has been downgraded compared to the April Inflation Report due to the significant destruction of the Ukrainian energy system, which has been accompanied by prolonged power outages and increases risks for the heating season. In addition to causing difficulties for households, frequent outages have a negative impact on production processes, which reduces economic activity and demand for labor, further stimulating migration. Moreover,

<sup>&</sup>lt;sup>34</sup> 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. Estimates of the electricity deficit include electricity imports.

migration will be driven by the sluggish normalization of economic conditions due to high security risks.

It is expected that the net return of migrants to Ukraine will begin in 2026 and will be gradual (around 400 thousand people), as they adapt more to living in new places after staying abroad for a long time, and as conditions in Ukraine, including due to power outages, will be more difficult than previously expected. The number of internally displaced persons will also remain significant, as according to <u>surveys</u> many of them have nowhere to return to due to the extensive destruction.

Currently, downside risks of an even greater outflow of migrants abroad, and fewer and later returns, prevail. An important factor in this may be legislative decisions by the governments of recipient countries to deepen the integration of Ukrainian migrants in host countries and their children in the educational systems of host countries, thus encouraging families to reunite abroad. This will have an adverse impact on Ukraine's labor supply and consumer demand, and will restrain GDP growth. Significant structural changes to the economy and an increase in the need for skilled labor will further strengthen imbalances in the domestic labor market, which will make wage growth outpace productivity growth in certain sectors. However, the rapid reconstruction of housing and infrastructure and an increase in the number of jobs due to the economic revival might lead to the more active return of migrants.

#### The current forecast is based on the assumption that intensive and long-lasting border blocking by individual EU countries of freight transportation will not reoccur. However, Ukraine might face short-term obstacles and/or additional restrictions on the access of its goods to the European market, although these will not have a decisive impact on trade flows

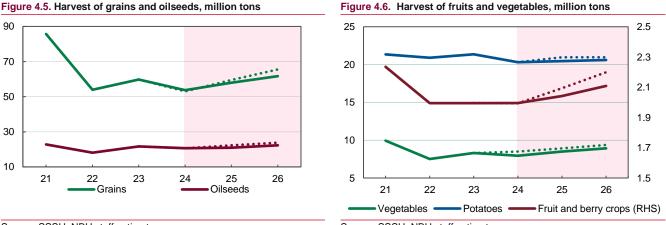
At the end of April, the border blockade was lifted thanks to a productive dialogue between Kyiv and Warsaw. Since then, there have been isolated short-term blockades, but in general they did not have a significant impact on Ukraine's external trade turnover. The baseline forecast assumes there is a possibility of such traffic stoppages, but losses from them are estimated to be minimal and will be compensated for by switching to other transportation routes. If the risk of a long-term and intense blockade materializes, export losses will be minimized thanks to the functioning of the sea corridor, while import losses will amount to no more than USD 500 million per month. In addition, such a blockade could lead to shortages of certain goods, price fluctuations, and a decrease in economic activity in certain sectors. Additional restrictions on the access of Ukrainian goods to the European market might also be imposed, which would create challenges for domestic exporters, who would need to find alternative routes and markets.

## The harvest estimate for 2024 was improved due to larger than expected planted areas. In the future, harvest volumes will gradually increase, albeit more slowly than previously expected

Actual planted areas for the 2024 harvest were larger for corn and sunflower. Given the higher yields of these crops compared to other crops and the generally rather favorable weather conditions for growing winter crops (despite frosts and a spring-summer drought in some regions), the estimates for the grain and oilseeds harvest in 2024 have been raised (to 53.7 million tons and 20.7 million tons, respectively). However, the extreme temperature highs in July pose additional risks to late crops.

Slow demining and high security risks will result in sown areas and yields growing more moderately in the coming years than previously expected. At the same time, the trend of increasing yields will continue in the long term. As a result, the grain harvest will reach almost 58 million tons in 2025 and around 62 million tons in 2026, and the oilseeds harvest will be 21 million tons and around 22 million tons, respectively.

The prospects for vegetable growing and fruit and berry production are favorable, given the growth in the area under these crops in certain regions. The heatwave in July affected the yields of a number of crops, in particular, the harvest of vegetables and potatoes will be lower than last year, which is accounted for as pressure on raw food prices in the current forecast. Going forward, yields will rise gradually. Animal farming will also continue to recover over the forecast horizon, thanks to relatively cheap feed and a pickup in external demand, which will support GDP growth. Given the continued migration, the supply of these products will be sufficient to meet demand, which will restrain inflation.



Source: SSSU, NBU staff estimates.

Deviations from climate norms may increase the volatility of harvest volumes, with a corresponding impact on food inflation. This will make it harder to manage expectations and conduct monetary policy. At the same time, rapid demining would help expand cultivated areas and further increase harvests, and additional investments could speed up the recovery of animal farming. This would lead to faster GDP growth and increased export earnings. Increased supplies of food products would thus curb inflationary pressures and allow the NBU to pursue a looser monetary policy.

## A gradual increase in excise taxes and utility tariffs is assumed. However, the timing and parameters for adjusting utility tariffs are subject to uncertainty and, accordingly, pose a risk to the inflation forecast

The forecast is based on the assumption that certain tariffs for utility services (gas, heating, and hot water supply) will remain unchanged throughout 2024. However, the difficult situation in the energy sector and in financing the state budget is likely to lead to a gradual adjustment of these tariffs in the coming years. It is expected that starting in 2025, the tariffs will be gradually brought to economically justified levels. Uncertainty about the timing and scale of the tariff adjustments, especially those for energy, is a separate risk to the inflation forecast. In particular, a significant hike in energy prices aimed at quickly eliminating imbalances in the energy sector would be a source of additional inflationary pressure and would require a significant increase in subsidies for households. On the other hand, a longer postponement of decisions to bring utility tariffs in line with economically justified levels would lower inflation, but would lead to an accumulation of quasi-fiscal imbalances and worsen the financial health of state-owned energy companies. This would raise the risk of instability in the energy market and would deteriorate industry's investment potential, while price pressure would only be postponed to the future.

## The implementation of large-scale reconstruction projects in Ukraine could significantly accelerate economic growth, but the baseline forecast is based on moderately conservative estimates of external assistance and investment

In the postwar period, there will be a need to attract investment for large-scale projects to rebuild destroyed Ukrainian infrastructure. Such funds can be raised if international lenders and donors mobilize the appropriate resources. If Western partners approve a decision to introduce a loan program for Ukraine secured by future revenues from immobilized russian assets (Extraordinary Revenue Acceleration Loans for Ukraine), it will increase the likelihood of the implementation and the potential of such projects. Progress may also be possible in confiscating the entire volume of frozen assets of the russian federation in favor of Ukraine. Together with European integration reforms, such a program would contribute to a significant acceleration of economic recovery. Household income would grow much faster than in the baseline scenario, increasing underlying inflationary pressures. However, the underlying inflationary pressures would be offset by exchange rate effects due to the inflow of foreign currency into the country

Source: SSSU, NBU staff estimates.

and a decrease in the risk premium, which would allow for a somewhat looser monetary policy.

However, such projects are not currently included in the baseline scenario, as the development of relevant plans is only at the initial stage, and their implementation in the forecast period is considered an upside risk to the forecast.

### Global commodity market conditions will remain favorable for Ukraine, but there is a risk of increased geopolitical tensions

Global energy prices will fluctuate within a relatively narrow range with a downward trend. In 2024, global crude oil prices will remain at 80–90 USD/bbl. Record-high production volumes in the United States, steady growth in production by Libya, Iran, and Angola amid sluggish demand from China will put downward pressure on prices. On the other hand, the expected pickup in demand in the United States and Europe, in particular due to the gradual easing of monetary policy by leading central banks, will prevent prices from falling. In the coming years, crude oil will become moderately cheaper due to the current oversupply in the market, including due to the increase in production by OPEC+ countries.

Natural gas prices in the European market, despite continued high volatility, will slowly decline over the entire forecast horizon due to increased global LNG production, primarily in the United States, Qatar, and Australia; larger supplies from russia to Asia; growing energy production from renewable sources; and balanced stockpiling. However, geopolitical tensions will remain a key source of uncertainty. Terrorist activity by non-state formations in the Red Sea and the escalation of the war in the Middle East could create significant disruptions in the energy supply chain on the global market. Given the expected revival of demand, this could lead to an offsetting of the supply surplus and an increase in crude oil and gas prices.

Global grain prices will fluctuate within a narrow range, with a weak upward trend due to sustained demand. On the wheat market, a deterioration in weather conditions in the Black Sea region lowered expectations for the harvest of MY 2024/2025, especially in russia. Additional pressures on supply will come from a poorer harvest in the EU and in the west of North Africa. Accordingly, global imports will continue to grow. Improvements in the United States and Australia will not be enough to compensate for the losses of other exporters. As a result, global ending stocks will fall to their lowest level in nine years, which will also put pressure on prices in the coming years. On the corn market, high yields in major exporting countries (the United States, Brazil, Argentina, and Ukraine) amid relatively weak demand will lead to a sizeable increase in ending stocks. which will put pressure on prices in MY 2024/2025. In the United States alone, stocks will reach a 37-year high, according to USDA forecasts. At the same time, lower prices will spur consumption growth, including by ethanol producers. The change in the structure of tax incentives in the United States that is to start in January 2025 is expected to further boost imports of renewable diesel feedstock. As a result, the upward trend in prices will continue throughout the entire forecast period.

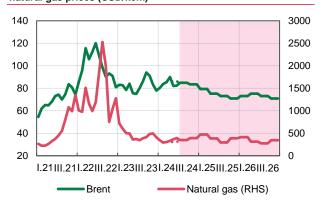


Figure 4.7. World crude oil prices (USD/bbl) and Netherlands TTF natural gas prices (USD/kcm)



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

Source: World Bank, IMF, NBU staff estimates.

Source: World Bank, Refinitiv, NBU staff estimates.

Global steel and iron ore prices will slowly decline. The revival of economic activity in all regions of the world will lead to a faster increase in supply amid higher competition, which will substantially exceed demand. Meanwhile, the intensification of emission control policies in most countries, including the EU, the United States, and China, will force steel companies to step up investments in process improvements and to use only high-quality raw materials for steelmaking. This will keep prices from falling too low.

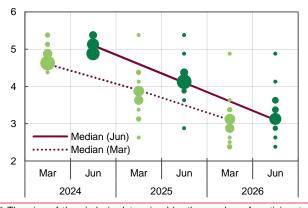
### Global financial conditions, despite a partial easing, will remain tight for longer, given the persistence of inflation

In June, the Fed revised its expectations for the number of rate cuts this year to one, down from the three expected previously, following the release of higher-than-forecast inflation data for the first months of 2024. Most analysts equate fewer rate cuts to their starting later. Traders are predicting a single 25 bp rate cut by November. At the same time, the probability of a second cut by the end of the year is around 77%, given the Fed Chair's comments on encouraging leading inflation data and the Fed's somewhat conservative forecasts.

For its part, the ECB, which cut its rate by 25 bp in June, will continue to take a cautious approach amid high uncertainty, so periods of unchanged rates are likely. However, according to a Reuters poll, analysts expect the deposit rate to be cut another two times by the end of 2024 – in September and December – to 3.25%. Risks are shifted toward fewer cuts. As a result, a smaller rate decrease by the Fed could lead to further depreciation of the euro, which lost almost 3.3% of its value against the U.S. dollar in H1. The NBU assumes that the Fed and the ECB will cut their rates by 50 bp each by the end of 2024, and that they will ease their policies further in 2025.

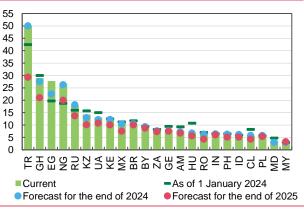
Amid uncertainty over the timing and extent of interest rate cuts, yields on 10-year German and U.S. government bonds, despite some decline, have been hovering at levels that are among the highest in the last 10 years. Expected real rates, inflation, and term premiums continued to point to potentially higher long-term yields in advanced economies compared with their historical levels. Thus, global financial conditions will remain tight in real terms until at least mid-2025.

Figure 4.9. Projected appropriate policy path at the end of the year according to the expectations of the FOMC members, 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





Source: official web pages of central banks, Focus Economics, Oxford Economics, as of 31.07.2024.

EM CBs are being forced to postpone or slow down the pace of monetary policy easing as the Fed keeps rates high in order to maintain the yield spread to keep investors interested. Thus, although the IIF estimates that in June there was an overall inflow of portfolio investment to EMs for the seventh month in a row, the total flow declined significantly.

According to IIF estimates, net capital inflows to EMs will increase by almost a third, to 2.3% of GDP this year. Foreign direct investment flows will remain the most important and relatively stable source of external financing. However, due to the Fed's "higher and longer" monetary stance, the expected volume of capital inflows may be considerably

lower. In addition, there are still risks associated with the further escalation of geopolitical conflicts, the return of inflationary spikes, and, consequently, a tighter stance by the Fed. In the face of a significant number of risks, next year EM CBs are expected to slow down their rate cuts and take a wait-and-see approach.

## The balance of risks in the baseline forecast is shifted toward a slowdown of Ukraine's economic growth and an increase in the pressure on prices due to potential tax changes

	Low		
		Medium	High
	<15%	15%–25%	25%–50%
'eak	Renewing the blockade of the western borders or establishing additional restrictions on access to the European market		
In the baseline sce Moderate		Intensified emigration Increasing geopolitical tension Quick recovery of damaged energy infrastructure	Potential pass-through to prices of rate hikes or additional taxes
Degree of impact on the baseline scenario Strong Moderate W	Rapid implementation of the large-scale reconstruction plan for Ukraine	Receiving income from immobilized assets of the russian federation Lower volumes of international aid	Prolonged war, escalation, eco-terrorism of the occupiers Larger electricity deficit due to further damage to the energy infrastructure Higher budget needs

#### Macroeconomic forecast (July 2024)

							2	2024					2	2025					:	2026		
Indicators	2020	2021	2022	2023	I	II	ш	IV		forecast 04.2024	I	II	ш	IV	current forecast	forecast 04.2024	I	II	III	IV	current forecast	
REAL ECONOMY, % yoy, unless otherwise stated																						
Nominal GDP, UAH bn	4222		5239	6538	1609	1696	2067	2217	7590	7590	1808	1915	2360	2537	8620	8705	2047	2150	2624	2805	9625	9685
Real GDP	-3.8		-28.8	5.3	6.5	3.7	3.1	2.3	3.7	3.0	1.8	2.8	5.1	5.9	4.1	5.3	5.8	5.2	4.4	4.1	4.8	4.5
GDP Deflator	10.3		34.9	18.5	10.9	11.7	12.7	12.2	11.9	12.7	10.4	9.8	8.7	8.0	9.1	8.9	7.0	6.7	6.4	6.2	6.5	6.5
Consumer prices (period average)	2.7	9.4	20.2	12.9	-	-	-	-	5.8	6.2	-	-	-	-	8.2		-	-	-	-	5.7	5.5
Consumer prices (end of period)	5.0	10.0	26.6	5.1	3.2	4.8	7.9	8.5	8.5	8.2	9.7	8.2	7.3	6.6	6.6	6.0	6.2	5.4	5.4	5.0	5.0	5.0
Core inflation (end of period)	4.5	7.9	22.6	4.9	4.2	5.0	6.1	7.1	7.1	6.7	6.9	5.8	4.8	4.5	4.5	3.6	4.2	3.9	3.6	3.1	3.1	3.0
Non-core inflation (end of period)	5.9	13.5	30.6	5.7	2.4	4.5	10.1	10.0	10.0	10.1	13.1	10.9	10.2	9.0	9.0	8.9	8.5	7.1	7.3	7.1	7.1	7.4
raw foods (end of period)	4.1	11.8	41.6	2.2	-4.9	-6.5	6.3	5.3	5.3	4.9	9.9	9.4	6.3	4.0	4.0	3.2	4.0	3.6	3.2	2.8	2.8	3.0
administrative prices (end of period)	9.9	13.6	15.3	10.7	9.9	13.3	13.6	14.0	14.0	14.7	15.0	11.8	13.6	14.2	14.2	15.5	13.8	11.1	11.8	11.9	11.9	12.1
Nominal wages (period average)	10.4	20.9	6.0	17.4	22.5	15.6	13.0	14.2	16.1	14.8	15.5	17.1	15.2	10.9	14.6	14.2	9.2	9.5	8.6	7.8	8.7	8.6
Real wages (period average)	7.4	10.5	-11.4	3.7	17.7	11.4	5.7	5.4	9.7	8.1	5.6	7.1	6.9	3.7	5.8	6.5	2.6	3.5	3.0	2.5	2.9	3.0
Unemployment rate (ILO, period average)	9.5	9.8	21.1	18.2	-	-	-	-	13.9	14.2	-	-	-	-	11.4	11.9	-	-	-	-	10.3	10.6
FISCAL SECTOR																						
Consolidated budget balance, UAH bn	-224	-187	-845	-1328	-	-	-	-	-1241	-1395	-	•	-	-	-1176	-941	-	-	-	-	-853	-703
% of GDP	-5.3	-3.4	-16.1	-20.3	-	-	-	-	-16.3	-18.4	-	-	-	-	-13.6	-10.8	-	-	-	-	-8.9	-7.3
excluding grants from revenues, % of GDP	-5.3	-3.4	-25.3	-26.9	-	-	-	-	-22.8	-20.7	-	-	-	-	-17.8	-13.5	-	-	-	-	-10.3	-7.5
BALANCE OF PAYMENTS (analytical presentation)																						
Current account balance, USD bn	5.3	-3.9	8.0	-9.7	-3.2	-5.4	-0.5	-5.0	-14.2	-20.2	-4.7	-5.7	-4.8	-3.8	-19.0	-18.2	-5.9	-5.8	-6.2	-5.7	-23.5	-23.1
Exports of goods and services, USD bn	60.7	81.5	57.5	51.1	14.2	13.7	13.6	15.4	57.0	57.1	13.6	12.9	14.2	16.6	57.3	60.8	14.9	14.6	16.2	17.8	63.4	65.6
Imports of goods and services, USD bn	63.1	84.2	83.3	88.8	21.2	22.3	23.6	24.8	91.9	90.3	22.9	22.4	23.8	24.8	93.9	92.3	23.1	22.8	24.5	25.2	95.6	95.3
Remittances in Ukraine, USD bn	12.0	14.0	12.5	11.3	2.6	2.4	2.7	2.9	10.6	11.3	2.8	2.8	2.9	3.1	11.6	12.7	3.1	3.2	3.2	3.3	12.8	13.7
Financial account, USD bn	3.3	-4.4	11.1	-19.0	-6.4	0.3	-2.1	-3.2	-11.4	-19.8	-2.1	-6.0	-4.3	-3.1	-15.5	-19.6	-4.6	-4.4	-5.1	-3.5	-17.6	-17.6
BOP overall balance, USD bn	2.0	0.5	-2.9	9.5	3.2	-5.6	1.6	-1.9	-2.6	-0.3	-2.6	0.3	-0.5	-0.7	-3.5	1.4	-1.2	-1.4	-1.1	-2.2	-5.9	-5.6
Gross reserves, USD bn	29.1	30.9	28.5	40.5	43.8	37.9	42.3	41.2	41.2	43.4	38.6	38.3	38.3	37.3	37.3	44.3	36.2	34.9	34.0	32.0	32.0	39.3
Months of future imports	4.2	4.5	3.8	5.3	5.6	4.9	5.4	5.3	5.3	5.6	4.9	4.9	4.8	4.7	4.7	5.6	4.5	4.3	4.1	3.8	3.8	5.8
MONETARY ACCOUNTS (cumulative since the beginning of the y	ear)																					
Monetary base, %	24.8	11.2	19.6	23.3	3.1	10.5	9.0	15.5	15.5	14.4	2.5	5.7	7.0	12.1	12.1	13.0	0.3	3.6	4.5	10.0	10.0	8.4
Broad money, %	28.6		20.8	23.0	1.7	6.0	9.1	16.1	16.1	14.1	1.6	3.9	5.0	11.4	11.4	12.5	1.4	2.6	4.3	9.2	9.2	7.6
Velocity of broad money (end of year)	2.3		2.1	2.1	-	-	-	-	2.1	2.2	-		-	-	2.2		-	-	-	-	2.2	2.3

#### National Bank of Ukraine

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	8.5	6.6	5.0	In 2024, effects of July drought and higher excise tax hikes; in 2025, fiscal expansion
	0.3	0.6	0	impact
Real GDP growth, %	3.7	4.1	4.8	In 2024, actual data for the Q1 and an increase in the budget deficit; in 2025, a higher energy deficit due to the attacks on energy sector, a slower normalization of conditions in
	0.7	-1.2	0.3	which the Ukrainian economy operates
	7590	8620	9625	
Nominal GDP, UAH bn	0	-85	-60	Lower rates of real economic growth in 2025
Consolidated budget balance (excluding	-22.8	-17.8	-10.3	Higher budget expenditures for defense, social support and reconstruction
grants from revenues), % of GDP	-2.1	-4.3	-2.8	
	-14.2	-19	-23.5	In 2024, redistribution of official financing towards grants; in 2025-26, worse situation in
Current account balance, USD bn	6	-0.8	-0.4	energy sector, more migrants abroad, lower harvests due to slower recovery of cultivated areas
Gross international reserves, USD bn	41.2	37.3	32	Larger interventions due to higher electricity deficit (which will limit exports and stimulate additional imports), longer stay of forced migrants abroad and increased demand for FX
	-2.2	-7.0	-7.3	due to a slower normalization of conditions in which the Ukrainian economy operates
	13.6	12.1	10.3	
Key policy rate (period average), %	0	0.2	-0.1	Response to expected higher inflationary pressures in 2024–2025

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	38.0	31.4	21.1
Migration (net, excluding russia and belarus)	m			-0.2	-0.4	-0.3	0.4
Real GDP of Ukraine's MTP (UAwGDP)	% yoy	6.9	3.6	1.5	2.3	2.8	2.7
Consumer inflation in Ukraine's MTP (UAwCPI)	% уоу	6.4	13.8	7.6	5.6	3.9	2.7
World prices:**							
Steel price, Steel Billet Exp FOB Ukraine	USD/t	615.0	618.1	539.7	517.1	508.1	494.3
Steel price, Steel bliet Exp 1 OD Orialite	% уоу	57.9	0.5	-12.7	-4.2	-1.7	-2.7
Iron ore price, China import Iron Ore Fines 62% FE	USD/t	161.7	121.4	120.6	109.7	87.6	76.2
non ore price, China Import non Ore Filles 62% FE	% уоу	48.5	-24.9	-0.7	-9.0	-20.1	-13.0
Steel price, No.1 Hard Red Winter, ordinary protein,	USD/t	265.8	360.2	272.3	225.2	242.5	247.3
Kansas City	% уоу	43.3	35.5	-24.4	-17.3	7.7	2.0
Corn price, Yellow #2 Delivery USA Gulf	USD/t	259.4	318.4	252.7	198.8	215.3	223.3
Complice, reliow #2 Delivery USA Gui	% yoy	56.8	22.7	-20.6	-21.3	8.3	3.7
Oil price Drept	USD/bbl	70.4	99.8	82.6	84.1	74.7	73.1
Oil price, Brent	% уоу	66.5	41.8	-17.2	1.8	-11.2	-2.1
Nietuwal waa wafaa - Nieth ada ada <del>1715</del>	USD/kcm	574.8	1355.9	465.6	354.6	384.7	336.5
Natural gas price, Netherlands TTF	% уоу	399.9	135.9	-65.7	-23.8	8.5	-12.5
Volumes of gas transit	bcm	41.6	20.6	14.6	15.0	0.0	0.0
Harvest of grain and leguminous crops	t m	86.0	53.9	59.8	53.7	57.9	61.7
Minimum wage**	UAH	6042	6550	6700	7775	8370	8950

\* Actual data

\*\* Annual average.

### Terms and Abbreviations

NPP	Nuclear power plant	NEER	Nominal effective exchange rate				
GDP	Gross domestic product	NFC	Non-financial corporation				
GVA	Gross value added	T-bills&bonds	Domestic government debt securities				
		UN	United Nations Organization				
HPP	Hydropower plant	OPEC	Organization of the Petroleum				
GMO	Genetically modified organism	OFEC	Exporting Countries				
		MTP	Main trading partner				
STSU	State Treasury Service of	PIT	Personal income tax				
	Ukraine	PFU	Pension Fund of Ukraine				
SCSU	State Customs Service of Ukraine	REER	Real effective exchange rate				
CD	Certificate of deposit	russia	russian federation				
SSSU	State Statistics Service of						
5550	Ukraine						
STA	Single Treasury Account	USA	United States of America				
EU	European Union	TPP	Thermal power plant				
ECB	European Central Bank						
		Fed	U.S. Federal Reserve System				
AFU	Armed Forces of Ukraine	CB	Central bank				
BOI	Business Outlook Index	CES	Centre for Economic Strategy				
IER	Institute for Economic Research	CEE	Central and Eastern Europe				
CPI	Consumer Price Index	EM	Emerging market				
MPC	Monetary Policy Committee	IT	Information technologies				
IMF	International Monetary Fund	PMI	Purchasing Managers' Index				
IOM	International Organization for	UAwCPI	Weighted average of the CPI in Ukraine's MTP countries				
	Migration	UAWCPI	Weighted average of economic				
ILO	International Labour		growth in Ukraine's MTP				
MY	Organization		countries				
	Marketing year	UAwGDP	Ukrainian Index of Interbank				
MFU	Ministry of Finance of Ukraine		Rates				
NBU	National Bank of Ukraine	UIIR					

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