



UKRAINE MACROECONOMIC HANDBOOK

Authors: Benjamin Hilgenstock, Dmytro Krukovets, Mykhailo Rebryk, Andrii Filipov, Anastasiia Zhornova, Oleksandra Kharkhun, Yuliya Ivanus, Dmytro Pokryshka, Lucas Risinger, Dmytro Andryienko, Viktoriia Klimchuk, Yuliya Markuts, Taras Marshalok, and Nataliia Shapoval

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EXECUTIVE SUMMARY

KSE Institute's *Ukraine Macroeconomic Handbook* covers the macroeconomic trajectory for 2026–29, analyzing the remainder of the full-scale war as well as the post-war reconstruction and recovery period. The forecast for key indicators across various sectors of Ukraine's economy is shown in Table 1.

- **We have revised our assumption for the end of the full-scale war from late 2026 to the second half of 2027.** Although the path to a ceasefire and lasting peace remains highly uncertain and could accelerate under favorable military, economic, or diplomatic developments, we consider a longer conflict the more likely outcome. Russia appears prepared to sustain the war despite mounting economic and military pressures, and even if its position continues to deteriorate, negotiations toward a durable peace agreement are likely to take considerable time. Updating this assumption is not intended to signal inevitability, but to provide partners with a realistic basis for assessing Ukraine's medium-term outlook and support needs.
- **The longer war has important implications for Ukraine's macroeconomic outlook across all sectors of the forecast.** Cumulative economic growth will be 3.7 percentage points lower over 2026–29 as war-related disruptions to activity continue; budget needs will be USD 67.0 billion higher, driven primarily by elevated defense and security spending, weaker tax revenues, and lower market financing; the underlying current account deficit (i.e., excluding grants) will be USD 68.8 billion higher due to war needs and Ukraine Support Loan disbursements resulting in higher imports, while exports and foreign capital inflows remain weaker for longer, thereby putting additional pressure on reserves; inflation will be 1.6 percentage points higher on average over the forecast period, and exchange rate depreciation pressures will be stronger (albeit partially offset by foreign financial support), in turn requiring a tighter monetary policy stance.
- **Despite the implementation of the Ukraine Support Loan, Ukraine will now require an additional USD 67.4 billion in financial assistance from its partners over 2027–29.** A longer full-scale war will significantly increase defense and security spending while weighing on budget revenues and delaying access to market financing, raising total financing requirements over and above the previously forecasted levels, which were fully covered by the USL and other support mechanisms. Absent additional funding, Ukraine's ability to defend itself against Russian aggression would be jeopardized, authorities forced to turn to extraordinary means to finance the budget, macroeconomic buffers depleted, and reconstruction critically underfunded.

Table 1: Forecast for key indicators

	2021	2022	2023	2024	2025	2026f	2027f	2028f	2029f
Real GDP growth, %	3.4	-28.8	5.5	2.9	1.8	1.9	2.1	4.5	5.6
Nominal GDP, UAH bn	5,451	5,239	6,628	7,659	8,899	10,043	11,452	13,323	15,494
Nominal GDP, USD bn	200.6	160.5	181.2	190.2	213.4	223.6	242.6	271.0	316.4
Budget bal. x/grants, %GDP	-3.6	-26.7	-26.8	-24.0	-24.6	-19.1	-18.8	-17.8	-12.6
Budget fin. gap, USD bn	...	...	...	...	...	...	19.5 ¹	27.1	20.7
State debt x/ ERA, % GDP ²	43.3	71.6	79.9	83.7	87.3	85.6	87.6	94.6	93.5
Headline inflation, % avg.	9.4	20.2	12.8	6.5	12.7	8.9	10.5	9.7	8.8
Exchange rate (USD), avg.	27.3	32.3	36.6	40.2	41.7	44.8	47.2	49.1	49.0
Policy rate, % avg.	7.5	18.6	22.4	13.7	15.3	15.1	14.4	11.5	11.0
Curr. acc. x/ grants, % GDP	-3.2	-7.0	-13.7	-16.2	-22.4	-32.3	-35.3	-25.3	-14.9
External fin. gap, USD bn	0.2	2.3	-11.4	-2.9	-11.4	-16.2	-2.0	10.6	-4.0
Total reserves, USD bn	30.9	28.5	40.5	43.8	57.3	73.5	75.5	65.0	68.9
Unemployment rate, % avg.	9.9	20.6	18.2	12.7	10.8	10.0	9.5	11.1	8.7
Real wage growth, % avg.	11.5	-14.0	4.5	16.7	8.3	11.4	4.7	5.9	7.5

¹Includes \$4 billion negative gap (i.e., overfinancing) in 2026. ²Based on assumption that financing gap will be closed with loans.

The forecast presented in Table 1 and discussed in more detail below is based on the assumption that the fiscal financing gap resulting from the longer war will be covered by currently uncommitted foreign loans (see [Assumptions](#) section). The executive summary presents the key messages across the main areas of the outlook.

Economic Activity: Longer War Keeps Growth Subdued

The longer war will continue to subdue growth—**1.9% in 2026** and **2.1% in 2027**—as **continued attacks**, particularly on energy and port infrastructure, as well as elevated uncertainty and delayed investment, collectively weigh on economic activity. The recovery is expected to lift growth to **4.5% in 2028** and **5.6% in 2029**, with investment serving as the post-war economy's **primary growth engine, rising to ~24% of GDP** by 2029 from a pre-war base of ~15%. Private consumption is **resilient** on the back of strong real wage growth and is projected to remain elevated after the war as the broader recovery takes hold and refugees return. Government consumption will only fall from its wartime levels once defense needs gradually **recede after 2027**. Exports remain a **drag in 2026** amid attacks on Odesa ports but are expected to **recover beginning in 2028**; imports, meanwhile, will **remain high** throughout the forecast period, shifting from wartime defense goods to reconstruction goods after the war.

State Budget: Funding No Longer Sufficient Under a Longer War

A longer full-scale war will materially worsen Ukraine's **fiscal outlook**. While the reclassification of the EUR 90 billion Ukraine Support Loan (USL) will reduce reported financing needs, it does not change the underlying fiscal position. Higher **defense and security** expenditures (+USD 68.0 billion over 2026–2029), weaker tax revenues, and postponed access to market financing will raise the cumulative budget deficit (excluding grants) to **USD 176.3 billion** and create a **financing gap of USD 67.4 billion**, in stark contrast to the negligible gap projected in the Q2 forecast. A gradual post-war moderation of expenditures will take place, bringing the deficit down to **12.6% of GDP in 2029**. Securing additional external support, preferably as **grants or highly concessional financing**, will be essential to preserve Ukraine's fiscal sustainability and to avoid a destabilizing fiscal adjustment.

State Debt: Sustainability Depends on Financing Terms

Ukraine's state debt is projected to rise throughout the forecast period, with its medium-term trajectory more dependent on the **form of external support** than the size of financing needs alone. In the baseline scenario, where the budget gap in 2027–29 is entirely covered by concessional loans, the debt-to-GDP ratio rises **above 100% (~95% excluding ERA liabilities)** by 2028 and eases only marginally in 2029. Alternatively, financing the gap through **grants or contingent instruments** would lead the debt-to-GDP ratio to **decline throughout the forecast period**—down to **~80% (~72% excluding ERA)** in 2029. **Favorable financing terms** will keep debt servicing manageable, but the accumulated stock of war-era borrowing will remain a central challenge for post-war fiscal sustainability.

Balance of Payments: Foreign Support Critical to Preserve Stability

A longer war will significantly weaken Ukraine's **external outlook** by widening underlying imbalances, even though adequate **foreign financing** would allow reserves to remain at comfortable levels. The current account deficit will be **USD 68.8 billion larger** than in the Q2 forecast over 2026–29, owing to higher defense-related imports, lower exports, and delayed inflows of private capital. Assuming an additional **USD 67.4 billion** of external financing is secured over 2027–29, reserves will remain robust at **close to USD 70 billion (over 6 months of imports)** by end-2029. If these funds do not materialize, Ukraine will face a combination of a **destabilizing reserve drawdown** and **import compression** undermining its defense capabilities. Lastly, reclassifying USL funds from loans to grants improves the headline current account in 2026–27 but does not change the overall **external financing position**.

Inflation: Cost-Push Pressures Keep Inflation Elevated

Inflation is expected to remain **elevated throughout the forecast period** but mostly **below the 10% threshold**, driven initially by **cost-push pressures**—higher global energy prices, war-related supply disruptions, and likely administered tariff increases—before gradually shifting toward **demand-driven inflation** during the post-war recovery period. A stronger harvest could contain near-term headline inflation and reduce the need for additional

monetary tightening, but pressure from **core inflation** and **elevated inflation expectations** will likely persist through **2027**. **True disinflation** is not projected to emerge until 2029, when the economy's productive capacity expands and recovery-related pressures normalize. Upside risks to the outlook include **energy market disruptions** due to a reescalation in the Middle East and **further administered price increases**.

Monetary Policy: Tighter-for-Longer Policy Anchors Inflation Expectations

We expect the NBU to raise the **key policy rate to 15.5%** in October 2026, begin cutting in **March 2027**, and ease to **13.0% by end-2027**. This represents a **tighter-for-longer** path, with slower and shallower easing than we previously projected. Because the rise of headline inflation into double digits in late-2026–early-2027 is likely temporary, the October rate hike would primarily serve as a **signal** meant to **anchor expectations** and ease FX and reserve pressure. Moreover, abundant liquidity and continued credit growth will limit the pass-through of tighter policy to lending. This forecast is **more hawkish than the consensus**—expecting the NBU to prioritize **credibility** and **durable disinflation** over faster normalization—and sees risks as skewed toward later and slower easing.

Exchange Rate: Balancing Depreciation Pressures and Price Stability

The hryvnia is expected to continue its **gradual depreciation path** under the NBU's **managed-flexibility regime**, which allows the exchange rate to adjust to market pressures without defending a specific level but smooths spikes that could trigger market anxiety. The effects of a longer war and wider trade deficits lead to a USD/UAH trajectory that reaches **46.3 by end-2026**, **47.5 by end-2027**, and **49.9 by end-2028**. A modest nominal appreciation is not expected until **2029 (to 48.3)** under improved export capacity and more visible private investment flows. The NBU's framework remains dependent on **continued external financing**, as an accelerated depletion of international reserves could spark a **steeper depreciation path**, including by limiting room for interventions.

Labor Market: Labor Shortages Constrain Growth and Fuel Inflation

Strong wage growth will remain a key inflationary channel throughout the forecast period, driven by **structural labor shortages**. The labor market is expected to stay exceptionally tight until demobilization, when the average unemployment rate is projected to rise from **9.5% in 2027** to **11.1% in 2028**, before investment pulls it back down toward **~9% by 2029**. Real wage growth is projected to continue but decelerate from **11.4% in 2026** to **4.7% in 2027**, before re-accelerating to **6–8% during the recovery** in 2028–29. A longer war, as well as a proposed extension of temporary protection for Ukrainians in the EU until early 2028, will yield return **migration levels that are both later and smaller** than previously assumed. **Reskilling programs, better labor matching, and measures to encourage the return of workers from abroad** will be essential to sustaining reconstruction-led growth.

Special Features: Migration and Forecast Evaluation

Two special features examine the trajectory of Ukraine's **migration and demography**, and the **performance of KSE Institute's 2025 forecasts**. The first special argues that **migration** will be the **decisive demographic variable** in Ukraine's post-war reconstruction and recovery period, with the country's population and labor force shaped by **return migration**, labor-market policies, and societal willingness to absorb immigration. It also considers **sentiment toward migration**, both inward and outward. The second special finds **strong performance for nominal indicators**—including inflation, the exchange rate, and the policy rate—in 2025 forecast editions. Forecast errors for real GDP largely reflected more **severe wartime disruptions** than assumed, underscoring the importance of **transparent and well-defined war-related assumptions** in macroeconomic forecasting.

ASSUMPTIONS

Assumptions are a major challenge given the extraordinary situation that Ukraine has been facing for more than four years. In particular, the war's future trajectory is not predictable, while it is the key factor influencing effectively all macroeconomic indicators and policy decisions in Ukraine and abroad. Assumptions underlying the analysis and forecast for 2026–29 in the *Ukraine Macroeconomic Handbook* are based on expert judgments by the KSE Institute team and are summarized in Table 2 below.

For the purposes of the Q3 forecast, we have changed our assumption regarding the end of the full-scale war, delaying it from the end of 2026 to the second half of 2027. With that said, the process that will ultimately lead from the current entrenched situation to serious negotiations, a ceasefire, and, ultimately, a peace agreement, is by no means linear and does not follow any clear set of rules. Thus, it is possible that the war could be brought to an end this year by an accelerated deterioration of Russia's economic and fiscal position, Ukrainian gains on the battlefield and strikes against Russian military logistics and energy infrastructure, as well as a renewed diplomatic push and stepped-up economic pressure campaign from Ukraine's allies. However, it is more likely that considerable time will pass before the Kremlin deems the cost of continuing the war unsustainable and even its limited military objectives in the Donbas unachievable. The regime's commitment to the war appears sufficiently strong to stay the course, even if the current trajectories of the war and Russia's economy suggest that Russia's position will continue to deteriorate with every passing month. While acknowledging that it is extremely difficult to determine a revised timeline for the war's termination, we ultimately believe that, after Russia's intentions finally change, considerable time will still be required to reach a lasting peace agreement through negotiations. Thus, we conclude that the second half of 2027 is a justifiable assumption. Finally, the decision to update the war termination assumption was made now not because of its inevitability, but in order to inform discussions in partner countries about what financial and military support will be necessary in case of a longer war. The *Ukraine Macroeconomic Handbook* aims to answer the question of short-to-medium term needs as clearly and transparently as possible.

Table 2: Foreign support

<i>USD billion</i>	2021	2022	2023	2024	2025	2026	2027	2028	2029
Macrofinancial support	7.5	31.3	42.4	41.4	50.3	46.0	23.9	17.3	17.1
Ukraine Support Loan ¹	...	...	...	...	...	19.3	16.0	...	...
ERA	...	...	...	1.0	36.1	8.2	1.7	...	...
EU (MFA and Facility)	...	8.0	19.4	17.4	11.8	9.3	2.3	...	...
IMF programs	0.7	2.7	4.5	5.3	0.9	2.9	1.9	1.3	1.1
EU MFF 2028–34 ²	...	...	...	...	...	...	...	16.0	16.0
Other ³	6.8	20.6	18.5	17.7	1.5	6.3	2.0	0.0	0.0
Uncommitted support⁴	...	...	...	...	...	...	19.5	27.1	20.7
Military support⁵	...	39.2	50.4	44.3	40.4	78.6	84.7	***	***
Through state budget ⁶	...	7.3	22.2	19.4	22.9	37.0	42.4	13.5	15.8
o/w USL ¹	...	...	...	...	...	32.6	37.5	...	...
Outside of budget ⁷	...	31.9	28.1	24.9	17.5	41.5	42.3	***	***

¹ We assume that EUR 30 billion will be provided in the form of macro-financial assistance or through the Ukraine Facility, while the entire EUR 60 billion for defense-industrial capacity building will go through the state budget. ² EUR 100 billion are to be provided within the 2028–34 EU multiannual financial framework (MFF); the total is evenly distributed between years. ³ Includes funds provided through the World Bank. ⁴ Funding needed to fill the budget financing gap but not yet secured. 2027 number reflects sum of 2026 and 2027 financing gaps. ⁵ Data for total military support in 2022–25 from Kiel Institute's Ukraine Support Tracker and converted to USD at market exchange rates; captures commitments instead of disbursements. ⁶ Historical data based on "own receipts of budgetary institutions" in the state budget; USL plus 2% of GDP in 2026–27; 5% of GDP in 2028–29. ⁷ Calculated as residual for 2022–25, with uncertainty due to different methods of valuation of in-kind contributions; EUR 70 billion per year NATO commitment minus USL and other on-budget spending in 2026–27; no information for 2028–29.

The future trajectory of the Iran war is already uncertain, but we assume that hostilities will not re-escalate to previous levels and that disruptions to global energy markets will gradually subside. There are serious risks that diplomatic efforts to reach a peace agreement and a reopening of the Strait of Hormuz will not persist, especially as the war's first ceasefire unraveled in mid-July and both sides presented incompatible visions of a post-war status quo in the region. However, we believe that the US and Iran fundamentally have an interest in avoiding a return to all-out war. In any case, the aftereffects of the Strait of Hormuz crisis will weaken only gradually, and energy markets will need considerable time to return to their fundamentals as destroyed refineries and LNG plants require repairs. In addition, many countries—most importantly China—will need to refill their strategic oil reserves, which will keep upward pressure on prices. Once the Strait of Hormuz is fully reopened, we assume that global energy markets will be significantly oversupplied. Inflationary pressure should, thus, be contained, while sharply lower prices will significantly increase pressure on Russia.

Foreign assistance remains critically important for Ukraine's macroeconomic stability, as well as its budget and external financing. We assume that Ukraine will receive USD 104.3 billion in already committed macrofinancial support over the forecast period (see Table 2). The most important drivers are the EU's Ukraine Support Loan (USL), a new four-year IMF Extended Fund Facility (EFF) program, and significant funding from the EU's 2028–34 Multiannual Financing Framework (MFF). While total committed support is largely unchanged from the Q2 edition, changes to the accounting were implemented to better distinguish macrofinancial assistance, military support through the budget, and military support outside of it. EUR 30 billion (~USD 35 billion) of the USL will be provided as macrofinancial assistance and partially channeled through the Ukraine Facility. We have made two important changes to our USL-related projections compared to the Q2 edition of this publication: *First*, we now assume that the entirety of the EUR 60 billion (~USD 70 billion) in USL funding for defense-industrial capacity building will go through the state budget. *Second*, we now classify all funds under the USL—whose repayment is conditional on the receipt of reparations from Russia—as grants instead of loans. While this does not change the overall fiscal and external financing picture, it does cause important shifts within the budget (moving money from financing to revenue) and the balance of payments (moving money from the financial to the current account). The assumptions table now also contains an “uncommitted financing” item, which amounts to USD 67.4 billion over 2027–29. This is needed for the integrity of the modeling exercise, as the longer war creates a substantial budget financing gap that must be incorporated across sectors. We assume that this yet-to-be-secured financing will consist of additional foreign loans in our base case.

In addition to budgetary support, Ukraine receives substantial military support from its allies. Ukraine has received USD 40–50 billion in such support per year since the start of the full-scale invasion (based on data from the Kiel Institute's [Ukraine Support Tracker](#)). Military support has partially been channeled through the state budget—where it is registered as own receipts of budgetary institutions (i.e., budget revenues) and as special fund expenditures—and partially provided outside of the budget (see Table 2). Projections and assumptions regarding military support are challenging, particularly for the off-budget portion. For 2026–27, there is some more clarity due to the USL and the [NATO Ankara Summit Declaration](#). Under the USL, Ukraine is projected to receive USD 32.6 billion in 2026 and USD 37.5 billion in 2027 through the budget, and NATO allies recently committed EUR 70 billion (~USD 82 billion) in total funding for each year. Because the USL's defense financing comes overwhelmingly from EU member states that are themselves NATO allies, we assume that the USL's funds are included in this number. In addition to the USL funds, we expect military support equivalent to 2% of Ukraine's GDP to go through the budget in 2026–27, with the remainder—USD 41.5 billion in 2026 and USD 42.3 billion in 2027—provided outside of it. Altogether, this enables Ukraine to fulfill its defense spending needs in 2026, with \$143.0 billion of total funding available (USD 101.5 billion in the budget and USD 41.5 billion outside of it). For 2027, we project total defense and security funding of USD 155.2 billion (USD 112.9 billion in the budget and USD 42.3 billion outside of it), conditional on the provision of USD 19.5 billion of yet-uncommitted financing. For 2028–29, when defense needs will remain high due to the persistent risk of future Russian aggression even

after the end of the full-scale war, we assume that Ukraine will receive 5% of GDP in military assistance within the budget, but further support will need to be secured within the budget and outside of it. It should be mentioned, however, that these figures include USL funds specifically earmarked for defense-industrial base investments that are not immediately comparable to previous years' defense and security expenditures.

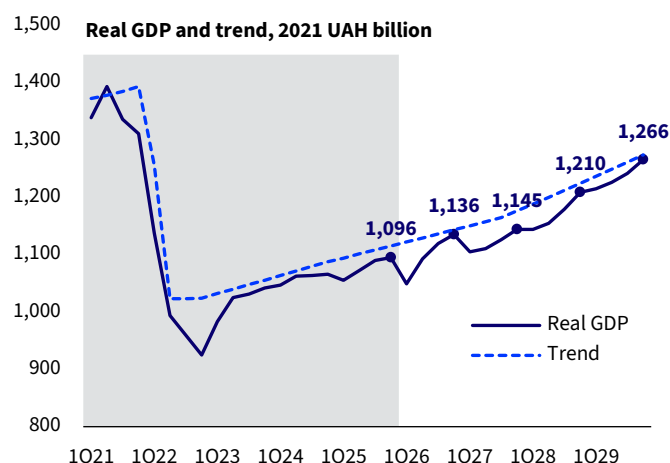
Risks to the forecast are considerable as the war continues to shape virtually all dimensions of Ukraine's economic, financial, and political outlook. Continued attacks on critical infrastructure, persistent labor shortages, subdued private investment, weak export performance, and large reconstruction financing needs constrain economic activity and the recovery. External vulnerabilities remain elevated, including uncertainty over the durability of international support and global energy market developments, while domestic challenges such as governance, human capital losses, and limited institutional capacity weigh on the medium-term outlook. At the same time, the overall risk environment has improved modestly. The unblocking of major international financial support (i.e., the USL's implementation following the removal of the Hungarian veto) has reduced fiscal and external financing risks, while frontline stabilization and related developments have somewhat lowered geopolitical risks. Nevertheless, these gains remain fragile and are fundamentally contingent on sustained external support and the future course of the war. KSE Institute undertakes a comprehensive quarterly assessment of key risks facing Ukraine in its ***Ukraine Risk Matrix***.

ECONOMIC ACTIVITY

The extension of the war into 2027 keeps growth near 2% for an additional year and delays the recovery to 2028. Real GDP growth is projected at 1.9% in 2026 and 2.1% in 2027, down from 2.3% and 4.1% in the previous forecast due to the revised assumption of the full-scale war's end in the second half of 2027 and worse-than-expected current economic dynamics; it is then expected to accelerate to 4.5% in 2028 and 5.6% in 2029, with the economy closing the negative gap only in the end of 2029 (see Figure 1). This year began on a weak note: real GDP contracted by 0.6% y-o-y in Q1 2026, as intensified strikes on the energy system disrupted production during the winter. Current attacks on the Odesa port and subsequent costly rerouting may reduce agricultural exports, further weighing on GDP in 2026. At the same time, the wartime growth model remains intact: large-scale external financing (see *State Budget and Financing* section) sustains domestic demand, with private and government consumption together contributing ~9 pp to growth in 2026. However, a substantial part of the demand does not translate into domestic production; surging imports subtract 9.6 pp and compress headline growth to below 2%. Once the war ends, growth drivers fundamentally change: demobilization and lower military needs turn government consumption into a heavy drag in 2028–29, while recovering private demand and, above all, the normalization of war-inflated imports more than offset it, lifting growth to 4.5–5.6% (see Figure 2).

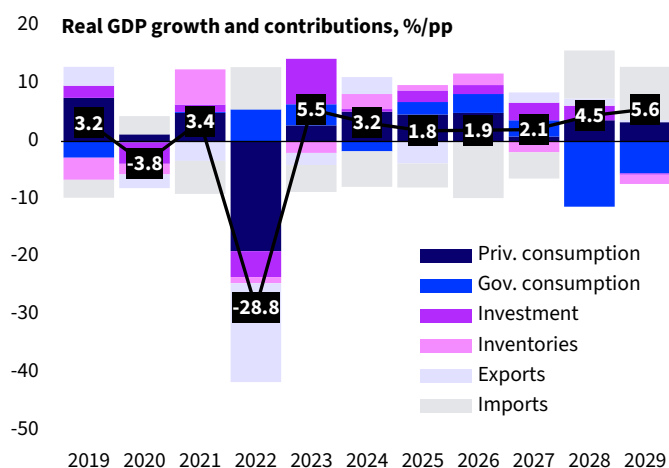
Private consumption remains the main engine of growth, with different factors driving it across the forecast horizon. Household spending expanded by 7.2% in 2025, contributing 4.4 pp to GDP growth, and its momentum has carried into 2026: private consumption rose 11.0% y-o-y in Q1, and retail trade turnover was still up 9.0% in January–June. We expect y-o-y growth of 8.8% (+5.7 pp) in 2026, supported by continued real salary growth, fiscal transfers, military-related incomes, and falling inflation. As a result, household consumption rises to ~69% of GDP from 65% in 2025, with an increasing share of the demand met by imports. In 2027, its momentum breaks: growth slows to 1.5% (+1.0 pp) as inflation above 10% erodes real incomes and businesses under tightening margins restrain compensation. In the post-war phase, consumption is set to re-accelerate to 5.3% in 2028 and 4.7% in 2029 (+3.7 and +3.3 pp, respectively), supported by improving security conditions, returning labor supply and the reintegration of demobilized personnel, and income normalization, maintaining its share near 69% of GDP.

Figure 1: Economic growth will remain subdued in 2026–27, before picking up after the full-scale war.



Source: SSSU, KSE Institute

Figure 2: Transformation of growth drivers will be delayed as war is assumed to continue into 2027



Source: SSSU, KSE Institute

Government consumption carries the economy through the extended war but then becomes its single largest drag, as military spending normalizes and external financing declines. Public consumption expands by 8.4% and adds +3.3 pp to GDP growth in 2026, lifting its share to a record 41% of GDP (2025: 39%; pre-war: ~20%), driven by elevated defense expenditures, social support, and critical public services—largely financed by foreign assistance. The within-year profile is uneven: government spending declined 1.6% y-o-y in Q1 as delayed external disbursements forced restraint, before re-accelerating from June, when more than \$15 billion in official external financing was disbursed and budget amendments expanded the spending envelope. In 2027, government consumption is projected to grow a further 6.9% (+2.8 pp), peaking at 43% of GDP. From 2028, demobilization and the decrease in military spending reverse the trajectory: public consumption contracts by 26% (-11.3 pp) in 2028 and another 18% in 2029 (-5.5 pp), with its share falling to 31% and then 24% of GDP. Nonetheless, its share of GDP will remain well above pre-war levels, reflecting persistent defense and security needs as well as support for veterans and IDPs.

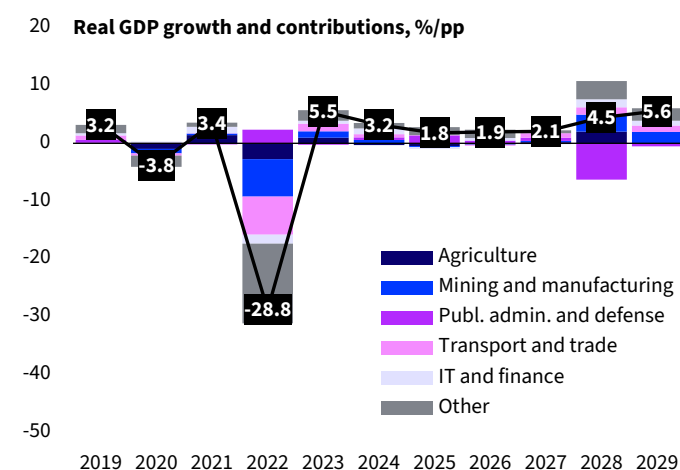
Investment stays on an accelerating path as Ukraine transitions to an investment-led growth model. Gross fixed capital formation is projected to grow 8.0% in 2026 (+1.6 pp) despite war-related risks and the high cost of capital, concentrated in donor-supported energy repair, fortification works, and defense-industrial capacity building. Growth is then projected to accelerate to 14.9% in 2027 (+3.1 pp) as financing under the EUR 90 billion Ukraine Support Loan scales up, and remain strong at 10.7% in 2028 (+2.5 pp) as large-scale reconstruction begins. The investment share of GDP rises from 19% in 2025 to 21% in 2026, 23% in 2027, and ~25% in 2028, remaining near those levels through 2029, well above the pre-war average of ~15%. Inventory changes add 2.0 pp in 2026, consistent with the observed restocking, as construction-materials output expands and gas accumulation needs rise, before subtracting 1.9 pp in 2027 and playing a minor role thereafter.

Net exports subtract almost 10 pp from GDP growth in 2026, and their normalization becomes the recovery's largest issue thereafter. Exports are projected to decline by 0.8% in real terms in 2026 (-0.2 pp). Russian strikes on Odesa, Chornomorsk, and Izmail have knocked out Black Sea port export capacity, prompting some traders to pause purchases, while tariff quotas under the revised DCFTA have cut Ukrainian grain flows to the EU. Agricultural products remain the only expanding export line (+10% y-o-y in January–May). Imports, in contrast, surge by 18.5% (-9.6 pp) in 2026, lifting their share to 60.3% of GDP, on defense procurement, machinery and equipment (+32.7% y-o-y in January–May), and energy purchases at prices inflated by the Iran war. In 2027, exports are set to recover by 7.1% (+1.8 pp) while imports grow 7.5% (-4.5 pp), with the import share peaking at 64% of GDP. Over 2028–29, the external position flips: war-related and aid-financed imports wind down, with real imports falling 13.1% and 17.5% and contributing +8.3 and +9.2 pp to GDP growth, respectively, and the import share returning to 41% of GDP by 2029. Meanwhile, exports are expected to grow by 4.7% in 2028, partially thanks to the strengthened

defense-industrial base, and expand more moderately over that higher base in 2029. Most importantly, the external adjustment comes primarily through import normalization (see [Balance of Payments](#) section).

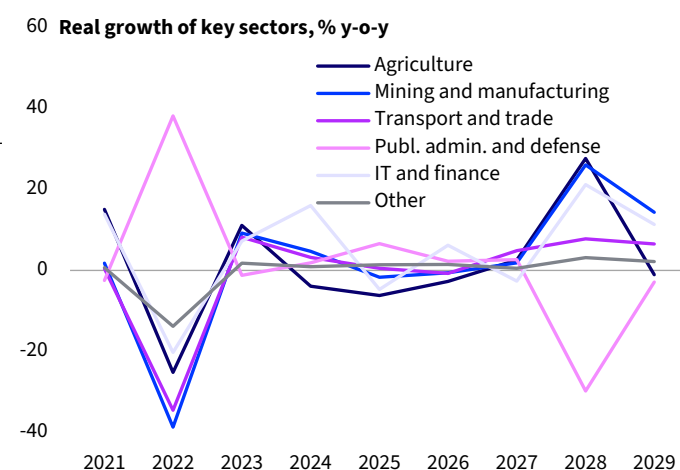
Sectoral dynamics in 2026 split the economy in two: war-exposed physical sectors contract, while state-linked activity and services keep growth positive. Agriculture (-2.7%), mining (-7.8%), energy (-4.3%), and transport (-2.6%) all shrink in 2026 under strikes, degraded logistics, rising costs, and stagnating trade. The offset comes from construction (+16.7%), financial services (+15.4%), education (+7.5%), public administration and defense (+2.3% on a ~21% GDP weight, +0.5 pp), and taxes on products (+0.8 pp, the largest single sector-side contribution). In 2027, the expected rebound will be broad but shallow: energy (+8.7%), transport (+6.8%), and trade (+4.2%) recover as the 2026 outliers normalize. From 2028, the structure shifts: public administration and defense is projected to contract by ~30% (-6.3 pp), with its GDP weight falling to the 13–14% range by 2029, while agriculture, extractive industries, manufacturing, transport, and ICT all rebound at double-digit rates (see Figure 3 & Figure 4). By 2029, manufacturing becomes the largest single growth driver (+1.7 pp), with its share of GDP rising from 8% to 11% over the forecast period.

Figure 3: Mining and manufacturing, agriculture, and IT/financial services will drive the recovery.



Source: SSSU, KSE Institute

Figure 4: Double-digit growth of key sectors will offset the sharp contraction in public administration.



Source: SSSU, KSE Institute

Agriculture is under acute logistics pressure today but holds the largest single-year rebound potential of the recovery. Output is projected to decline by 2.7% in 2026: the loss of Black Sea port capacity, quota-capped access to the EU market, and costlier Danube, rail, and road alternatives compress margins and weaken forward planting incentives, even as agriculture remains the only expanding goods-export category. A modest recovery of 2.6% is set to follow in 2027, before a significant rebound for the sector in 2028, serving as the largest sectoral contribution of the recovery's first year and contributing 2.0 pp to GDP growth. The rebound will be facilitated by restored seaborne logistics, improved security in frontline regions, and land returning to cultivation. Beyond 2028, growth is projected to level off from the high base, while adaptation to EU regulatory requirements on the accession path may temporarily add costs for producers.

Industrial output has stalled, and energy remains the binding constraint on any broader industrial recovery. Industrial production rose just 0.3% y-o-y in May, with the utilities segment still deeply negative (-11.5%) as accumulated damage to generation and distribution capacity caps supply. Energy-sector value added is projected to decline by 4.3% in 2026 before recovering by 8.7% in 2027 as repairs, decentralized generation, and donor-financed investment take effect, being the critical precondition for unlocking the >4% growth path from 2028 onward.

The extractive sector is stabilizing around a gas-led core, but a broad recovery cannot occur until the post-war period. In May, extractive output rose 2.8% y-o-y, supported by a 10.3% increase in natural gas production as storage is replenished ahead of the 2026–27 heating season; coal (-25%) and other mining and quarrying (-21.3%)

remained under pressure from weak construction-linked demand and structural decline, while the contraction in metal-ore extraction eased to -6%. For 2026, mining value added is projected to decline by 7.8%, as weak ore and coal segments outweigh gas, the EU's CBAM implementation adds competitive pressure on carbon-intensive exports, and exports overall becomes costly amid broken logistic chains. Stabilization will follow in 2027 (+2.2%), with a stronger post-war recovery driven by reconstruction demand, investment in critical raw materials aligned with the EU Critical Raw Materials Act, and deeper integration into European industrial value chains.

Manufacturing is splitting into a booming defense segment and a squeezed civilian base, which will shape the sector until the war ends. Output rose 1.8% in May y-o-y, masking a widening divergence: production of computers, electronic and optical products (+77.9%), machinery and equipment (+32.7%), and fabricated metals (+15.5%) is being driven by sustained defense procurement and drone and missile production, with non-metallic mineral products (+15.9%) supported by fortification and regional reconstruction demand. Civilian-oriented industries, by contrast, are contracting sharply: electrical equipment (-26.8%), motor vehicles (-9.4%), and wearing apparel (-39.2%) are under cost pressure (manufacturing PPI at 39.1% in June 2026), labor shortages, and weak demand. Sector value added is projected to grow by 2.2% in 2026 and 1.7% in 2027 as energy and cost constraints persist. The defense-industrial expansion of 2026–27, however, strengthens the production base from which the post-war recovery can proceed: with reconstruction demand, reindustrialization, and capital inflows added, manufacturing is projected to grow at double-digit rates in 2028–29, lifting its GDP share from 8% to 11%.

Construction is contracting now but remains the clearest expression of the coming investment cycle. Output fell 17.8% y-o-y in May, with every segment contracting: civil engineering (-20.4%) on weaker activity outside priority infrastructure, non-residential (-18.1%) on weak private investment and elevated security risks, and residential (-5.9%) on cautious sentiment, with rising costs adding pressure across segments. But notably, several construction-materials industries continued to expand, pointing to inventory accumulation ahead of expected demand from infrastructure, reconstruction, and defense projects. The projected growth for 2026 therefore implies a strong second half, as the external disbursements that resumed in June allow donor-funded energy repair, fortification, and defense-industrial construction to scale up. In 2027, activity will once again pull back (-10.8%) as works concentrate in a narrow set of priority projects and private demand stays weak, before reconstruction in earnest takes over from 2028, when construction becomes one of the fastest-growing sectors in the economy.

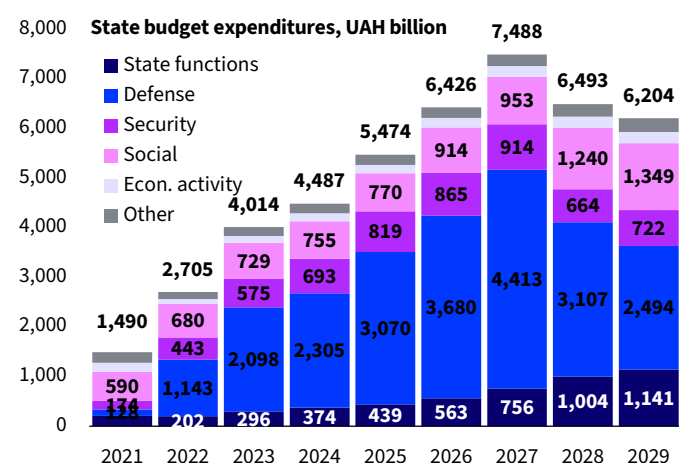
Transport volumes mask a structural downgrade of Ukraine's logistics network. In May, freight volumes rose 1.4% y-o-y on strong road haulage (+35.6%), but freight turnover fell 16.3% as rail contracted sharply (volumes -18.4%, turnover -28.8%). Shorter, less efficient routes are replacing long-haul export flows, while strikes on port and railway infrastructure add recurring disruptions; passenger traffic also declined by 0.4%. Sector value added is projected to fall by 2.6% in 2026 before recovering by 6.8% in 2027 and expanding by more than 20% in 2028 as seaborne and rail export logistics are restored, which will make transport, alongside energy, one of the recovery's principal enabling sectors.

STATE BUDGET AND FINANCING

A continuation of the full-scale war beyond 2026 would significantly alter the trajectory of Ukraine's public finances, whereas the reassessment of USL funds leads to important shifts in budget accounting. *First*, a longer war will require significantly higher defense and security spending (+USD 68.0 billion) over 2026–29 as a gradual reduction will not be possible until at least 2028, with the biggest change compared to the Q2 forecast materializing in 2027 (+USD 43.0 billion); all other spending increases by USD 3.8 billion. *Second*, longer war-related disruptions to economic activity will reduce tax revenue collection by USD 12.6 billion over the forecast period. *Third*, the treatment of the USL's macrofinancial assistance components as grants creates USD 35.3 billion in additional

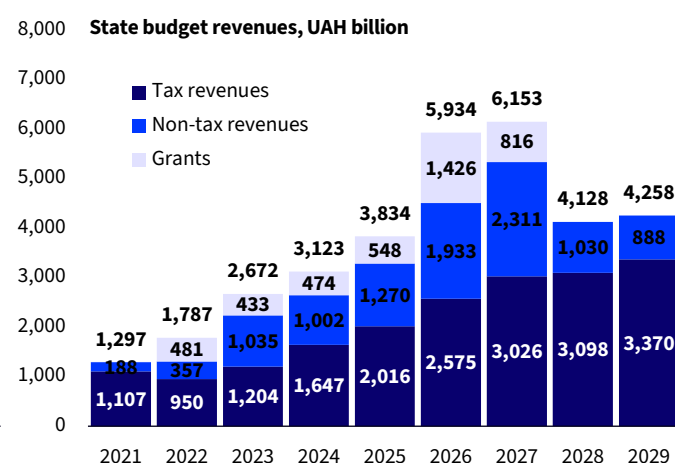
revenues. *Fourth*, the fact that the USL's defense portion will be channeled through the state budget in its entirety increases other revenues of budgetary institutions (i.e., non-tax revenues) by USD 70.1 billion over 2026–29. At the same time, we assume that more than USD 25 billion in previously assumed bilateral military support will be subsumed into the USL flows (while still being accounted for as non-tax revenues). *Fifth*, new foreign loans are reduced by USD 56.5 billion as they previously included macrofinancial support under the USL (now grants) and USD 21.6 billion in USL defense funding (now non-tax revenues). *Sixth*, market-based financing will be considerably lower (USD 5.2 billion) due to the delayed ability to issue Eurobonds and the absence of non-resident absorption of domestic bonds during the war. Altogether, we estimate that the budget financing gap will reach USD 67.4 billion over 2026–29, compared to a negligible gap of USD 0.4 billion identified in the Q2 forecast. This amount is included as “uncommitted financing” in the assumptions table and incorporated into the model across sectors.

Figure 5: The longer war will lead to markedly higher spending needs over 2027–29.



Source: Ministry of Finance, KSE Institute

Figure 6: USL funds will support state budget non-tax revenues and grants in 2026–27.



Source: Ministry of Finance, KSE Institute

Defense and security expenditures will be markedly higher due to the longer war. In our Q2 forecast, we assumed that an end to the full-scale war would allow Ukraine to gradually decrease defense and security spending—by ~30% in the first year after a peace agreement (i.e., 2027) and an additional 10% by 2028 compared to 2026. With the war now expected to continue into H2 of 2027, this will no longer be possible. We now expect defense and security spending to rise from UAH 3.9 trillion (USD 93.3 billion) in 2025 and UAH 4.5 trillion (USD 101.5 billion) in 2026 to UAH 5.3 trillion (USD 112.9 billion) in 2027 (see Figure 5). This reflects the need to sustain and further strengthen Ukraine’s military capabilities during a prolonged war, including readiness for potential further escalations, and preserve the operational capacity of the armed forces and other security institutions. Accordingly, the forecast assumes the continuation of mobilization efforts, the potential expansion of military personnel, further development of the domestic defense-industrial base, and large-scale procurement of military equipment and weapons from both domestic and international suppliers.

At the same time, even amid rising financing needs, the government has already demonstrated its ability to improve the efficiency of existing budget resources. A recent example is the introduction of a new military contract model, which provides substantially higher compensation for infantry personnel and selected categories of service members without requiring additional budgetary allocations. The necessary funding was secured through internal reallocations within the Ministry of Defense budget, primarily by optimizing military procurement programs. This demonstrates that improvements in procurement and operational efficiency can become an important instrument for strengthening fiscal sustainability, either by reducing the need for additional funding or by significantly increasing defense capabilities without expanding overall expenditure. These gains should be crystallized into standing practice, insulated from political shocks, and continuously expanded. Embedding procurement and operational optimization as a permanent process of auditing and

improvement would convert efficiency into a more durable fiscal buffer, cushioning the budget against underfinancing shocks and the intra-year gaps that arise when external disbursements are delayed.

After the war, a gradual moderation of defense and security expenditures can take place, bringing spending to UAH 3.8 trillion (USD 76.8 billion) in 2028 and UAH 3.2 trillion (USD 65.6 billion) in 2029. Although the adjustment of the defense budget is expected to be spread out over several years following the end of the war, the most significant reductions are projected to occur during the first two post-war years (2028–29). This would primarily reflect large-scale demobilization, a gradual decline in military procurement, and a reduction in international military assistance. Altogether, this means that defense and security expenditures would rise by UAH 3.7 trillion over 2026–29.

Despite the dominant role of defense and security spending, the forecast also envisages continued growth in other expenditures as the post-war period is expected to see a gradual shift in fiscal priorities toward civilian sectors. Non-defense and security spending is projected to increase from UAH 1.6 trillion (USD 38.0 billion) in 2025 to UAH 1.9 trillion (USD 42.0 billion) in 2026, UAH 2.2 trillion (USD 45.8 billion) in 2027, UAH 2.7 trillion (USD 55.5 billion) in 2028, and UAH 3.0 trillion (USD 60.9 billion) in 2029. This growth will be driven both by inflation-related increases in social sector spending and by higher expenditures on general public services, particularly debt servicing costs and the maintenance of public administration. In particular, expanded support programs for veterans and internally displaced persons (IDPs), higher social expenditures, and substantial investments in the reconstruction of damaged infrastructure and broader post-war recovery efforts will take up significant fiscal resources. For 2026–29, we project a total increase in non-defense and security spending amounting to UAH 600 billion compared to the previous forecast.

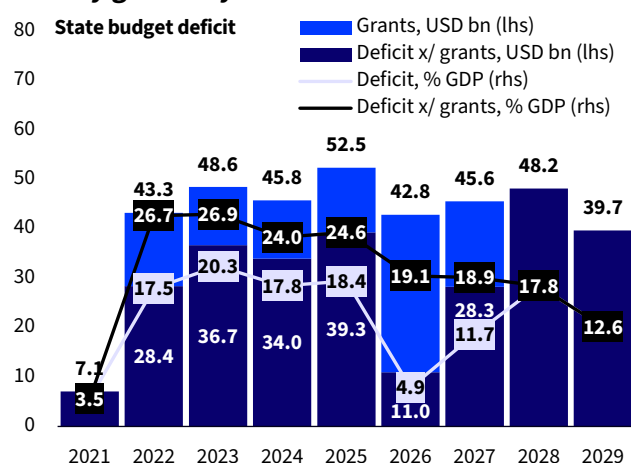
Total budget expenditures are projected to rise considerably during the war on the back of markedly higher defense and security spending before moderating in the post-war period. We project spending of UAH 6.4 trillion (USD 143.5 billion) in 2026 (+17.4% vs. 2025), UAH 7.5 trillion (USD 158.7 billion) in 2027 (+16.5% vs. 2026), UAH 6.5 trillion (USD 132.3 billion) in 2028, and UAH 6.2 trillion (USD 126.5 billion) in 2029. For 2026–29, this means a cumulative increase of UAH 4.4 trillion compared to the previous forecast.

On the revenue side, the wartime fiscal story is defined by two opposing forces: large foreign support and subdued tax revenues due to the war's disruptions of economic activity. As mentioned in the [Assumptions](#) section, we have changed our view on the accounting of USL funds and now incorporate the entire EUR 90 billion (USD 105.4 billion) as revenues within the state budget. Specifically, the USL's macrofinancial assistance component (amounting to USD 35.3 billion) is classified as grants, while the defense portion (amounting to USD 70.1 billion) is classified as "other revenues of budgetary institutions," i.e., non-tax revenues. Altogether, we project grants and non-tax revenues of UAH 6.5 trillion (USD 141.3 billion) in 2026–27 before they drop to an average of UAH 1.0 trillion (USD 19.5 billion) in 2028–29. Tax revenues, on the other hand, are tied to the overall macroeconomic outlook—nominal GDP growth, household consumption, imports, wage dynamics, and inflation—which will be significantly impacted by a longer war. We project that tax revenues will reach UAH 2.6 trillion in 2026, UAH 3.0 trillion in 2027, UAH 3.1 trillion in 2028, and UAH 3.4 trillion in 2029 (see Figure 6). Altogether, total revenues are expected to reach UAH 5.9 trillion in 2026, UAH 6.2 trillion in 2027, UAH 4.1 trillion in 2028, and UAH 4.3 trillion in 2029—an increase of UAH 3.7 trillion over the previous forecast. However, it bears repeating that a considerable portion of this change simply represents an accounting shift from budget financing to revenues and, thus, does not fundamentally alter Ukraine's headline budgetary needs.

As external wartime inflows (i.e., grants) are likely phased out after 2027, the medium-term fiscal base will again be anchored primarily in domestic tax revenues and the recovery of the nominal tax base. Domestic VAT will continue to track nominal consumption and output, while import VAT and duties will depend on import dynamics, customs administration improvements, lower shadow imports and the likely removal of customs exemptions for low-value postal shipments. Excise revenues will be supported by the scheduled increase in tobacco and fuel rates toward EU levels. PIT and military levy receipts will reflect wage dynamics, military

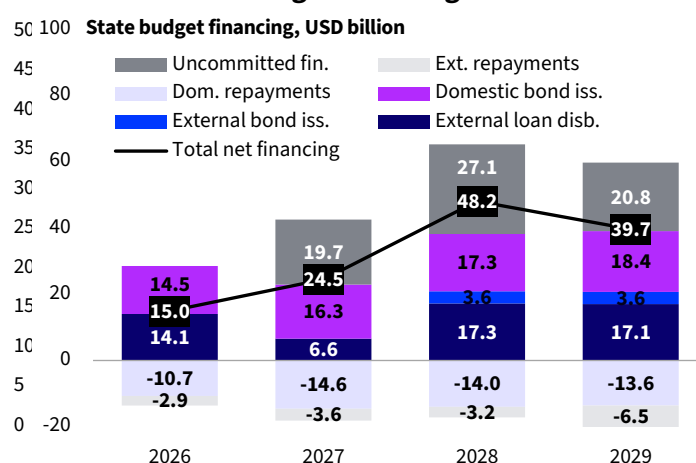
personnel allowances, and the expected taxation of income earned through digital platforms. Corporate income tax revenues will remain supported by the higher tax rate for banks, while rent payments are expected to stay constrained by weak extraction activity in 2026–2027 before a gradual recovery later in the forecast period. No additional tax policy or administrative factors are assumed to materially alter the tax revenue path.

Figure 7: The budget deficit excluding grants will only gradually decline over 2026–29.



Source: Ministry of Finance, KSE Institute

Figure 8: Additional foreign support will be critical for state budget financing in 2027–29.



Source: Ministry of Finance, KSE Institute

Higher defense and security spending and other effects of a longer war will keep Ukraine’s budget deficit at exceptionally high levels over the forecast period, with some improvements by 2029. Due to the large amount of macrofinancial support received in the form of grants, it is preferable to look at the dynamics of the deficit excluding grants, which we expect to gradually decline from its peak of 24.6% of GDP (USD 52.5 billion, UAH 2.2 trillion) in 2025 to 19.1% of GDP (USD 42.8 billion, UAH 1.9 trillion) in 2026, 18.8% of GDP (USD 45.6 billion, UAH 2.2 trillion) in 2027, 17.8% of GDP (USD 48.2 billion, UAH 2.4 trillion) in 2028, and 12.6% of GDP (USD 39.7 billion, UAH 1.9 trillion) in 2029 (see Figure 7). Altogether, we estimate financing needs of USD 176.3 billion over 2026–29, of which USD 49.2 billion are covered by grants, including from USL and ERA.

Budget financing will continue to rely heavily on foreign support, with USD 67.4 billion in additional funding needed over 2027–29 as a result of the longer war. This year and next, the main financing sources will be loans under the Ukraine Facility (USD 9.8 billion), the new IMF EFF program (USD 4.8 billion), and other loans (USD 5.4 billion), including support channeled through the World Bank. As USL funds are now classified as grants and non-tax revenues, the mechanism does not provide any budget financing. With market financing now USD 5.2 billion lower than expected in the Q2 forecast—e.g., no Eurobond issuance and no inflows of non-resident portfolio investment into domestically-issued sovereign debt during the war—we identify a financing gap of USD 19.5 billion in 2026–27 (see Table 3). This amount is added as uncommitted financing in 2027 throughout the model. As most committed support will be fully disbursed by the end of 2027, including ERA funds and the Ukraine Facility, only USD 34.4 billion in budget financing will be received in the form of foreign loans in 2028–29, with the overwhelming share (USD 32.0 billion) stemming from the EU’s 2028–34 MFF, which has not yet been adopted. The result is a fiscal financing gap of USD 47.9 billion in 2028–29. Altogether, additional support worth USD 67.4 billion will be required and should be structured in a way that limits debt sustainability issues, i.e., as grants or conditional loans (see Figure 8).

Table 3: State budget forecast

	2021	2022	2023	2024	2025	2026f	2027f	2028f	2029f
<i>State budget, UAH bn</i>									
Total revenues	1,297	1,787	2,672	3,123	3,834	5,934	6,153	4,128	4,258
in % of GDP	23.8	34.1	40.3	40.8	43.1	59.1	53.7	31.0	27.5
Tax revenues	1,107	950	1,204	1,647	2,016	2,575	3,026	3,098	3,370
Non-tax revenues	188	357	1,035	1,002	1,270	1,933	2,311	1,030	888
<i>Memo: USL</i>	...	...	...	...	...	1,458	1,769	...	...
Grants	1	481	433	474	548	1,426	816	0.0	0.0
<i>Memo: USL</i>	...	...	...	...	...	864	755	...	...
Total expenditures	1,490	2,705	4,014	4,487	5,474	6,426	7,488	6,493	6,204
in % of GDP	27.3	51.6	60.6	58.6	61.5	64.0	65.4	48.7	40.0
Defense & security	302	1,586	2,672	2,997	3,889	4,545	5,327	3,771	3,217
Overall balance	-193	-918	-1,342	-1,364	-1,639	-492	-1,335	-2,365	-1,947
in % of GDP	-3.5	-17.5	-20.3	-17.8	-18.4	-4.9	-11.7	-17.8	-12.6
Balance x/ grants	-195	-1,399	-1,776	-1,838	-2,187	-1,918	-2,151	-2,365	-1,947
<i>Financing, UAH bn</i>									
Domestic financing						168	83	162	235
Debt issuance						649	771	850	900
Repayments						-481	-688	-688	-665
External financing						503	141	871	695
Debt issuance						0	0	177	177
Loan disbursements						631	311	849	838
Repayments						-129	-170	-155	-320
<i>Financing, USD bn</i>									
Needs						11.0	28.3	48.2	39.7
Sources						15.0	4.8	21.0	19.0
Gap						-4.0	23.5	27.1	20.7

STATE DEBT

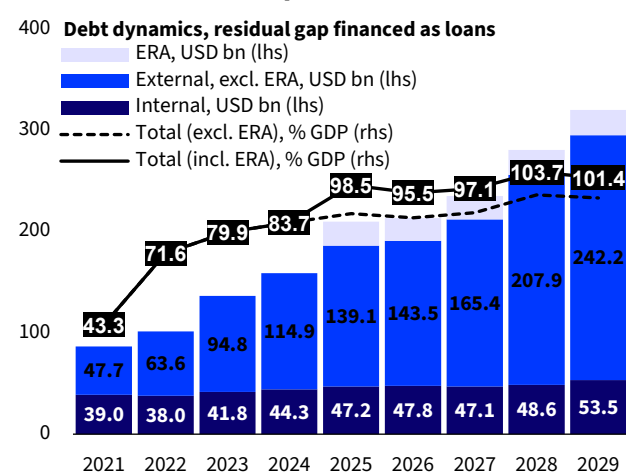
Ukraine has borrowed heavily throughout the war to meet defense and reconstruction needs, and state debt has risen sharply since the full-scale invasion. As of May 2026, state debt reached UAH 9.1 trillion (USD 205 billion) and will continue rising in nominal terms over the forecast period. What shapes the debt-to-GDP trajectory is not only the size of the financing needs—significantly increased by the assumption of a longer war—but also the form in which they are met. The path depends on how the currently uncommitted financing gap is covered: as loans in our baseline, or as grants in the more favorable case. The realistic outcome likely lies between these two extremes.

Our baseline treats the uncommitted financing as loans, bringing the debt-to-GDP ratio including contingent instruments above 100% by 2028. This residual financing gap is sizeable, at USD 23.5 billion in 2027 (minus USD 4.0 billion carried over from 2026), USD 27.1 billion in 2028, and USD 20.7 billion in 2029. Meeting it with concessional loans reverses the near-term improvement in the debt ratio. Debt-to-GDP dips from 87.3% in 2025 to 85.5% in 2026, then rises as the gap is financed, reaching 94.6% excluding ERA and 103.7% including ERA in 2028, before easing marginally to 93.5% and 101.4%, respectively, in 2029 (see Figure 9). Two features hold the ratio below an even higher level. First, the USL, the main source of support in 2026–27, is classified as a grant and, thus, does not add to the debt stock. Second, obligations under the ERA mechanism are excluded from the lower figure, as their repayment is guaranteed by windfall profits from immobilized Russian assets.

If partners close the residual gap with grants or contingent instruments, the debt-to-GDP ratio will continue to decline throughout the forecast period. In this alternative scenario, the ratio declines to 72.4% excluding ERA by 2029, extending the path already underway. Including ERA, it peaks at 98.5% in 2025 and eases to 80.3% by 2029 (see Figure 10). The two cases diverge by more than 20 percentage points of GDP by the end of the forecast period, which makes the form of financing the single clearest lever partners hold over Ukraine's medium-term debt path.

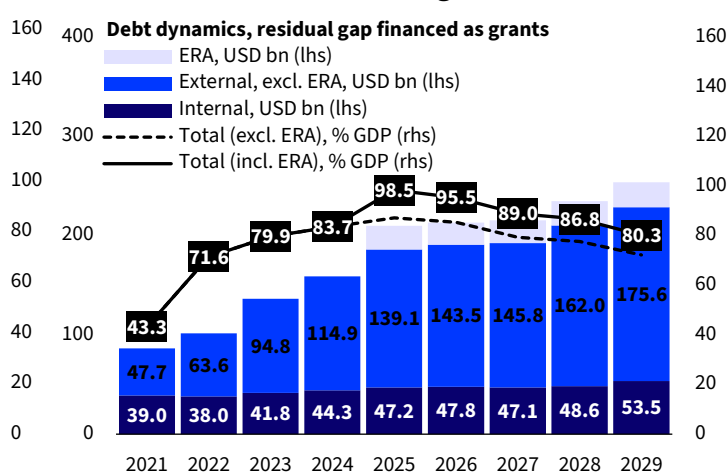
Even in the loan baseline, the near-term debt service burden stays limited, because these funds are treated as uncommitted financing whose repayment and servicing fall largely beyond the forecast horizon. Like the Ukraine Support Loan and the ERA mechanism, they carry favorable terms, and the USL's own repayment is contingent on Ukraine receiving reparations from Russia. The pressure they create is therefore a matter of the post-war debt stock, not of debt service during the forecast period. That deferral does not remove the underlying obligation, however. The USL could still convert into sovereign debt if reparations are paid, and the broader stock of war-era borrowing will remain a substantial repayment burden long after the war ends. Managing debt maturities and refinancing needs will therefore stay central to post-war fiscal stability.

Figure 9: Financing the fiscal gap with loans would reverse near-term improvements after 2026.



Source: Ministry of Finance, KSE Institute

Figure 10: Financing the gap with grants would sustain the debt decline through 2029.



Source: Ministry of Finance, KSE Institute

LOCAL AND CONSOLIDATED BUDGETS

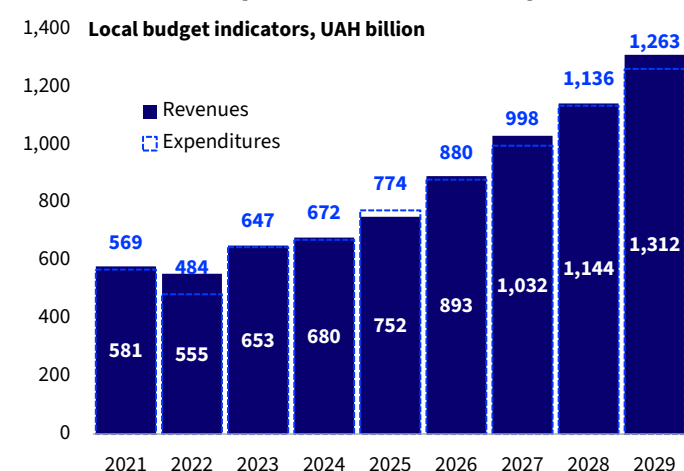
Local budgets will remain shaped by the war throughout the forecast period. Support for the military is expected to stay substantial but not increase; transfers to the state budget and territorial defense spending will collectively amount to UAH 69.5 billion in 2026 and UAH 69.4 billion in 2027, before declining to UAH 51.0 billion by 2029. Compared with the first years of the full-scale war, municipalities have demonstrated reduced willingness to expand defense-related programs. Recent legislation allowing municipalities to procure certain goods for the military is therefore unlikely to materially change aggregate spending, as municipalities that had already supported such needs will mainly continue doing so, albeit within a clearer legal framework.

Local expenditures are projected to rise substantially, from UAH 880 billion in 2026 to UAH 1,263 billion in 2029 (see Figure 11). The main acceleration is expected after the end of martial law, once municipalities begin addressing accumulated demand for investment in local infrastructure, housing, and economic recovery. Capital spending has remained constrained by the priority given to defense as well as the gradual implementation of public investment management reform. Education will be the largest source of expenditure growth, increasing from UAH 400 billion in 2026 to UAH 589 billion in 2029, while spending on economic activity, housing and communal services, and social protection will also expand. This growth reflects the government's broader policy

agenda aimed at strengthening social support, including higher remuneration for teachers, expanded assistance to internally displaced persons, and increased investment in essential public services and post-war recovery. As market borrowing is unlikely to become a broad financing option during the war, the pace of recovery investment will depend largely on predictable state transfers and concessional external support.

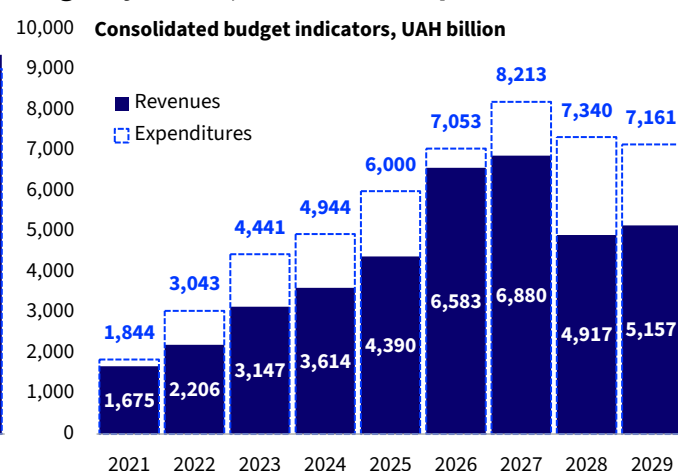
Local revenues are projected to increase and remain above expenditures, growing from UAH 893 billion in 2026 to UAH 1,312 billion in 2029 (see Figure 11). Growth will be driven primarily by the expanding wage base and, consequently, personal income tax receipts, which are projected to rise from UAH 361 billion to UAH 504 billion. Transfers are expected to grow faster than own-source revenues, reaching UAH 413 billion in 2029, and will remain important for financing education and post-war recovery needs. The forecast does not incorporate a specific change in the local share of personal income tax that could follow future legislation on the delineation of powers, as its design and fiscal effects remain uncertain. Single tax revenues may grow more slowly and temporarily decline as some individual entrepreneurs become subject to VAT requirements, potentially leading to business closures, formalization into employment, or a shift into informality. Ultimately, the rise in local revenues and expenditures—and local budgets’ status as balanced or in surplus—leaves little mark on the consolidated deficit (see Figure 12).

Figure 11: Local budgets expected to remain balanced or in surplus over the forecast period.



Source: Ministry of Finance, KSE Institute

Figure 12: Consolidated deficit is driven by state budget dynamics; USL-driven drop in 2026–27.

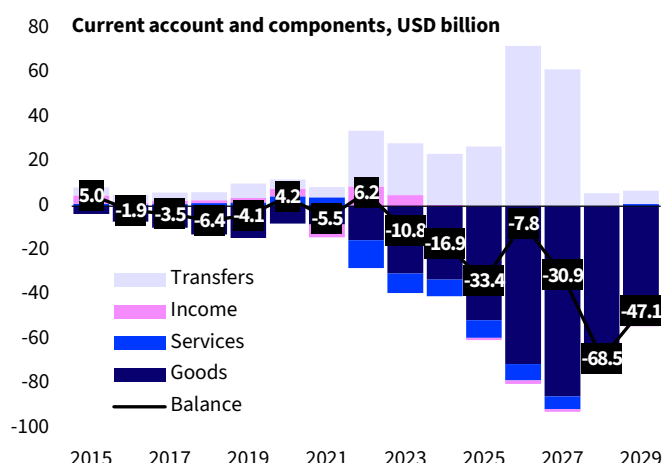


Source: Ministry of Finance, KSE Institute

BALANCE OF PAYMENTS

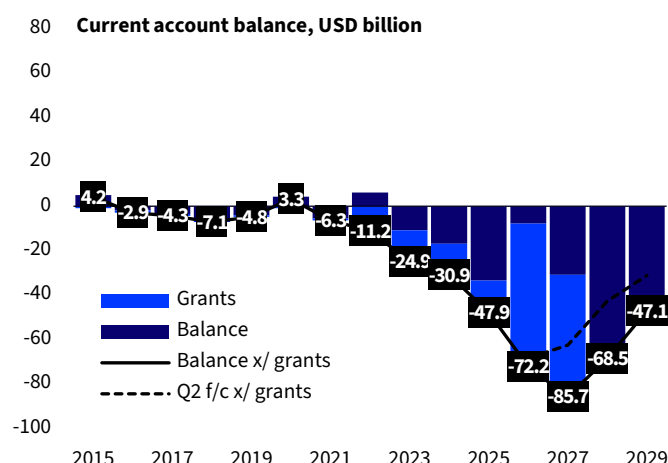
Two developments reshape Ukraine’s external outlook: a longer war and the reclassification of Ukraine Support Loan funds from loans to grants. *First*, a longer war will affect Ukraine’s balance of payments in several ways—through lower goods exports due to disruptions to energy supply and logistics (USD 10.0 billion over 2026–29 compared to the Q2 forecast), markedly higher import needs for military equipment and other goods that cannot be provided domestically (USD 53.9 billion), a larger services deficit (USD 6.8 billion), and lower foreign capital inflows, particularly FDI (USD 3.0 billion) and portfolio investment (USD 7.3 billion). *Second*, the reclassification of EUR 90 billion (USD 105.4 billion) in USL funds from loans to grants (see [Assumptions](#) section) improves the headline current account in 2026–27 but reduces capital inflows by the same amount, leaving the overall external financing picture unchanged. Furthermore, as discussed in detail in the [State Budget and Financing](#) section, the longer war has important implications for Ukraine’s fiscal accounts, and additional financing will be required to meet budgetary needs. For consistency, these funds (USD 67.4 billion over 2027–29) are added as “uncommitted financing” in the balance of payments. While it is possible that they will be provided through a mechanism such as the USL—and thus ultimately be classified as grants—they are treated as foreign loans in this forecast.

Figure 13: USL grants improve the current account in 2026–27; fundamentals remain challenging.



Source: NBU, KSE Institute

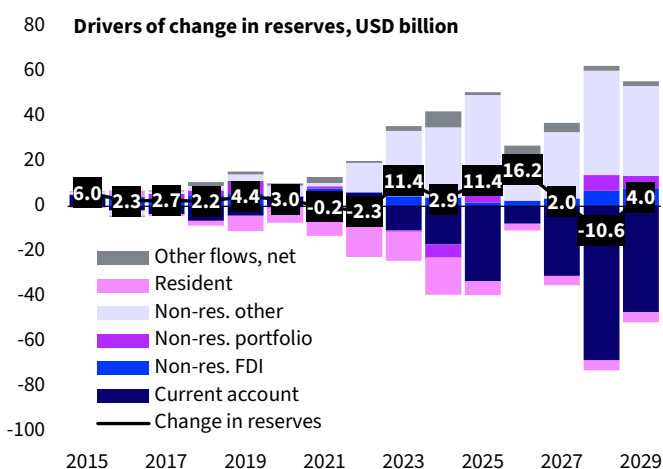
Figure 14: Current account deficit excluding grants to grow on the back of significantly higher imports.



Source: NBU, KSE Institute

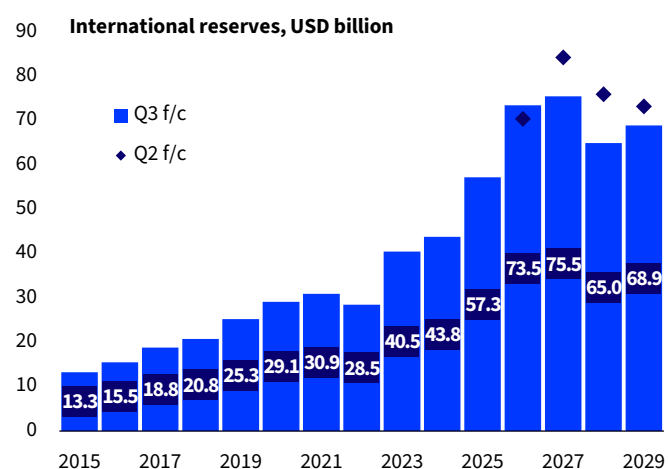
Ukraine's current account balance excluding grants will deteriorate further due to the extended war, though additional financing would maintain reserve buffers and ensure that defense import needs are met. A longer period of subdued exports during the war, coupled with a further surge in imports that will remain elevated for longer and a larger services trade deficit, will widen the underlying current account gap (i.e., excluding grants) from USD 47.9 billion in 2025 to USD 72.2 billion in 2026 and USD 85.7 billion in 2027, before it is projected to narrow during the post-war period to USD 68.5 billion in 2028 and USD 47.1 billion in 2029 (see Figure 13 & Figure 14). Cumulatively, this is a considerable increase over 2026–29 (+USD 68.8 billion) compared to the Q2 outlook. While USD 105.4 billion in USL grants will reduce the headline deficit, this money is, in turn, missing from the financial account, leaving the overall external financing situation unchanged. As foreign investor inflows will also be lower for longer, maintaining adequate reserves critically depends on additional funding being secured (see Figure 15 & Figure 16). Including USD 67.4 billion in uncommitted financing, we project reserves to reach USD 68.9 billion at the end of 2029—USD 4.3 billion lower than in the Q2 forecast but still at a comfortable level of 6.3 months of imports of goods and services (see Table 4). Without additional financing, Ukraine would either have to accept sharply lower reserves, thereby undermining macroeconomic stability, or reduce imports, thereby jeopardizing its military capacity.

Figure 15: Reserve dynamics remain positive if additional financing is received in 2027–29.



Source: NBU, KSE Institute

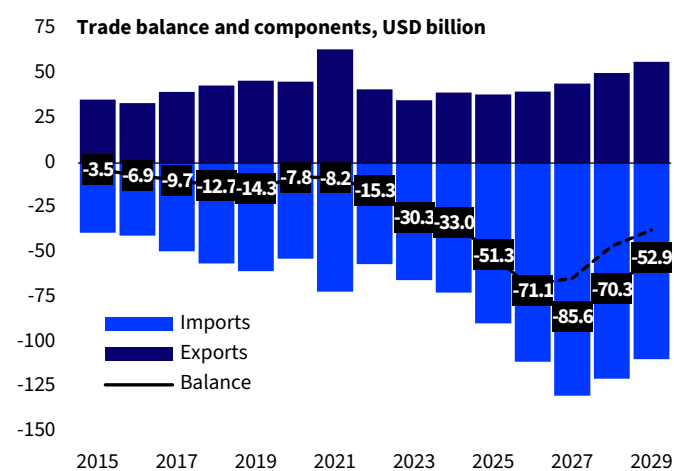
Figure 16: International reserves to reach close to USD 70 billion by 2029.



Source: NBU, KSE Institute

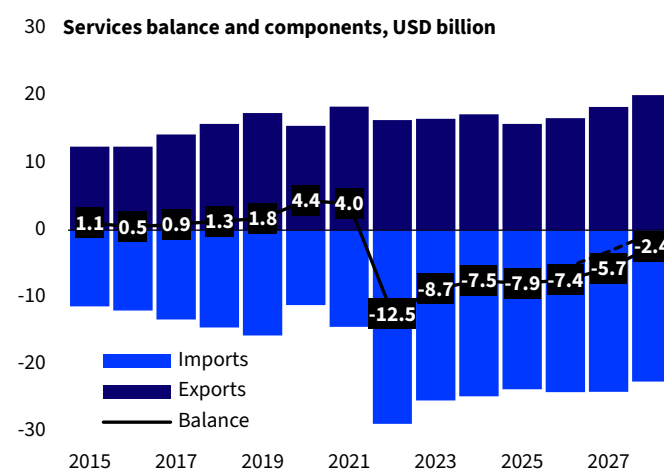
Goods imports continue to grow strongly and will be driven up markedly over 2026–29 by foreign support, while exports remain subdued and will be weaker than expected due to the longer war. In January–May, Ukraine’s goods imports increased by 27% year-over-year, before any USL funds were even disbursed, pointing to a continuation (or even an acceleration) of the import dynamics observed during the full-scale war thus far. While the energy import bill may be somewhat smaller than estimated in Q2 due to a faster normalization of global energy prices, we expect total imports of USD 111.1 billion in 2026, somewhat higher than in the Q2 forecast, albeit with risks to the upside due to continued uncertainty in the Middle East. Altogether, we project that goods imports over 2026–29 will be USD 53.9 billion higher than previously expected (see Figure 17). The key driver is the conversion of large foreign support inflows—EUR 90 billion from the USL over 2026–27 and USD 67.4 billion in uncommitted financing over 2027–29—into imports. Despite the increasing localization of Ukraine’s defense production, reliance on imported equipment and components remains high. Goods exports performed as expected in January–May, increasing 3% year-over-year; thus, our forecast for 2026 (USD 40.0 billion) is broadly unchanged. However, the longer war will keep export constraints in place in 2027, leading to cumulative exports in 2026–29 that are USD 10.0 billion weaker. Collectively, these developments increase the cumulative trade deficit by USD 63.9 billion. Trade dynamics, including the potential impact of Russian strikes on Black Sea port infrastructure, are also discussed in KSE Institute’s [*Ukraine Monthly Economic Update*](#).

Figure 17: Trade deficit will be significantly larger as international support is converted into imports.



Source: NBU, KSE Institute

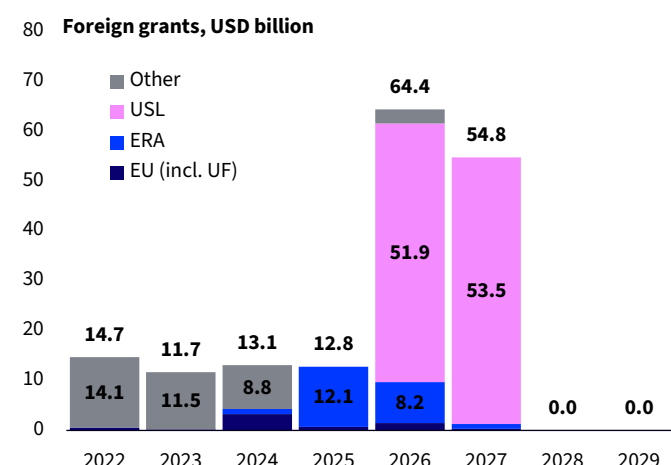
Figure 18: Services deficit will be moderately larger due to the longer war.



Source: NBU, KSE Institute

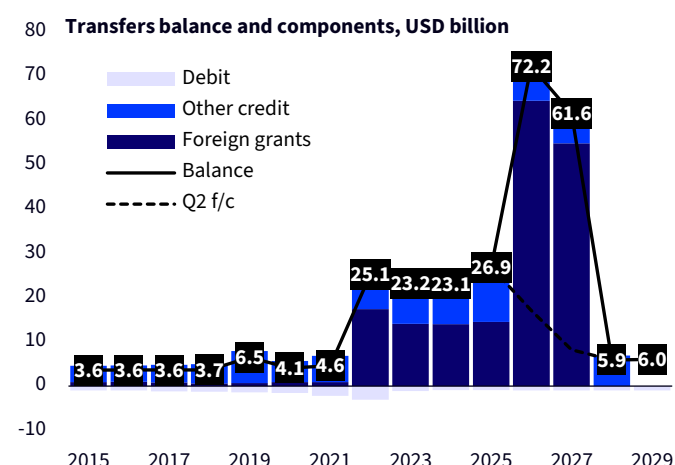
Services imports will remain elevated for longer, while the income balance is broadly unchanged and the transfers balance improves temporarily on the back of USL grants. Ukraine’s services exports performed in line with expectations in January–May (+6% y-o-y), while imports are rising somewhat faster (+9%), leading to a USD 1.8 billion downward revision of our forecast for the services balance this year. Over 2027–29, we expect the cumulative deficit to be USD 6.8 billion larger, primarily for two reasons: higher transport services debits owing to stronger goods imports, and a delayed normalization in travel services payments due to the longer war. Nonetheless, we still expect the services balance to turn to a surplus by 2029 (see Figure 18). Our forecast for the income balance was modified slightly, with the cumulative deficit over 2026–29 USD 2.0 billion smaller than in the last edition, as January–May data indicate smaller debits. The most important change took place in the transfers balance and, specifically, foreign grants (see Figure 19 & Figure 20). Total foreign grants are expected to be USD 108.4 billion higher over 2026–27, largely due to the reclassification of EUR90 billion in USL funds. Importantly, this development is temporary; no foreign grant commitments exist for 2028–29. The shift to loans after 2027 will have implications for Ukraine’s debt burden. Thus, partners must consider the modalities of additional financial support, providing it either as grants or conditional loans to ensure Ukraine’s debt sustainability moving forward.

Figure 19: Foreign grants to be significantly higher in 2026–27 due to USL disbursements.



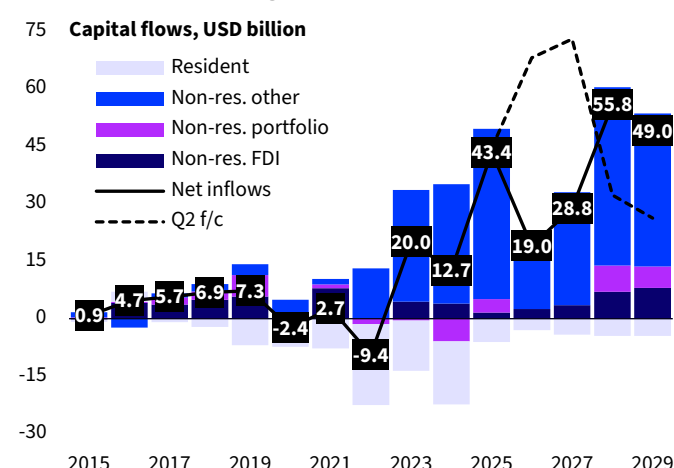
Source: KSE Institute

Figure 20: Transfers balance forecast is shaped by USL funds reclassification.



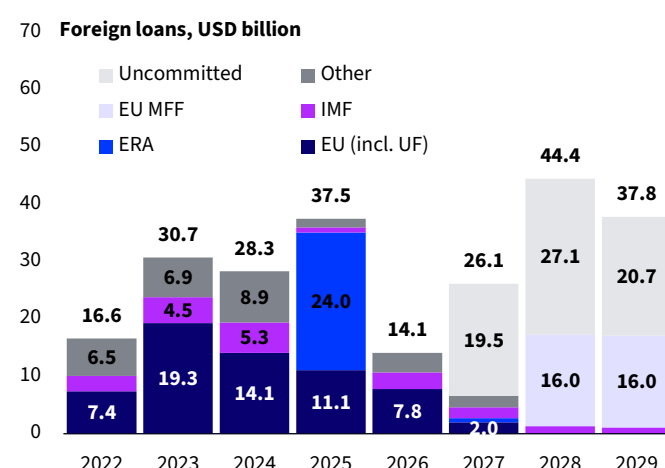
Source: NBU, KSE Institute

Figure 21: Capital flows dynamics to change due to shift of USL funds to grants, uncommitted support.



Source: NBU, KSE Institute

Figure 22: Foreign loans set to rise in 2027–29 if EU MFF and additional support are secured.



Source: KSE Institute

Non-resident capital flows will drop sharply due to the longer war and the USL's shift toward grants, but uncommitted financing will offset some of the decline (see Figure 21). While foreign FDI inflows have performed somewhat better in January–May, increasing 11% y-o-y, they remain subdued even compared to the early years of the full-scale war. We have reduced our forecast for 2026 to USD 2.5 billion (vs. USD 3.0 billion), as a more optimistic recovery is increasingly unlikely. The longer war will more significantly weigh on the recovery of FDI in the coming years, however, especially in 2027. For 2026–29, we project non-resident FDI to be USD 3.0 billion weaker than in the Q2 forecast. The impact of the war's continuation in 2027 is even more pronounced on portfolio investment. In our view, Ukraine will not be able to return to the Eurobond market in 2027, nor will non-resident investors increase their holdings of domestically issued sovereign debt. In both cases, we effectively shift our forecast out by one year—assuming that investments will not commence immediately after the full-scale war's end—resulting in a cumulative reduction of portfolio inflows by USD 7.3 billion over 2026–29. Non-resident other investment looks fundamentally different than in the Q2 forecast, thanks to a sharp downward revision in 2026–27 and a considerable upward revision in 2028–29, which is largely a result of two developments: First, the classification of USL funds as grants shifts EUR 90 billion (USD 105.4 billion) from the financial to the current account in 2026–27. And second, uncommitted financing adds USD 67.4 billion in foreign loans in 2027–29 (see Figure 22). It bears repeating that the latter are not yet secured and, thus, the ultimate level of non-resident flows will depend on political decisions.

Table 4: External sector forecast

USD bn	2021	2022	2023	2024	2025	2026f	2027f	2028f	2029f
Current account balance	-5.5	6.2	-10.8	-16.9	-33.4	-7.8	-30.9	-68.5	-47.1
Excluding grants	-6.3	-11.2	-24.9	-30.9	-47.9	-72.2	-85.7	-68.5	-47.1
in % of GDP	-3.2	-7.0	-13.7	-16.2	-22.4	-32.3	-35.3	-25.3	-14.9
Goods balance	-8.2	-15.3	-30.3	-33.0	-51.3	-71.1	-85.6	-70.3	-52.9
Exports	63.6	41.2	35.1	39.3	38.3	40.0	44.4	50.3	56.6
Imports	71.8	56.5	65.5	72.3	89.6	111.1	130.1	120.6	109.5
Services balance	4.0	-12.5	-8.7	-7.5	-7.9	-7.4	-5.7	-2.4	1.0
Income balance	-5.8	8.8	5.1	0.5	-1.0	-1.5	-1.2	-1.7	-1.2
Transfers balance	4.6	25.1	23.2	23.1	26.9	72.2	61.6	5.9	6.0
Foreign grants ¹	0.9	17.4	14.1	14.0	14.5	64.4	54.8	0.0	0.0
Non-res. capital flows	10.4	11.7	33.1	29.1	49.5	21.9	33.0	60.3	53.5
Direct investment	8.0	0.1	4.5	4.0	1.6	2.5	3.5	7.0	8.0
Portfolio investment	1.0	-1.4	-0.5	-5.9 ²	3.5 ²	0.0	0.0	6.9	5.7
Public Eurobonds	0.8	-0.3	-0.1	-5.3 ²	3.5 ²	0.0	0.0	3.6	-0.1
Domestic gov. debt	0.2	-1.1	-0.4	-0.6	-0.1	0.0	0.0	2.0	3.1
Other investment	1.5	13.0	29.1	31.1	44.4	19.4	29.5	46.4	39.8
Public loans	0.9	15.3	28.0	27.6	37.7	10.7	22.1	41.4	34.8
Res. cap. flows (- = outfl.)	-7.7	-21.1	-13.1	-16.5	-6.1	-3.0	-4.2	-4.5	-4.5
Change in reserves	-0.2	-2.3	11.4	2.9	11.4	16.2	2.0	-10.6	4.0
Total reserves	30.9	28.5	40.5	43.8	57.3	73.5	75.5	65.0	68.9
in months of imports	4.3	4.0	5.4	5.4	6.1	6.5	5.9	5.4	6.3

¹ Numbers for total grants provided to the general government from the NBU's balance of payments data; small discrepancies to KSE Institute's own accounting of grants under support programs for 2021–25. ² Reflects Eurobond restructuring.

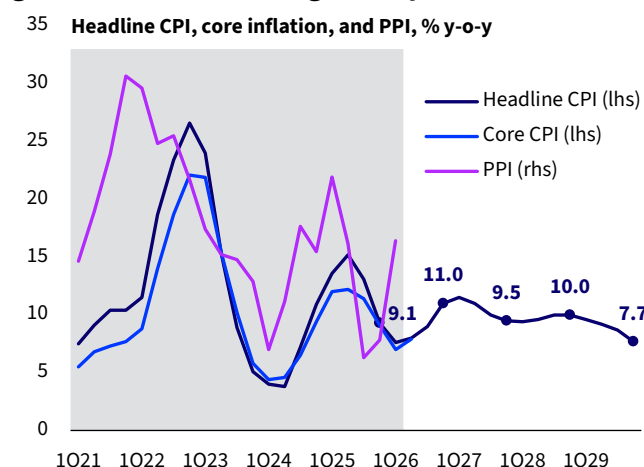
INFLATION

The inflation forecast has been revised up throughout the forecast period, remaining above the previous forecast yet generally below the 10% threshold. Upward price pressure will remain elevated throughout 2026–2027, only to gradually ease thereafter (see Figure 23). Disinflation will ostensibly appear in late 2027, although this largely reflects the elevated base left by the 2026 cost-push inflation shock; genuine disinflation will only materialize in 2029, when recovery-related pressures normalize and the economy's productive capacity expands. This trajectory is a conditional baseline with risks to the upside through 2027. The baseline assumes that the Iran-war energy shock unwinds, but only gradually, with oil and gas prices returning to early-2026 levels by around Q2 2027, that the full-scale war comes to an end in H2 2027, that household electricity tariffs rise after the current freeze expires on October 31, 2026, and that inflation expectations stay elevated but do not de-anchor further. A renewed escalation of the Iran war and prolongation of the energy shock, a second round of administered-price increases, or a sustained rise in household expectations would each lift inflation above the baseline.

A stronger harvest is the primary domestic force pulling prices down, although core and non-core inflation have begun to diverge. Food prices carry a weak base from 2025, and a relatively good harvest, despite significant supply-side shocks, could keep raw-food inflation low into the summer (see [Ukraine Monthly Economic Update](#)). If current trends hold contrary to our expectations, food is the factor most likely to keep headline inflation contained below 11% in the near term. This could also allow the NBU to hold off on the key policy rate hike currently assumed in the baseline (see [Monetary Policy](#) section). The harvest is a swing factor for both the inflation path and near-term policy decisions as the improvement is narrow, supply-driven, and likely short-lived. Core inflation is still rising, and

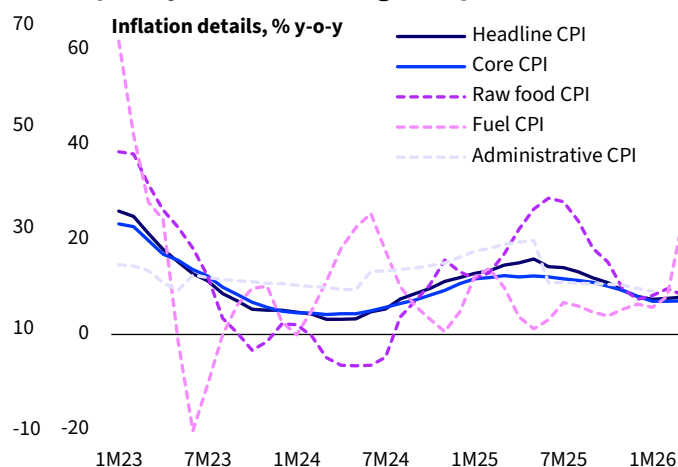
services inflation is in double digits (see Figure 24). This signals that earlier energy, labor, and logistics costs are still passing through to consumer prices, pushing potential inflation up to 11% if the NBU decides not to hike rates.

Figure 23: Inflation stays elevated through 2028; genuine disinflation begins only in 2029.



Source: NBU, KSE Institute

Figure 24: Harvest-led raw food disinflation is temporary amid remaining core pressures.



Source: NBU, KSE Institute

Inflation is projected to stay elevated throughout the forecast period, but the source of the pressure shifts from supply to demand. In 2026, inflation is driven by a cost-push shock, as higher global energy prices feed into fuel, production, and imported input costs, while administered-price adjustments add to the pressure. In 2027, the elevated 2026 base will mechanically restrain year-over-year inflation numbers, particularly in the latter half of the year. However, this is not genuine disinflation. Core pressures will persist through energy, wage, and supply-side channels; thus, inflation will reach its 2026–29 peak and only gradually moderate thereafter. In 2028, the composition shifts from cost-push to demand-pull factors. The end of the full-scale war, reconstruction spending, recovering real wages, and firms' capital expenditure will collectively lift domestic demand and push end-of-period inflation back up. Only in 2029 does inflation begin to normalize, as productive capacity catches up with demand and price pressures ease.

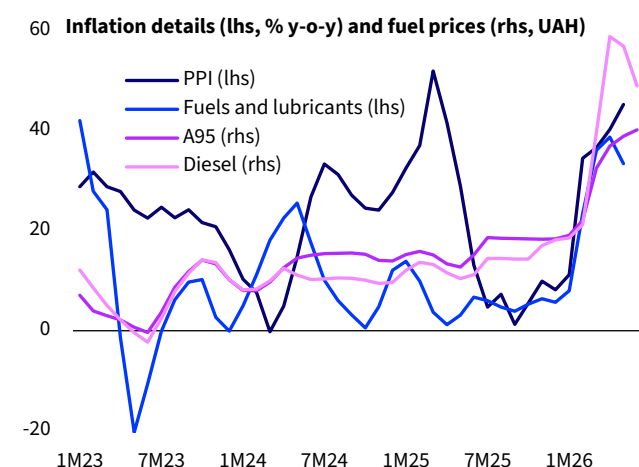
The pass-through from global oil prices to domestic fuel was near-instantaneous; it is expected to moderate from the 2026 spike if global oil markets gradually normalize, but prices will likely settle at a higher level relative to the pre-shock period. As a result, fuel will make a substantial direct contribution to inflation in 2026 before its contribution to annual inflation fades through 2027, largely because of the high base. This does not necessarily imply a comparable decline in retail fuel prices: Ukraine's dependence on imported refined petroleum products and limited capacity to absorb external supply shocks mean that domestic prices may remain structurally elevated even after global benchmarks ease. In addition, the outlook remains highly sensitive to geopolitical developments, as renewed escalation or further disruptions to production and transport routes could quickly reignite global and domestic fuel prices. The risks are therefore asymmetric, as renewed supply disruptions could produce a rapid price increase, whereas normalization is likely to be more gradual. A weakening of OPEC+ production discipline represents a downside risk, with stronger competition among producers feasibly increasing supply and reducing the steady-state oil price. The baseline assumes gradual normalization, with risks remaining strongly skewed toward renewed price increases.

The fuel shock will extend beyond its direct effect on consumer prices, as higher transport and operating costs propagate through domestic production chains during 2026–27 (see Figure 25). Our estimates based on 2024 Input-Output tables suggest that fuel accounted for 5.8% of production costs on average, although exposure varied considerably across sectors. The share reached 26.7% in transport and warehousing, 18.7% in chemicals, 14.7% in agriculture, 6.4% in construction, and 4.9% in wholesale and retail trade. Together with the difficult

winter, costly autonomous power generation, and higher electricity prices for businesses, this will sustain producer-price pressures and feed into processed consumer goods with a lag (see Figure 26).

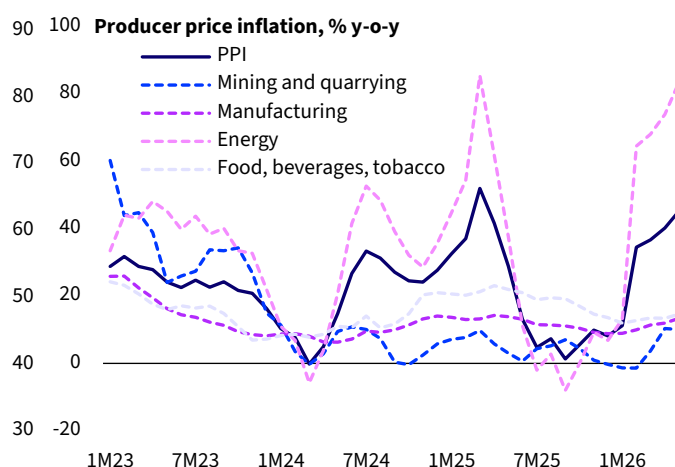
External price pressures will reinforce the domestic transmission. Both the ECB and the European Commission project average headline euro-area inflation at 3.0% in 2026, while the Federal Reserve’s median projection puts US PCE inflation at 3.6%. The IMF’s July update also raised its global inflation forecast for 2026 by 0.3 pp to 4.7%. Higher partner-country inflation will broaden price pressures beyond energy by increasing the costs of machinery, components, and other processed inputs. Rising producer costs will affect both consumer inflation and export competitiveness. Firms operating primarily in the domestic market may pass part of the increase on to consumers, reinforcing second-round inflation. By contrast, export-oriented tradable sectors are largely price-takers on the global market, so their margins will narrow, forcing adjustment through lower output and investment and weakening firms’ creditworthiness. Over time, this may deepen supply bottlenecks.

Figure 25: Fuel price spikes are rapidly feeding through to producer-price inflation.



Source: SSSU, KSE Institute

Figure 26: Rising production costs will keep inflation elevated beyond the initial shock.



Source: SSSU, KSE Institute

Core inflation is expected to remain more persistent than non-core inflation. Earlier increases in fuel, electricity, logistics, and imported-input costs continue to pass through to processed goods with a lag. This delayed transmission is particularly relevant for goods with energy- and transport-intensive supply chains, where firms may adjust prices after existing inventories are replaced and higher input costs are fully absorbed. Services inflation will remain elevated for a different reason: labor shortages and continued wage growth are raising costs in labor-intensive sectors, while strengthening household demand gives firms greater scope to adjust prices. As wages account for a significant share of service-sector costs and tend to adjust more slowly than commodity prices, services inflation may remain elevated even after energy and fuel pressures moderate. These pressures will slow convergence to the target even after the direct fuel shock fades and its contribution to annual inflation weakens.

Household inflation expectations are a key channel that translates a supply shock to embedded core inflation, and they have deteriorated. Twelve-month-ahead household expectations reached 14.4% in early 2026, the highest since mid-2023, going down to 12.7% in June, while analysts’ expectations stood near 7.9% in July. The gap reflects how each group reads the shock. Analysts treat the Iran war and the winter as transitory, while households respond to visible fuel and food price increases. Elevated household expectations are among the key reasons that the baseline now includes a key policy rate hike in October, and it constrains how quickly easing can follow (see [Monetary Policy](#) section).

Administered prices will add a separate source of inflationary pressure. The baseline assumes an increase in household electricity tariffs following the expiration of the current price freeze at the end of October 2026, as the Cabinet Resolution No. 530 keeps the household tariff fixed at UAH 4.32/kWh through October 31, 2026.

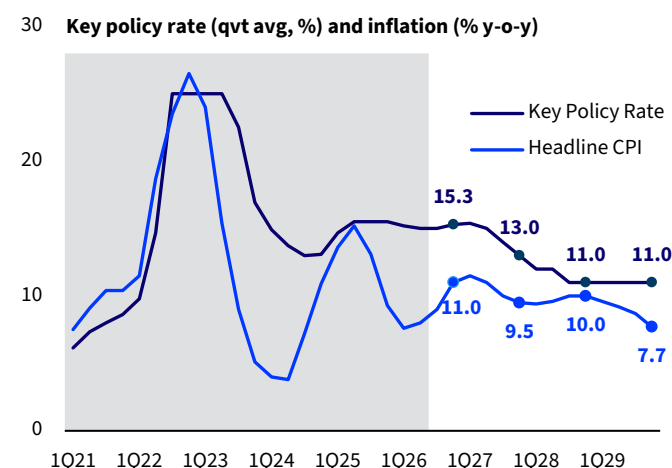
However, there is an ongoing discussion about a continued freeze. The adjustment would reflect the need to finance repairs and restore generating capacity after the difficult winter. Water and wastewater tariffs have also increased in several cities, although these changes have limited regional coverage, so their direct effect is likely to be small at the moment. However, visible increases in utility bills may worsen household inflation expectations. Further utility-price adjustments remain an upside risk to inflation persistence. Regulated household gas tariffs remain frozen under the wartime moratorium and present a smaller, less likely risk for 2026, though tighter European gas prices are already raising costs for industrial users.

Since the dominant pressures in 2026–27 originate largely from damaged productive and energy capacity, monetary policy alone cannot remove their source. Recovery needs are estimated at USD 90.6 billion, and the effective mobilization of private capital will play a pivotal role in ensuring adequate funding for reconstruction (see *Ukraine Reform Series: Energy Sector*). Support for energy projects and recovery investment, including targeted credit programs for energy infrastructure and reconstruction, can ease supply constraints more directly by financing distributed generation and energy-efficiency improvements. Such investment would reduce firms' reliance on costly autonomous power generation and alleviate the energy bottlenecks underlying current price pressures, thereby reducing inflation persistence over the medium term.

MONETARY POLICY

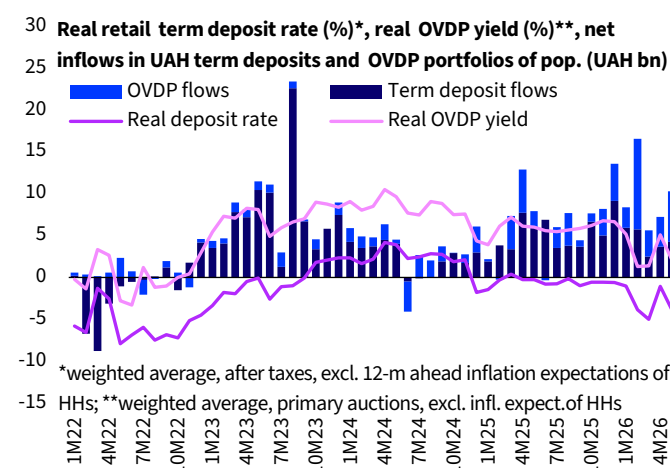
We expect the NBU to raise the key policy rate to 15.5% in October 2026 amid significant inflationary pressures that will push inflation above the 10% threshold by year-end. In our view, the NBU will begin cutting only in March 2027, easing the policy rate to 13.0% by the end of 2027 and keeping it around 11% throughout the 2028–29 recovery (see Figure 27). This is a tighter-for-longer path than we previously forecasted: the easing is slower and shallower. Behind this profile is an inflation path we read as stronger than the NBU's forecast. We expect headline inflation to end 2026 in double digits and remain there into early 2027. We see the nature of this overshoot as cost-push and temporary; thus, the hike will perform mainly as a signal, aimed at anchoring expectations and easing FX and reserve pressure, and the easing can begin in March 2027, as the pressure fades mechanically due to the high 2026 base. We also expect the NBU's own projection to be revised up from its April round but to remain somewhat below ours, as projecting double-digit inflation—based on hard data that is not yet set in stone—is a communication challenge any central bank would approach cautiously.

Figure 27: Signaling KPR and higher-for-longer stance may be necessary to keep inflation in check.



Source: SSSU, NBU, KSE Institute

Figure 28: Demand for hryvnia savings remained strong, but slipping real returns create risks.



Source: NBU, KSE Institute

The near-term signals already point to a potential rate hike, as hawkish sentiment builds. The NBU has held the key policy rate (KPR) at 15% since January 2026. In June, it kept the KPR unchanged for the third consecutive meeting, judging that prevailing monetary conditions were sufficient to sustain demand for hryvnia savings instruments and to contain pressure on the FX market, while still allowing rapid credit expansion. At the same time, the NBU reiterated its readiness to raise the KPR if necessary, given signs of increasing underlying price pressure, to keep inflation expectations in check and return inflation to a sustained downward trajectory toward its 5% target. According to Monetary Policy Committee (MPC) minutes, the hawkish camp is expanding: three of the eleven MPC members voted for a 0.5 pp KPR hike already in June (the April hold was backed unanimously), and four members do not rule out raising the KPR to 15.5%–16.0% over the coming months.

Rising underlying price pressures, elevated inflation expectations, and upside inflation risks underpin the case for tighter monetary policy. Beneath the seasonal relief in food prices, underlying cost pressures keep building, and annual core inflation continues to inch up, markedly above the NBU's forecast. A marked hryvnia depreciation, higher-for-longer fuel prices due to renewed Middle East escalation, administered-tariff adjustments, or stronger food inflation in a severe El Niño scenario could reignite a more sustained price spike into 2027, given producers' already squeezed margins. This is consistent with our headline CPI path (see [Inflation](#) section), which keeps year-end 2026 above the 10% threshold and above the NBU's April outlook. In turn, a sustained breach of the 10% "attention threshold" could disproportionately amplify the pass-through of shocks into households' already elevated and volatile expectations, strengthening the hawks' call for a stabilizing KPR hike closer to Q4 and for greater resistance to further hryvnia depreciation. The trigger for policy action is therefore not the inflation print itself, which is mostly cost-driven and largely rate-insensitive. It is the risk of expectations de-anchoring and mounting pressure on the FX market and reserves. A higher KPR may help keep hryvnia assets attractive, contain FX demand, and prevent second-round effects from becoming entrenched. Still, the best remedy for cost-driven inflation lies outside monetary policy, in relieving supply pressures through energy restoration and recovery projects, including targeted credit programs (see [Ukraine Reform Series: Energy Sector](#)). Until underlying price pressures ease and household expectations improve durably, we expect the NBU to avoid any monetary easing.

Hryvnia savings remain attractive, but real returns have slipped as expectations have deteriorated, raising the risk to the sustainability of inflows (see Figure 28). With the KPR on hold and liquidity in surplus, banks have been reluctant to compete for funding, and deposit and OVDP rates have been broadly flat (see [Ukraine Monthly Economic Update](#)). On 12-month household expectations, the real after-tax return on retail term deposits remained negative, while tax-exempt hryvnia OVDPs still offer a small positive real return despite falling nominal yields. Demand has held up so far: retail hryvnia deposits crossed UAH 1.0 trillion in May for the first time, and dollarization eased slightly. If inflation accelerates and expectations worsen while rates remain flat, real returns will sink further into negative territory, testing the NBU's commitment to supporting hryvnia savings. We therefore expect deposit growth to moderate as the relative attractiveness of hryvnia instruments diminishes, but we do not expect material outflows.

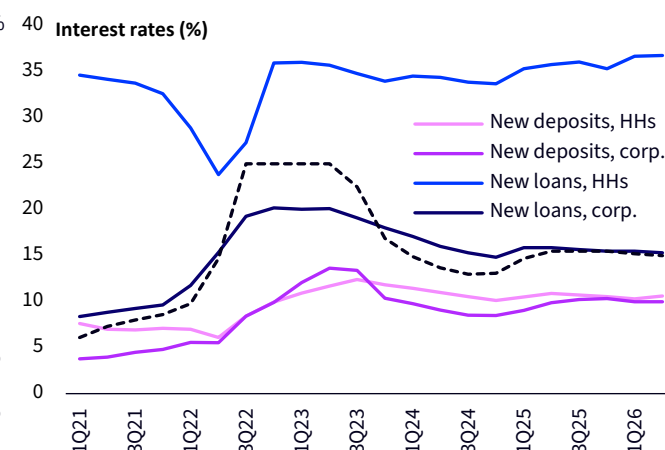
Considering the NBU's commitment to exchange rate flexibility, FX-market developments also reinforce the case for tight monetary conditions. Under the managed-flexibility regime, the NBU has signaled its readiness to allow the exchange rate to partially adjust to market conditions, whose fundamentals are now deteriorating. At the same time, FX interventions are among the NBU's key tools for containing inflation and are an integral part of the monetary policy story under the current regime. Recent FX volatility and the projected depreciation path (see [Exchange Rate](#) section) will pass through to prices and expectations, reducing the hryvnia's attractiveness. While restored reserve buffers reduce the tail risks that could otherwise force steep tightening, at least a modest KPR increase may be justified to ease pressure on international reserves.

Figure 29: Corporate and retail lending are recovering steadily.



Source: NBU, KSE Institute

Figure 30: With KPR on hold, banks' loan and deposit rates showed only marginal fluctuations.



Source: NBU, KSE Institute

The task of supporting lending, which is recovering steadily, may give way to the priority of price stability and keeping expectations in check (see Figure 29). Interest rates on new hryvnia corporate loans eased marginally to 15.3% in Q2, essentially at the KPR level (see Figure 30). Rates on new household loans, at ~37%, remain dominated by risk premia. Lending gathered pace: net corporate loans climbed to UAH 869 billion (+30% y-o-y) by end-June, remaining predominantly market-based, with the subsidized 5-7-9% program accounting for ~30% of the hryvnia gross corporate portfolio. Net retail loans grew 36% y-o-y to UAH 347 billion in Q2. Loan dollarization decreased to ~31% in the corporate segment in June, while remaining negligible at ~0.2% in retail. The high quality of new loan vintages has continued to push the NPL share down to ~15.3% for corporate loans and ~10.4% for retail loans in May. We expect credit growth to persist due to rising demand and strong risk appetite and to accelerate in the postwar phase. A signaling hike and a higher-for-longer KPR hold will have a limited effect on credit expansion while providing asymmetrically stronger financial-stabilization benefits (see *Special: Structural Credit Gap in the Q2 Ukraine Macroeconomic Handbook*). The primary constraint on credit growth in the recovery period will not be interest rates or liquidity, but the structural barriers to long-term investment lending.

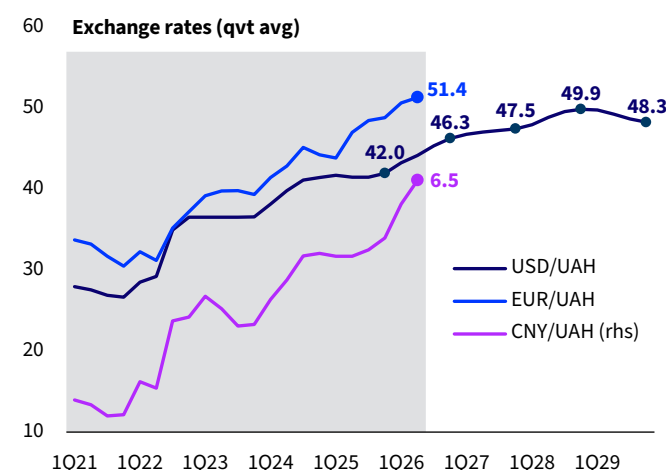
Abundant liquidity would support lending but mute the pass-through of a modest KPR hike into market rates, implying a mainly signaling role. Structural liquidity remained in deep surplus in Q2, with average balances on correspondent accounts of UAH 278 billion and certificates of deposit (CDs) at UAH 642 billion. Even with the average share of three-month CDs rising (to 31% in Q2 from 26% in Q1), liquidity poses no constraint on further credit expansion. We expect liquidity buffers to remain strong on the forecast horizon, with the probability of material deposit outflows relatively low. The flip side is asymmetric transmission: a large liquidity surplus would mute the effect of any KPR hike. Making a hike effective not only through expectations but also through other transmission channels would require additional measures beyond the KPR (e.g., modifications to the operational framework and reserve requirements); however, we do not expect the NBU to resort to them in our base case.

This profile is more hawkish than the consensus and the NBU's own April forecast. Our previous wait-and-see call has materialized, and we now side with the case for a signaling hike to keep expectations in check. The cautious easing that begins in 2027 is enabled by the winding down of the war, base-effect disinflation, and steadier expectations. Through 2028–29 the real rate stays positive, enough to counter demand-pull pressure and keep hryvnia assets attractive. Amid overlapping shocks, we expect the NBU to prioritize credibility and durable disinflation over the speed of normalization. Risks to the path are skewed toward later and slower easing, and the NBU will likely exploit the flexibility of the current regime, watching hard data closely to avoid over-tightening that would strain the supply side.

EXCHANGE RATE

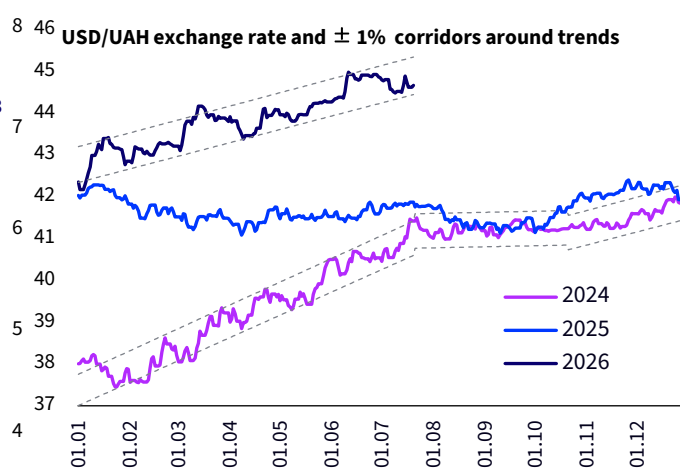
The exchange rate dynamic is a policy (inflation vs. ER flexibility) path, conditional on the external support schedule. Our ER projections are based on the NBU's commitment to principles of flexible inflation targeting and managed ER flexibility. With reserve buffers restored and FX volatility filtering into elevated prices and expectations, a firmer NBU position against further steep depreciation is both likely and justified to limit pass-through effects. However, we do not expect the NBU to defend specific ER levels, nor to eliminate the ER's ability to adjust to underlying market pressures. Considering the underlying pro-depreciation pressure profile, we project USD/UAH at 46.3 by end-2026 and 47.5 by end-2027 (see Figure 31). We then expect an initial depreciation impulse in 2028, reaching 49.9 at year-end, in the first year of recovery after the full-scale war. The first nominal appreciation (to roughly 48.3) is expected only in 2029, amid improving export capacity and more visible private investment inflows. Finally, it is worth remembering that managed flexibility does not preclude a steeper depreciation path under accelerated depletion of international reserves; thus, the path assumes that external financing continues to amply replenish international reserves (see [Balance of Payments](#) section).

Figure 31: Further depreciation is likely through 2026–28 amid rising underlying pressure.



Source: NBU, KSE Institute

Figure 32: The USD/UAH exchange rate is echoing its 2024 crawl-like depreciation pattern.



Source: NBU, KSE Institute

The hryvnia's crawl-like depreciation continued through Q2 2026 and culminated in a June spike that tested the boundaries of the NBU's managed-flexibility regime. The USD/UAH averaged 44.2 in Q2, up from 43.3 in Q1, mostly staying within a $\pm 1\%$ corridor around the pronounced depreciation trend in place since late last year (see Figure 32). The remarkable June spike, when the interbank exchange rate climbed by 1.6% over few sessions to a peak near 45.1, tested the upper bound of that corridor before the rate slipped to about 44.5 by mid-July, returning to the corridor's lower bound. Dynamics against the euro were choppy but ultimately more muted: EUR/UAH averaged 51.4 in Q2 (50.7 in Q1), touching 52.0 in mid-June before retreating to about 50.9 by mid-July as the U.S. dollar firmed globally, reaffirming that, under the current regime, the euro leg behaves as a cross-rate of USD/UAH and EUR/USD. This pattern of a continued managed crawl, punctuated by spikes that the NBU smooths, remains orderly only as long as external financing keeps reserves ample enough to defend the corridor. This behavior serves as a baseline template for the forecasted ER path.

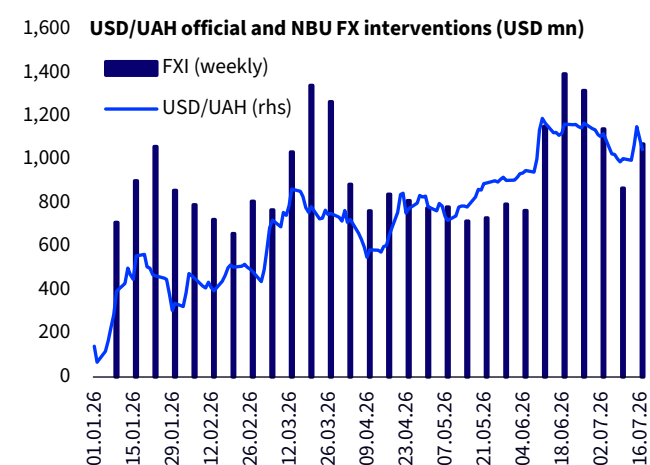
The underlying pressure stems from the external trade deficit and is likely to intensify through 2026–27, creating a depreciation bias. In Q2, the underlying depreciation pressure intensified, driven primarily by the widening external trade gap (see [Balance of Payments](#) section). Further damage to export logistics would curtail FX receipts, while shelling of energy infrastructure and renewed Middle East escalation could further inflate the import bill. Combined with deteriorating expectations, this would fuel FX market pressures through H2 2026. With the full-scale war now assumed to persist into H2 2027, we expect elevated wartime imports of

defense goods, energy, and machinery, along with a delayed recovery in real activity and exports. In 2028, recovery-related imports keep the import bill elevated, widening the current account deficit and prompting a depreciation bias amid the phasing out of grants and a decline in total official assistance. We do not anticipate the pressure easing until 2029, when productivity rises, export capacity improves, and declining risk premia support capital inflows, opening room for the hryvnia to strengthen.

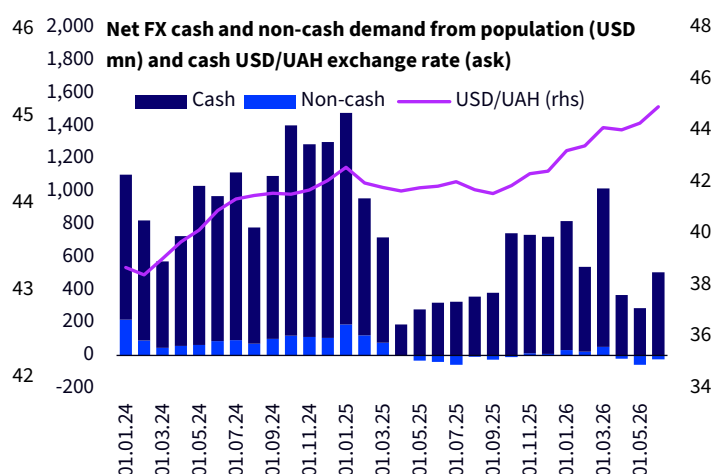
Situational FX market imbalances are often fiscal-driven and largely intrinsic to the current war-financing model. The proximate trigger of the June depreciation episode, like the customary December–January spikes, was domestic and mostly fiscal: hryvnia liquidity injections from State Treasury Service operations reached UAH 656 billion in Q2 (+64% y-o-y), including UAH 113 billion in the first half of June alone (+89% y-o-y). The resulting overhang met a thinner supply side, as exporters deferred FX sales amid rapid depreciation and seasonally weaker receipts. At the same time, international reserves decreased only slightly (-USD 0.7 billion) to USD 51.3 billion by end-Q2, despite USD 11.9 billion of NBU interventions (+3% q-o-q), thanks to inflows from partners. The fiscal origins of major FX spikes and the reserve dynamics indicate that the FX market imbalance is intrinsic to the current war-financing model and is mostly covered, so the NBU can reasonably offset it through interventions. However, the framework’s sustainability continues to hinge on the timeliness of external financing: reserve buffers not only enhance the NBU’s ability to smooth the market via FX interventions but also have a calming effect through the behavioral channel, as market participants recognize the central bank’s growing capacity to intervene. Delays in financing would work in reverse and remain the key risk to the ER path.

The NBU’s conduct over Q1 and Q2 confirmed its readiness to let the exchange rate adjust to material market pressures, while decisively smoothing spikes that could trigger panic. Intervention volumes closely tracked market pressure, except in late May and early June, when the central bank’s sales lagged the growing momentum of the ER slide, signaling a reserve-preserving, flexibility-oriented stance (see Figure 33). When pressure spiked, however, the NBU responded forcefully—as it had in March, when the eruption of the Hormuz crisis triggered a USD 4.8 billion intervention peak. June sales jumped to USD 5.1 billion from USD 3.2 billion in May, the largest monthly volume since December 2024, lifting the NBU’s share of interbank turnover to 61–64% in mid-June from about 45% in May. By mid-July, as tensions in the interbank segment receded, weekly sales had scaled back markedly. Such NBU tactics enhance the ER’s adaptability but mechanically support a crawl-like drift amid both persistent underlying pressure and situational, fiscal-driven spikes in FX demand.

Figure 33: NBU interventions closely tracked market pressure, except in late May and early June. **Figure 34: Crawl-like drift and ER spikes provoke higher FX demand from population.**



Source: NBU, KSE Institute



Source: NBU, KSE Institute

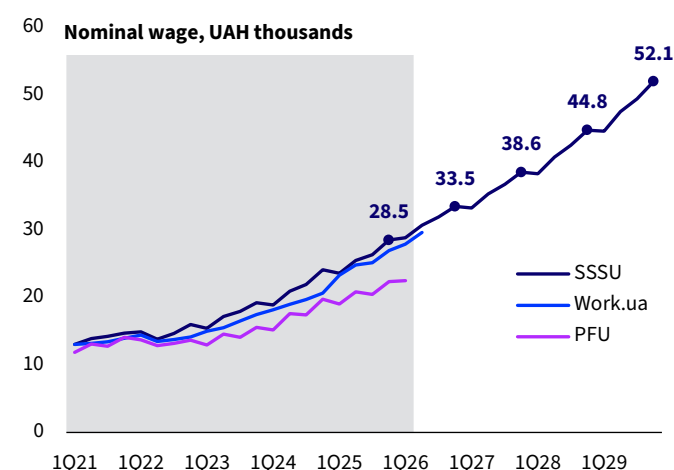
Although the June episode passed without panic, the persistent crawl-like drift continues to shape market participants’ expectations and behavior. Amid the June depreciation, bank clients partially deferred FX sales, with average daily sales falling to USD 226 million from USD 256 million in May. Coupled with a remarkable surge

in purchases to USD 398 million per day (+30% y-o-y), this produced an FX market deficit of USD 3.8 billion—the widest gap in years, exceeding even the seasonal December surges of 2024–25. Households' net FX purchases doubled to USD 22 million per day in June (+63% y-o-y) and, despite the hryvnia's modest early-July firming, climbed further, to about USD 33 million per day, driven both by heavier purchases and thinner sales (see Figure 34). One-year-ahead expectations tell a similar story: financial analysts' USD/UAH projections jumped to 47.1 in the July survey round (from 46.2 in June), banks' expectations—to 46.5 in July from 45.7 in April, with households' expectations at 47.1 amid the June spike. Echoing the 2024 crawl-like pattern, these trends indicate that depreciation is gradually filtering into psychology, which in turn heightens pressure on the FX market and international reserves and shapes the behavior for the months ahead.

LABOR MARKET

Wage growth will continue to be one of the key inflationary channels throughout the forecast period. Labor scarcity sets the pace: shortages keep nominal wages rising even as the cost shock squeezes margins. We project average nominal wages growing from UAH 31,284 in 2026 to UAH 48,458 in 2029, surpassing inflation. Real growth will slow down during 2027, and then re-accelerate with the recovery, reaching 4.7% in 2027 (after 11.4% in 2026) driven by elevated supply-side inflation in the extended war economy, and 6–8% in 2028–29 as reconstruction intensifies competition for skilled labor. The current dynamics confirm the revision in the near-term from supply-side suppressed 11.4% in 2026 to 5.9% in 2028. Average wages reported by the SSSU reached UAH 30,747 in Q2 2026, a nominal gain of about 20% consistent with work.ua and PFU data (see Figure 35). The mechanism behind the growth is that employers absorb higher energy and logistics costs into margins instead of losing scarce workers, confirming that labor is now the harder constraint for most firms. Military pay reform will reinforce this from the demand side, as sharply higher service compensation will raise reservation wages across the civilian market, however the effect will be limited. Pressure is most acute in defense-related production, construction, logistics, manufacturing, and services; these are the same sectors that will compete for labor during reconstruction, keeping wage growth elevated well into the recovery and requiring action to overcome the scarcity, including enhancing the programs for reskilling and calibrating the regional employment policy.

Figure 35: Labor shortages will keep nominal wages rising throughout the forecast period.



Source: SSSU, work.ua, PFU, KSE Institute

Figure 36: Unemployment dynamics are broadly unchanged, but the post-war spike shifts to 2028.



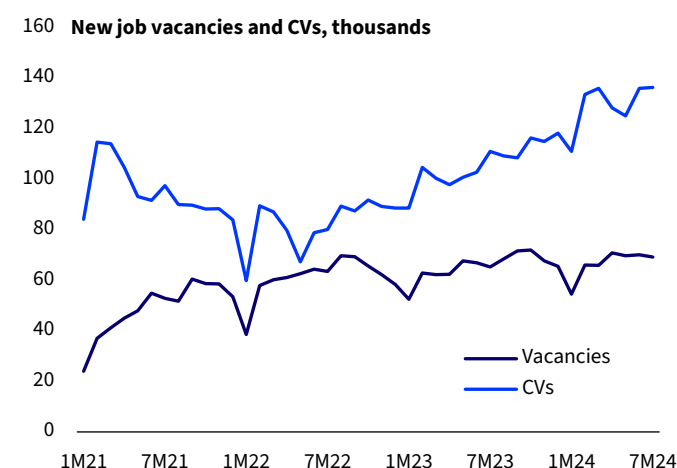
Source: SSSU, Info Sapiens, KSE Institute

The unemployment path over 2026–29 is close to the previous forecast but has shifted as the assumption on the full-scale invasion changed. The demobilization shock moves certain changes from 2027 into 2028, and the labor market stays exceptionally tight until then. The unemployment rate declined to 10.4% in Q2 2026 from 11.4%

in Q1, as the economy recovered from the winter energy crisis that had pushed Q1 real GDP into its first contraction since 2023 (-0.6% y-o-y) and prompted some businesses to postpone activity. We expect the decline to continue to 8.8% by year-end as reconstruction-adjacent demand absorbs available labor. Annual unemployment is projected at 9.5% in 2027, before demobilization drives it up in 2028 to 11.1% on average, with a quarterly peak of ~13% in H1 2028 (see Figure 36). Absorption after the peak is comparatively rapid: reconstruction and investment-driven demand-pull unemployment back toward ~9% by 2029. The return of refugees should add modestly to labor supply in 2028–29. The practical implication is that the reintegration challenge, namely reskilling, qualification recognition, regional matching is once again critical for labor market dynamics.

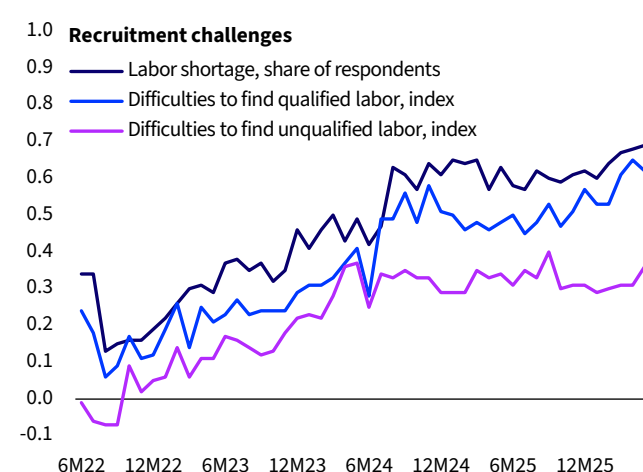
Labor shortages remain the binding constraint on activity, and supply and demand are increasingly misaligned. More searchers, unchanged vacancies, and rising recruitment difficulty (see Figure 37) are occurring at once, which is the signature of a structural mismatch. Roughly 69% of firms reported labor shortages in mid-2026, a record high, while the recruitment-difficulty gap between qualified and unqualified workers also reached a peak (see Figure 38). The two sides of the market are compositionally mismatched: CV inflows are dominated by graduates and lower-skilled service candidates, whose salary expectations already exceed offered wages, while the hardest-to-fill vacancies are blue-collar production, driver, and construction roles with an aging workforce. Rising applications therefore do not clear the market (see [Ukraine Monthly Economic Update](#)). This mismatch is sustained by mobilization and migration now and by demographic decline later, as outmigration has risen disproportionately among the young cohorts that should anchor the workforce in the future. Labor scarcity, thus, remains a binding long-term constraint on growth.

Figure 37: Labor demand and supply are increasingly misaligned.



Source: Work.ua, KSE Institute

Figure 38: Recruitment challenges continue to rise and are most pronounced for qualified labor.



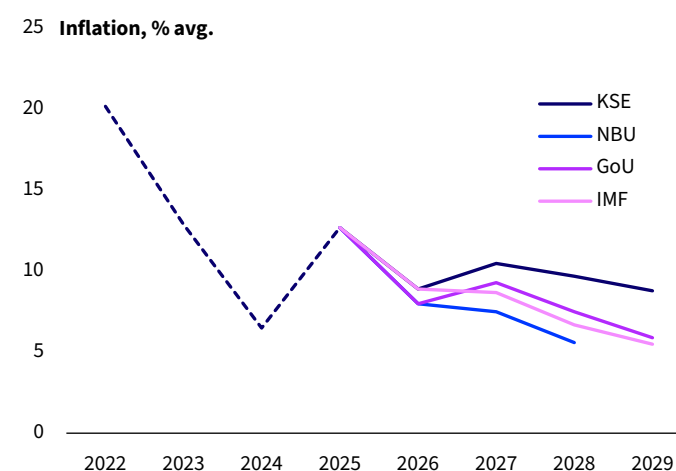
Source: IER, KSE Institute

Return migration is now likely to be later and smaller than previously assumed, which keeps the supply constraint in place. The European Commission proposed in June to extend temporary protection for the roughly 4.4 million Ukrainians in the EU to March 2028, and each additional year of protected status deepens their attachment to host-country jobs, schooling, and housing. On the domestic side, the Ministry of Defense announced a phased demobilization from end-2026, prioritizing the longest-serving military personnel alongside new fixed-term contracts with guaranteed deferments. This is the first defined pathway for returning labor force to the sectors under the most strain, though its initial scale is unspecified. Instruments to attract immigration are not yet in place: Ukraine drew just 6,272 labor migrants in 2025, about 0.14% of the estimated shortfall, against Ministry of Economy estimates that sustaining high growth will require some 8.6 million additional workers by 2032. Through the rest of 2026, we expect shortages to stay elevated across skill segments. Despite the small actual inflow of foreign workers, misinformation campaigns have attempted to create anti-immigration sentiment, illustrating the sensitive nature of migration policies, which will be critical for the post-war recovery (see [Special 1: Migration and Demography](#)).

FORECAST COMPARISON

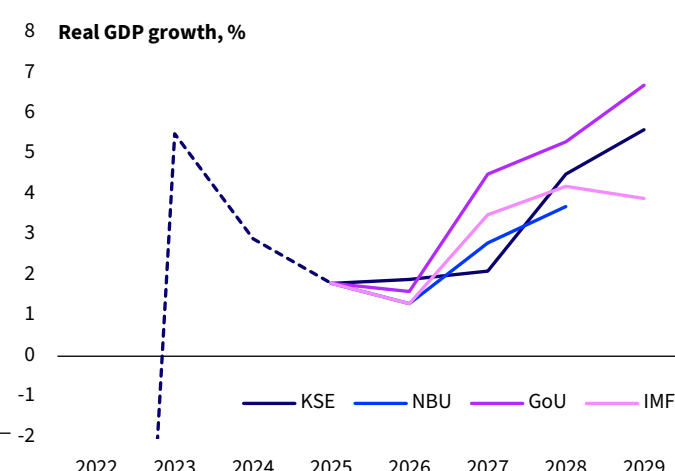
The comparison covers institutions that publish regular medium-term projections for Ukraine: the National Bank of Ukraine (NBU),¹ the Government of Ukraine (GoU),² and the International Monetary Fund (IMF).³ All three institutions have new bases for comparison this quarter: the NBU released its April 2026 Inflation Report; the government published an updated medium-term projection in the Budget Declaration for 2027–29, adopted on June 17, the first credible official baseline in a year; and the IMF completed the First Review of the Extended Fund Facility and the 2026 Article IV consultation on July 20. The IMF review re-based its program on the same two shocks the other forecasters had already absorbed (Q1 contraction and Middle East energy spillover), cutting 2026 growth to 1.0–1.6%, raising end-2026 inflation to around 10.5%, and lowering the debt path due to the USL reclassification. One updated assumption has also changed on our side: we now expect the full-scale war to continue beyond 2026, moving KSE from the most optimistic growth forecaster in recent editions to one of the more cautious.

Figure 39: Inflation forecasts have shifted toward KSE's outlook, while still implying a faster decline.



Source: IMF, Ministry of Finance, NBU, KSE Institute

Figure 40: GDP forecasts converge in the near term, but differ on the timing and pace of recovery.



Source: IMF, Ministry of Finance, NBU, KSE Institute

All institutions raised their near-term inflation paths relative to the previous round in response to the same fuel and energy shock. KSE no longer expects a return to the 5% target within the forecast horizon (see Figure 39). The NBU's April baseline treats the acceleration to 9.4% at end-2026 as a temporary supply-side impulse that unwinds as fuel effects fade, harvests normalize, and monetary restraint holds, returning inflation to target by 2028. The government's path is more benign still, with average inflation of 8.0% in 2026, an increase to 9.3% in 2027 and a gradual easing to 5.9% by 2029 on the back of the tariff moratorium and subdued demand. The IMF's July review moved sharply in our direction, lifting projected end-2026 inflation to about 10.5% from 7.5% in February, before a return to 8% in 2027; it now sits close to our near-term reading, though it still assumes faster subsequent convergence. KSE, assuming the war continues into 2027, places far more weight on the second-round and demand-pull channels of an extended war economy: labor scarcity keeping wage growth elevated, while the 2025 cost-push shock leaves a high base, producing average inflation of 10.5% in 2027 and only gradual disinflation thereafter. Consistent with this reading, we expect the NBU to abandon its easing bias and lift the key

¹ The NBU forecast is prepared quarterly; the latest edition is the Inflation Report of April 2026, among the two most current institutional forecasts this quarter. Its war-duration assumption is not disclosed, and its baseline was finalized before the energy shock's full effects were visible.

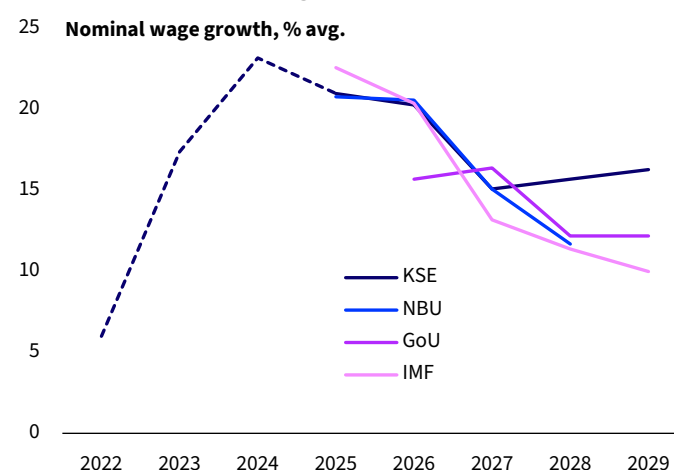
² The government forecast is the Budget Declaration for 2027–29, adopted on June 17, 2026. Unlike the previous quarter, an up-to-date official baseline is now available; we compare against Scenario 1, the baseline used to construct the Declaration, which assumes a substantial improvement in the security situation from 2027. Scenario 2, reserved for a longer war, is closer in spirit to our own assumption but is not published with a full numerical path.

³ The IMF forecast is taken from the 2026 Article IV Consultation and First Review of the Extended Fund Facility (IMF Country Report No. 26/188), discussions concluded June 3 and Executive Board approval July 20, 2026. Its baseline continues to assume the war ends in 2026, followed by an immediate recovery phase over 2027–30, and it envisages a return to market access only in 2029 (the downside scenario assumes none throughout).

rate to 15.5% by October 2026, keeping policy tighter than its April communication implies and revising its own inflation profile upward at the next round while stopping short of publishing double-digit outcomes.

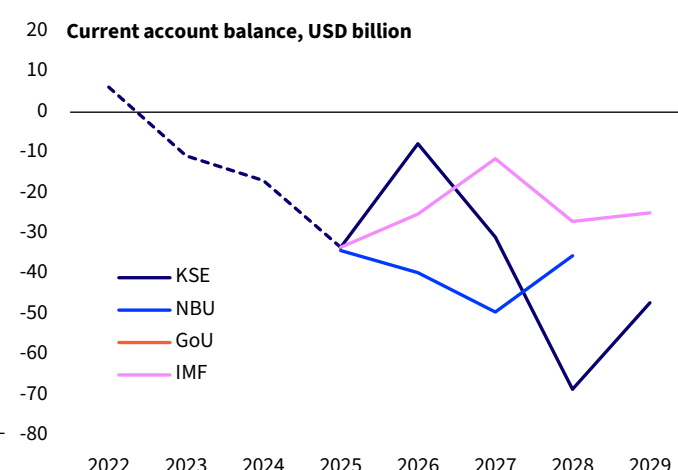
On real GDP trajectory in the near term, the forecasts have largely converged: all four cluster between 1.0% and 1.9% for 2026, anchored by the first-quarter contraction of 0.6% y-o-y and the gap in electricity supply, with the IMF's downgraded 1.0–1.6% range now on the pessimistic rather than the optimistic side, as in previous quarters (see Figure 40). The disagreement has migrated to 2027, where KSE projects only 2.1% real growth, treating it as another year of a war economy in which reconstruction cannot yet scale up and defense continues to absorb resources; the government's Scenario 1 assumes a decisive improvement in the security situation from 2027 and a 4.5% rebound, while the IMF cut its near-term numbers but retained its end-2026 war-end assumption, still projecting 3.5% for what it treats as the first post-war year. The Fund now agrees that the present is materially worse than it assumed in the spring, yet retains an optimistic 2027 rebound because it still dates the war's end earlier than KSE. The NBU sits in between at 2.8%. Once the recovery begins, KSE and the government see growth accelerating toward 5–6%+, while the IMF and NBU project a shallower rebound nearer 4% (the Fund has 3.5% in 2027, rising to 4.2% in 2028 before easing to 3.7% by 2030). Our recovery is therefore both later and steeper, consistent with the larger cumulative output loss implied by an extended war.

Figure 41: Wage forecasts are now broadly aligned, but differ on the timing of deceleration.



Source: IMF, Ministry of Finance, NBU, KSE Institute

Figure 42: KSE expects a larger and later external adjustment than peer forecasts.



Source: IMF, Ministry of Finance, NBU, KSE Institute

Wage forecasts have converged in the near term and now differ only on timing of deceleration. On real wage growth, KSE, the NBU and, after the First Review, the IMF are effectively aligned for 2026: we project real growth of 11.4% the NBU 11.6%, and the IMF's staff report implies a similar outcome, having revised nominal wage growth up to 20.4%, from a much lower assumption in the February request, to match an outturn that ran near 20% y-o-y in Q2. All are reading the same labor-scarcity dynamic, in which persistent shortages and competition for workers, reinforced by the new military-pay model, push real wages well ahead of productivity (see Figure 41). The NBU is the upside outlier, holding real wage growth at 6–7% on the assumption that labor shortages ease only gradually. KSE and the IMF both see a sharp deceleration, to roughly 4.7% and 4.5% in real terms, but for opposite reasons: the IMF's war ends this year, making 2027 a normalization year in which nominal wage growth slows to 13.2%, whereas in our baseline the war continues and the deceleration is real rather than nominal, as the 2027 inflation spike erodes gains before wages re-accelerate to 6.0% in 2028 and 7.5% in 2029.

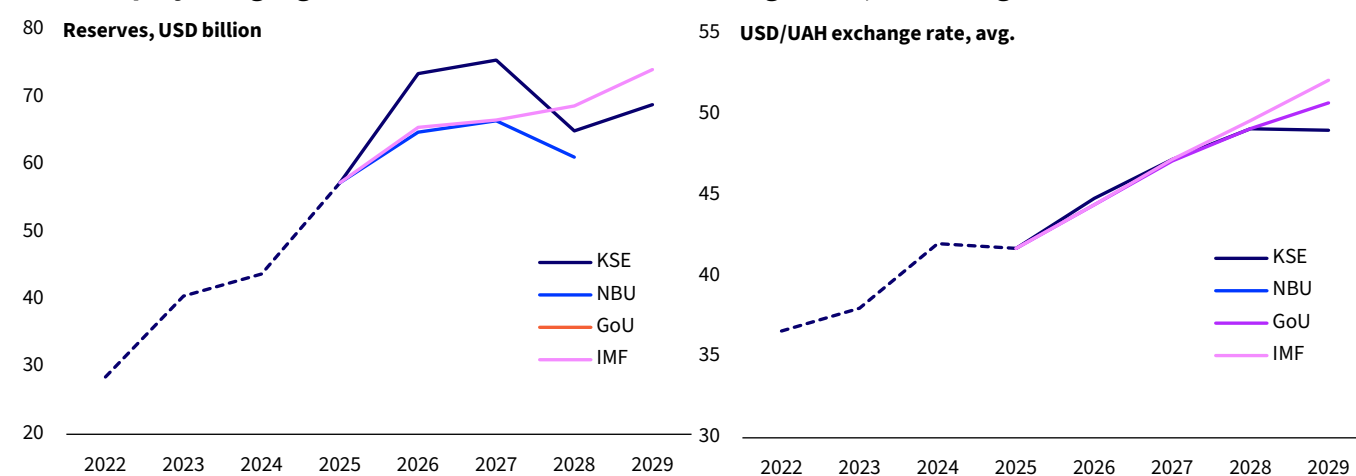
The external accounts are the most structural point of disagreement. KSE projects the trade deficit widening to a peak of nearly USD 86 billion in 2027 before narrowing, materially larger at the peak than the government's broadly flat path of roughly USD 70–74 billion. Two assumptions drive the difference. First, an extended war sustains defense-related capital imports, much of it financed through the Ukraine Support Loan's defense

envelope, further into the forecast horizon, whereas the government and the IMF assume the war-related impulse fades sooner: the Fund's goods trade deficit already narrows from USD 54.5 billion in 2026 to USD 48.7 billion in 2027, and its current-account deficit falls from 11.0% of GDP in 2026 to 4.7% in 2027 as its assumed 2026 war end reduces defense and energy imports. In our baseline, that adjustment is deferred by a year, making the deficit both larger and more persistent. Second, the Middle East escalation, only partly in the NBU's April round, raises the 2026–27 energy import bill. The headline current account is further distorted by the treatment of official support: with large grant-classified inflows (including reclassified USL macrofinancial assistance) in 2026–27, KSE's current-account deficit including grants is compressed to near USD 8 billion in 2026 before widening sharply to around USD 69 billion by 2028 as grants expire (see Figure 42). The IMF shows a milder version of the same mechanics—its current-account deficit widens again to 10.4% of GDP in 2028 as the post-war reconstruction import surge coincides with the roll-off of grant support—but the swing is far smaller than ours, because it assumes both a shorter war and a lower grant share to begin with.

Reserve projections are closer and suggest that external financing remains ample enough to preclude a balance-of-payments crisis. KSE nonetheless projects a higher reserve stock, about USD 73–76 billion in 2026–27 against the NBU's USD 60–67 billion range and the IMF's USD 65 billion for 2026 (though the Fund's July review noted a breach of the end-June net international reserves target, attributed partly to the Middle East shock), because our financing assumptions are more front-loaded, with roughly USD 80 billion of grants, USL, ERA and IMF financing arriving in 2026 (see Figure 43). The dip we project in 2028 (to roughly USD 65 billion) reflects the same grant cliff: as grant inflows stop and repayments resume, accumulation reverses even though the underlying financing picture remains adequate.

Through 2027, the paths of hryvnia depreciation nearly coincide: KSE projects the exchange rate at roughly 46.3 per dollar at end-2026 and 47.5 at end-2027, essentially in line with the government's 45.8 and 48.3 (see Figure 44). They diverge thereafter. The government's baseline continues depreciating to 51.5 by 2029, while KSE projects a modest nominal appreciation to about 48.3 in 2029 from 49.9 in 2028 as the recovery matures, export capacity improves, and private inflows return. The difference is one of regime and timing: our path assumes managed flexibility with a firmer NBU leaning against steep depreciation once reserves are rebuilt, reflecting the exchange rate's pass-through to prices and expectations, whereas the government's numbers, prepared for budget planning, embed a more mechanical depreciation trend.

Figure 43: Reserve forecasts point to ample buffers, with KSE projecting higher near-term reserves. **Figure 44: Exchange-rate forecasts remain close through 2027, but diverge thereafter.**

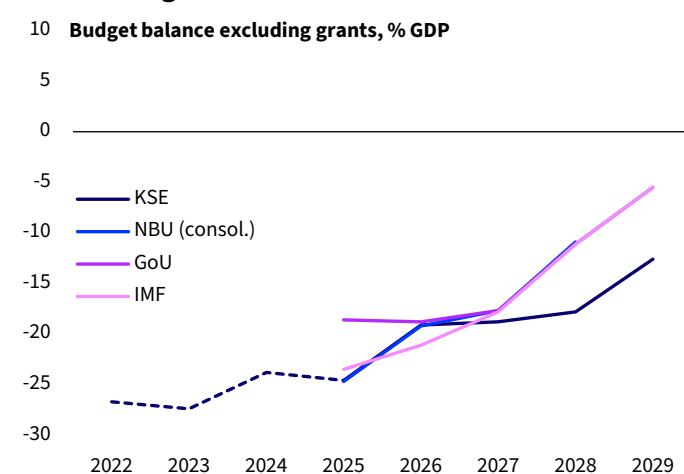


Source: IMF, Ministry of Finance, NBU, KSE Institute

Source: IMF, Ministry of Finance, NBU, KSE Institute

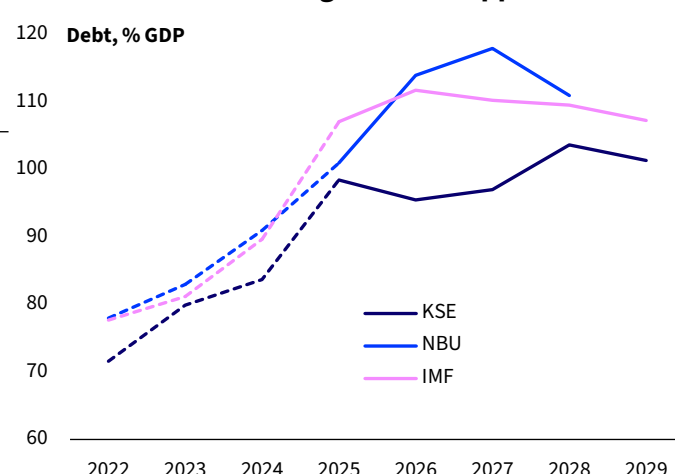
Fiscal projections now include the government's updated budget declaration. The government projects the deficit narrowing from 17.7% of GDP in 2027 to 11.1% in 2028 and 5.5% in 2029, a considerably faster consolidation than KSE's, which, excluding grants, keeps the deficit near 19% through 2027 and still at 12.6% in 2029 (see Figure 45). The IMF's July review, by contrast, now tracks our near-term path closely, placing the general government deficit excluding grants at 21.1% of GDP in 2026 and 17.8% in 2027. The difference with the government's forecast again reflects war assumptions. Scenario 1 in the Budget Declaration assumes defense spending can begin falling from 2027; KSE, with hostilities continuing into H2 2027, keeps defense and security outlays rising into 2027, to above USD 110 billion, before moderating from 2028, sustaining the deficit for longer. On the grants-inclusive measure, the two look closer in 2026–27 because grant-classified support compresses the reported deficit, but that convergence is mechanical and disappears once grants end. The gap between the two deficit paths in the outer years reflects the fiscal cost of the longer-war assumption, and it is the same amount that reappears as the roughly USD 67 billion of uncommitted financing in our assumptions.

Figure 45: Fiscal normalization is delayed in KSE's longer-war baseline.



Source: IMF, Ministry of Finance, NBU, KSE Institute

Figure 46: KSE projects a lower debt burden through a different treatment of grant-like support.



Source: IMF, NBU, KSE Institute

Debt paths differ mainly because of how contingent and grant-like instruments such as the USL are treated and the inclusion of uncommitted foreign loans in 2028–29. KSE projects state debt, including contingent liabilities under the ERA mechanism, falling as a share of GDP this year and rising somewhat above 100% in 2028–29 (see Figure 46). The Fund now projects debt peaking at 111.8% of GDP in 2026 (up from 107.1% in 2025) and edging down only slowly to 110.3% in 2027 and around 102% by 2030. The NBU in its April forecast keeps public and publicly guaranteed debt above 100% of GDP across the entire horizon. Due to the broader concept that captures guarantees, the numbers are not directly comparable. Two factors drive overall differences in the trajectory: First, we classify all funds provided in 2026–27 under the USL as grants, leading to significantly lower debt level throughout the forecast period. Second, we assume that the budget financing gap will be covered by USD 67.4 billion in foreign loans in 2027–29, leading to an increase in the debt level in the outer years that others do not show.

SPECIAL 1: MIGRATION AND DEMOGRAPHY

Every component of Ukraine's demography—births, deaths, and migration—has been negatively affected by the full-scale war. But the three drivers of demographic developments do not carry equal weight for what comes next. In H1 2026, Ukraine registered 73,292 births (16% fewer than in H1 2025) against 259,853 deaths (up 4% y-o-y).⁴ Numbers like these—nearly four deaths for every newborn and a total fertility rate 1.0—cannot be reversed by family planning policy on any horizon that matters for the reconstruction period, likely taking decades to revert.⁵ European experience shows that fertility rates respond to incentives slowly and modestly. Migration, meanwhile, is different in both scale and speed. Roughly 5.6 million Ukrainians remain abroad as of January 2026, roughly two-thirds of which are of working age.⁶ Whether they return home, stay abroad, or are joined by yet more migrants from Ukraine is a question that will be decided within the next few years and depends fundamentally on whether the war comes to an end in the not-too-distant future.

Migration dynamics will define the population and labor force in the short-to-medium term. In KSE Institute's preliminary population projections, three scenarios differ primarily in their migration assumptions, producing a spread of 4.5 million people by 2040. Even the optimistic scenario ends below today's population level, however, with deaths running high as the older segment of the population moves into higher-mortality age brackets, against births that remain either extremely low (during the war) or moderately improve, yet significantly below the 2.1 replacement rate threshold during the post-war recovery. This means that the return of refugees can create a temporary plateau, rather than sustained growth in the population. The central scenario sits between these poles: roughly one-third of refugees return, leaving 26.5 million residents by 2040. Partial return does not stop the decline of the population, but it materially improves its structure as enough families and women of childbearing age come back to the country. In the pessimistic scenario, the refugee stock abroad continues to grow (from 5.9 to 7.3 million) as a continued wartime outflow outweighs small returns, while births in Ukraine fall further as young women leave. Youth emigration compounds into the birth rate, with today's outflows becoming a labor-supply constraint with a 15–20-year tail.

Bringing young Ukrainians back after the war will be critical for the labor force. In the months following the government's decision to permit men aged 18–22 to exit the country (from late August 2025), nearly 100,000—about one out of every seven in that age cohort—left.⁷ Weekly temporary-protection applications from young Ukrainian men in Germany rose roughly tenfold.⁸ Their departure is often rational at the individual level but quite costly in aggregate, as these youth will form the core of the 2030's labor force and generation of young parents. Thus, the policy debate must emphasize how Ukraine engages with return migration, even if the solutions carry their own political costs (e.g., in the case of benefits, tax exemptions, or focused reskilling programs for returnees).

Ukraine has traditionally been a labor exporter, not a labor importer. Before 2022, an estimated 2.5–3 million Ukrainians worked abroad (1.35 million in Poland alone on the eve of the full-scale invasion), collectively remitting USD 18.2 billion in 2021, or ~9% of GDP, and serving as one of the largest sources of foreign currency.⁹ By contrast, foreigners made up barely 1% of the Ukrainian population, with ~190,000 temporary residents and ~300,000 permanent residents, the latter overwhelmingly migrants with familial connections to Ukraine from former Soviet states; just 21,800 work permits were issued in the peak pre-war year of 2021.¹⁰

⁴ [Ministry of Justice of Ukraine](#)

⁵ [World Bank](#)

⁶ [CES, 5th refugee survey wave](#)

⁷ [CES, 5th refugee survey wave](#)

⁸ [InfoMigrants \(Deutsche Welle\)](#)

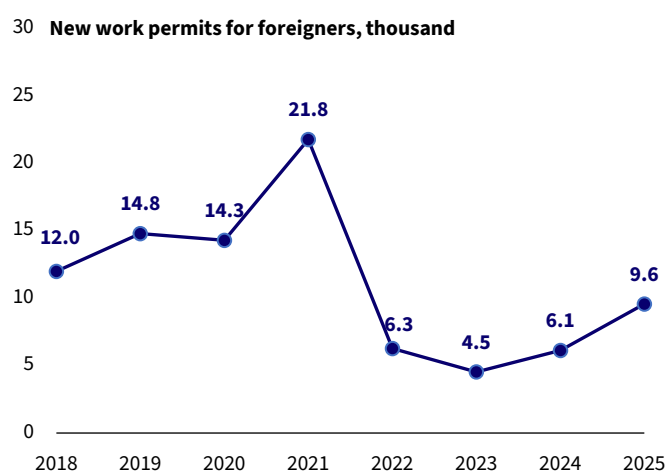
⁹ [World Bank](#); Ptoukha Institute for Demography and Social Studies of the NAS of Ukraine; [Statistics Poland](#)

¹⁰ [State Migration Service of Ukraine](#)

Post-war reconstruction will change the demand side of the migration equation fundamentally, though, and policies aimed at improving both recruitment and retention will be necessary. Reconstruction investments will create a wave of job creation and demand for labor. Ukraine will also have a salary level 2–3 times higher than in Central and South Asia, and the promise of eventual EU accession serves as a signal of improving quality of life standards. Central Asia’s partial reorientation away from Russia could be an opening for Ukraine, even if other European countries already draw from their labor markets. Since Ukraine will have to compete on a lower tier of the same wage ladder with other European countries, policy design—e.g., legal channels, recruitment agreements, and retention—will be the decisive factor. Ukraine’s pre-war record is not the strongest in this respect: of the ~50,000 first-time temporary residence permits issued annually in 2019–21, roughly half of arrivals did not durably remain.¹¹ Policies aimed at retaining migrant labor are what can prevent Ukraine from becoming merely a transit stop on the way to Warsaw.

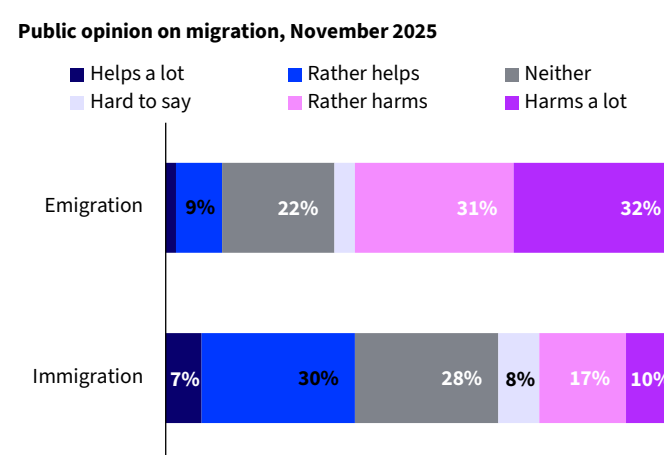
Against this backdrop, a heated debate over inward migration of non-Ukrainians has already begun within Ukrainian society. An anti-migrant petition passed the 25,000-signature threshold in May amid viral warnings of ‘a million migrants from Bangladesh’ that will replace the Ukrainians who are dying at war. What is particularly remarkable about this reaction is that it is entirely belied by the data; in fact, the numbers point in the opposite direction. Work permits issued to foreigners collapsed from 22,000 in 2021 to just 4,500–6,300 in 2022–24, recovered to only 9,582 in 2025 and stood at 3,800 by June 2026 (see Figure 47). Beyond flows, the change in the stock of foreign labor is even more drastic: Ukraine’s temporary foreign population fell by 75% during the full-scale war, from 189,000 in 2021 to just 47,000 in 2024.¹² Far from receiving a wave of migrants, Ukraine has been losing foreigners faster than at any point in its recorded history. The ~300,000 permanent residents who stayed are overwhelmingly long-settled, family-anchored people from Moldova, Azerbaijan, Georgia, and other former Soviet states.

Figure 47: New work permits for foreigners are still significantly below pre-war levels.



Source: State Migration Service of Ukraine

Figure 48: Public opinion towards immigration is much more favorable than towards emigration.



Source: Gallup International ‘End of Year’ survey

The gap between perception and official data is not purely a reflection of the public’s mood. Fact-checkers and investigative journalists helped trace the panic to a coordinated information operation that played on well-known societal anxieties.¹³ After a January 2025 report that a furniture factory in Tiachiv was negotiating to hire 160 Bangladeshi workers, waves of AI-generated videos and images (e.g., Indian migrants in Ivano-Frankivsk, scenes of migrants selling Russian flags in Kyiv) were posted in sync across Telegram networks, boosting narratives that the government is effectively replacing Ukrainians with foreigners while Ukrainians languish at

¹¹ State Migration Service annual reports

¹² State Migration Service annual reports

¹³ Center for Countering Disinformation; The Kyiv Independent

the front. Crucially, the operation exploited genuine anxiety about depopulation—which the government will have to carefully manage going forward—to preemptively poison the one policy tool that can materially offset it.

In fact, Ukrainians are well aware which direction of migration poses the bigger threat to their country. Ukraine is among the most pessimistic countries toward the effects of emigration—63% say that emigration harms the country, compared to just 11% that see benefit in it (see Figure 48).¹⁴ Views on immigration are far more favorable: 37% see benefits from foreigners immigrating to Ukraine—most pronounced among young people, particularly young women, and residents of Kyiv—27% view it as harmful, and another 36% are neutral or undecided.¹⁵ Other surveys show that 61% of Ukrainians agree that immigrants are helpful to the country’s development, higher than in Hungary and Slovakia, for example. Moreover, KIIS’s long-running social-distance index finds xenophobia in Ukraine to be steadily “moderate,” with post-2022 deterioration concentrated on attitudes toward Russians, not migrants in general.¹⁶ However, these figures may present an overly optimistic picture, given that these attitudes have not yet been tested by the lived experience of Ukrainians facing genuinely noticeable inflows of migrants.

There are three European reference points bracket what a post-war Ukraine can realistically expect. First, Poland is the ceiling. Foreign workers registered in Polish social insurance rose six-fold in eight years. But Poland achieved this with EU membership, wages 2–3 times Ukraine’s, the simplest legal channel in Europe (the employer declaration), and a 40-million-person neighbor (Ukraine) with dense networks. Second, Bulgaria is the most realistic benchmark: it is the closest income peer to a post-war Ukraine, recruiting over 108,000 foreign workers in three years (~49,000 in 2025, chiefly from Uzbekistan, Turkey, Nepal and India), equivalent to ~7.7 arrivals per 1,000 population annually. Scaled to Ukraine’s population, matching Bulgaria’s per-capita rate would mean roughly 230,000 gross arrivals a year. Third, Bosnia is the warning. Thirty years after Dayton Agreement, Bosnia issues about 6,000 work permits a year and remains a net exporter of people. Without growth and wage convergence, a war-damaged country remains a sender. Thus, the lesson for Ukraine is that the inflow of migrants is conditional on its reconstruction boom actually materializing, and that the most valuable “immigrants” in the Balkans turned out to be returning diaspora, who drove firm creation and exports.¹⁷

SPECIAL 2: KSE FORECAST EVALUATION

Judged against the difficulty of forecasting an economy at war, the 2025 record holds up well. The forecasts were accurate in monetary and mostly accurate in budgetary indicators, and erred where the war assumption was the most influential, particularly where the destruction of infrastructure played a key role, as in real activity (see Table 5). Nominal GDP was projected within ~0.7% of the outcome in every edition from January 2025 onward (see Figure 49). Inflation was corrected in essentially one step, with the January revision from 8.8% to 12.1% capturing most of the movement toward the eventual 12.7% outturn. Exchange-rate and policy-rate forecasts converged steadily toward the outcome. Forecasts for the state budget deficit and the current account balance displayed decent accuracy yet relied strongly on the quality of the foreign financing forecast, which was less stable in 2024–25 than in 2026. Thus, relatively accurate and convergent forecasts showed worsening results in the latest vintage. The one persistent error was real GDP growth, overestimated by 1.8 pp in the October 2024 vintage and in smaller increments thereafter (see Figure 50). As the following analysis shows, this error can be traced directly to the assumed end of the full-scale war by late 2025. However, as the assumption was stated transparently in each edition, readers could adjust the real-sector outlook to their own views, and it was revised as the evidence changed.

¹⁴ Gallup International End-of-Year Survey 2025

¹⁵ Rating Group and Gallup International

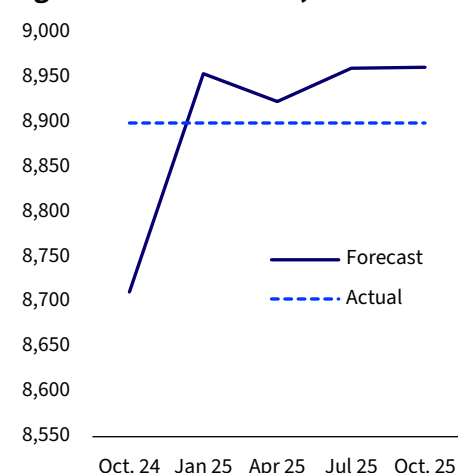
¹⁶ KIIS

¹⁷ Bahar et al., 2024

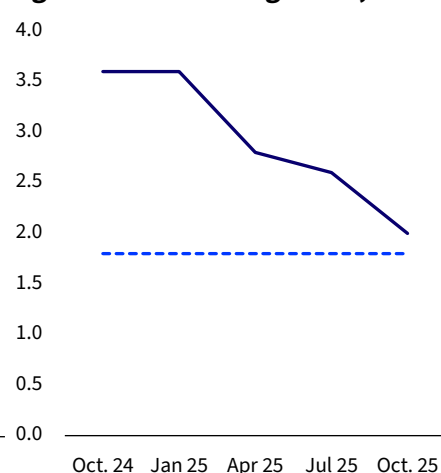
Table 5: Key indicators: outturn vs. forecast vintages

Indicator	Forecast vintage					2025 actual
	Oct. 24	Jan. 25	Apr. 25	Jul. 25	Oct. 25	
Real GDP growth, %	3.6	3.6	2.8	2.6	2.0	1.8
Nominal GDP, UAH bn	8,711	8,954	8,923	8,960	8,961	8,899
Budget balance, USD bn	-41.3	-37.5	-33.5	-30.5	-41.7	-39.3
Budget balance x/ grants, USD bn	-41.3	-42.2	-50.2	-47.2	-49.1	-53.8
Foreign grants, USD bn	...	4.7	16.7	16.7	7.4	14.5
Foreign loans, USD bn	...	40.7	41.7	41.7	35.1	37.5
Loans and grants, USD bn	...	45.4	58.4	58.4	42.5	52.0
Headline inflation, % avg	8.8	12.1	11.8	12.5	13.1	12.7
Exchange rate (USD), avg	44.5	42.7	42.6	42.1	41.7	41.7
Policy rate, % avg	13.0	13.1	14.9	15.0	15.2	15.3
Current account, USD bn	-20.9	-25.9	-14.0	-16.6	-33.6	-33.4
Current account x/ grants, USD bn	-20.9	-30.5	-30.7	-33.3	-41.0	-47.9
Unemployment rate, % avg	13.3	13.1	11.5	10.1	10.6	10.8
Nominal wage, UAH avg	23,388	23,748	26,364	25,016	26,396	26,009

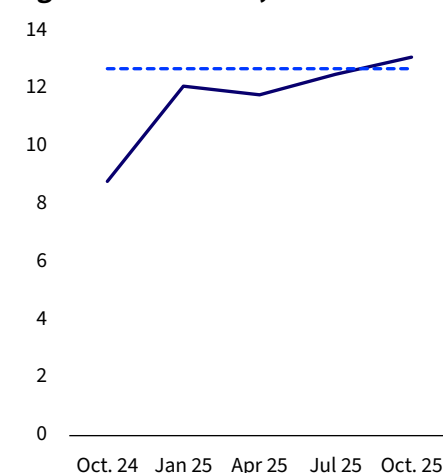
Inflation, exchange-rate, and policy-rate forecasts increasingly converged towards a higher-inflation, stronger-hryvnia, and tighter-monetary-policy outcome than initially expected. Most of the inflation correction occurred by January 2025, while the July forecast of 12.5% differed from the actual outcome by only 0.2 pp (see Figure 51). At the same time, the average exchange rate forecast was gradually reduced from 44.5 USD/UAH in October 2024 to the actual 41.7 USD/UAH in October 2025 (see Figure 52). The combination of higher than forecasted inflation and a stronger than expected hryvnia suggests that the inflation cannot be explained by exchange-rate depreciation alone, and that the domestic cost pressures were likely more important than initially assumed. Consistent with the stronger inflationary environment, the forecast for the average key policy rate increased from 13.0% to 15.2%, compared with the actual 15.3% (see Figure 53).

Figure 49: Nominal GDP, UAH bn

Source: KSE Institute

Figure 50: Real GDP growth, %

Source: KSE Institute

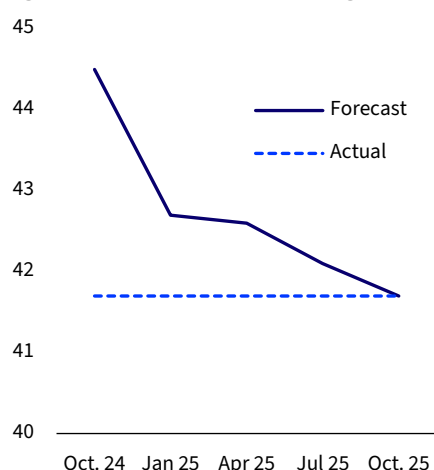
Figure 51: Inflation, %

Source: KSE Institute

Early forecasts overestimated unemployment and underestimated nominal wages. The October 2024 and January 2025 editions projected unemployment rates of 13.3% and 13.1%, respectively, compared with the actual 10.8% (see Figure 54), while nominal wages were underestimated by approximately 9–10% (see Figure 55). Subsequent wage forecasts were considerably closer: the April and October projections differed from the actual UAH 26,009 by only 1.4–1.5%. However, the July forecast again underestimated wages by almost 4%, indicating

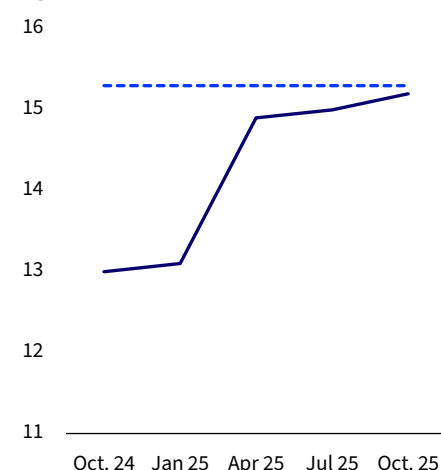
that convergence was not continuous. Wage accuracy depended not only on the outlook for employment and economic activity, but also on the extent to which higher inflation translated into nominal pay growth.

Figure 52: USD/UAH exchange rate



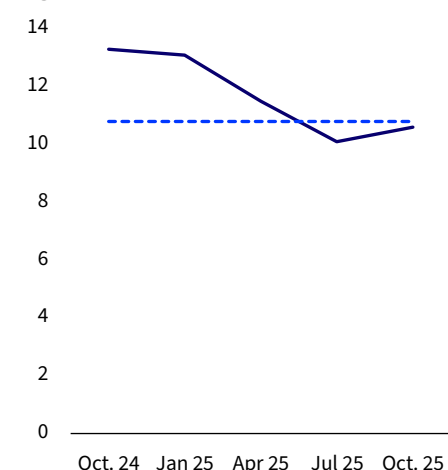
Source: KSE Institute

Figure 53: Key policy rate, %



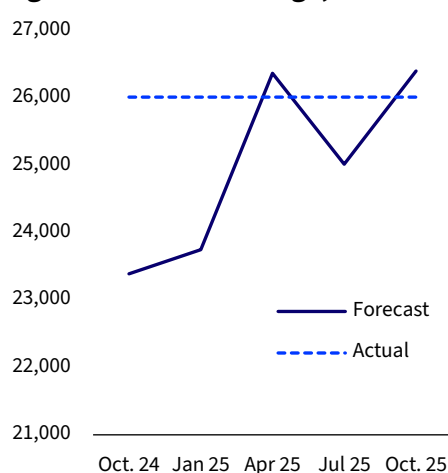
Source: KSE Institute

Figure 54: Unemployment rate, %



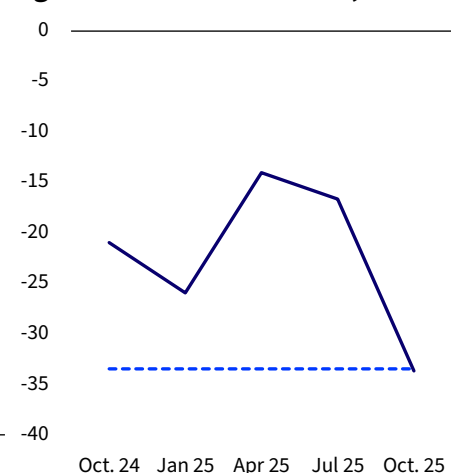
Source: KSE Institute

Figure 55: Nominal wage, UAH



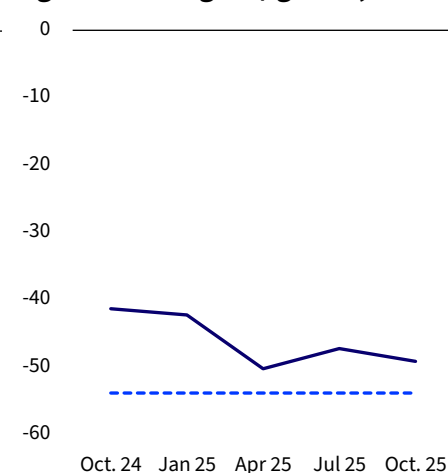
Source: KSE Institute

Figure 56: Current account, USD bn



Source: KSE Institute

Figure 57: Budget x/ grants, USD bn



Source: KSE Institute

Forecasts for fiscal and external sector indicators skewed overly optimistic. The projected current account deficit ranged from USD 14.0 billion to USD 33.6 billion, compared with an actual deficit of USD 33.4 billion. However, the current account with grants is in large part a policy variable, and the composition of expected support was constantly changing (see Figure 56). Thus, the more representative reading would exclude grants, for which the forecast steadily converged toward the actual value, albeit underpredicting it. The April and July forecasts underestimated the headline deficit by USD 19.4 billion and USD 16.8 billion, respectively, before a substantial revision in October brought the projection close to the final outcome. The reading without grants is overall closer, though not in the October forecast, when an optimistic view underpredicted the actual value. These revisions illustrate how fiscal and external sector forecasts are highly dependent on the amount and composition of external financing, as well as the timing of its disbursement. They also show that a later vintage is not necessarily more accurate for every individual indicator amid a constantly changing policy environment. The forecast for the budget balance, albeit also affected by foreign support assumptions and the distribution between grants and loans, performed rather well. In particular, the assessment of underlying budget dynamics, i.e., the fiscal balance excluding grants, was close to the eventual outcome from April 2025 (see Figure 57).

Quarterly accuracy generally deteriorated as the forecast horizon increased. However, the four-quarter-ahead results remain based on only two or three observations and should be treated as indicative rather than as stable measures of long-horizon performance (see Table 6).

Table 6: Key indicators: forecast accuracy 1Q-4Q ahead

Indicator	Horizon	N	Avg. error	MAE	RMSE
Real GDP growth, %	1Q	5	1.5	1.5	1.8
	2Q	4	1.5	1.5	1.6
	4Q	2	3.3	3.3	3.5
Inflation, % avg.	1Q	6	0.2	0.7	0.8
	2Q	5	-0.4	0.8	1.0
	4Q	3	-0.1	0.2	0.2
Nominal wage, UAH avg.	1Q	5	119.5	779.7	803.8
	2Q	4	-814.5	1,094.7	1,375.3
	4Q	2	-2,676.6	2,676.6	2,864.3
Key policy rate, % avg.	1Q	6	-0.2	0.2	0.3
	2Q	5	-0.6	0.6	0.6
	4Q	3	-1.7	1.7	1.8
Exchange rate, USD/UAH avg.	1Q	6	0.0	0.5	0.6
	2Q	5	0.2	1.0	1.0
	4Q	3	1.3	1.3	1.6

Real GDP growth was consistently over-forecast at both the one- and two-quarter horizons. The average error and MAE were approximately 1.5 pp for both horizons, meaning that the errors did not cancel out: forecasts were consistently above actual growth. The four-quarter-ahead average error and MAE were considerably larger at 3.3 pp, while RMSE reached 3.5 pp. The difference between MAE and RMSE reflects the particularly large miss for Q1 2026, when GDP declined by 0.6% compared with forecasts of 1.6%, 0.3% and 4.0% at the one-, two- and four-quarter horizons, respectively. This largely reflects shocks that were absent from, or less severe than, the assumptions underlying earlier forecast vintages. Persistent attacks on critical infrastructure and the resulting electricity shortages constrained production during the harsh winter. The disruption of energy flows through the Strait of Hormuz late in the quarter also raised global oil and gas prices.

Inflation forecasts did not display systematic bias, while exchange rate forecasts were broadly unbiased only at shorter horizons. For inflation, one-quarter-ahead average error was only 0.2 pp, however, its MAE of 0.7 pp shows that the small average bias partly resulted from over- and under-forecasts cancelling each other out. In addition, four-quarter-ahead inflation forecasts performed well, with an MAE of only 0.2 pp. Exchange rate accuracy, on the other hand, weakened with the horizon: its MAE increased from 0.5 UAH per USD one quarter ahead to 1.0 and 1.3 UAH per USD at the two- and four-quarter horizons. The near-zero short-horizon average errors indicate no persistent directional bias, although longer-horizon forecasts consistently anticipated a weaker hryvnia than observed.

The accuracy of KPR and nominal wage forecasts declined as the forecast horizon lengthened. The KPR forecast MAE rose from 0.2 pp one quarter ahead to 0.6 two quarters ahead and 1.7 four quarters ahead. Negative average errors at every horizon indicate a systematic tendency to forecast a lower policy rate than was eventually observed. Nominal wage forecast errors were also relatively limited one quarter ahead, with an MAE of approximately UAH 780, or ~3% of the average actual wage. The MAE increased to about UAH 1,095 two quarters ahead and UAH 2,677 four quarters ahead, equivalent to ~4% and ~9%, respectively. Negative average errors at the longer horizons indicate that nominal wages were generally higher than anticipated in earlier forecast vintages.

The 2025 record shows a clear division: the forecasts were consistently optimistic on real activity and consistently accurate on nominal anchors. Real GDP growth was over-forecast in every vintage and at every horizon, while nominal GDP, inflation, the exchange rate, and the policy rate converged quickly and stayed close to the outcome. The source of this asymmetry is not the model, but the war assumptions that feed it. Each vintage assumed less intense strikes on infrastructure and an earlier normalization of hostilities than materialized, pushing them into the unpublished negative scenario. This is the central lesson that will carry into upcoming editions. Where the war assumption does not bind to such an extent, namely in prices, the exchange rate, the policy rate, the forecasts have proven reliable.