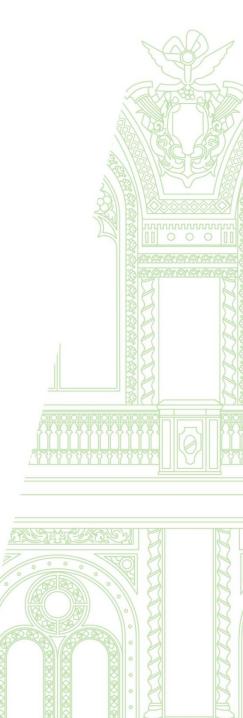


Monthly Macroeconomic and Monetary Review

October 2023

Monetary Policy and Economic Analysis Department



Summary

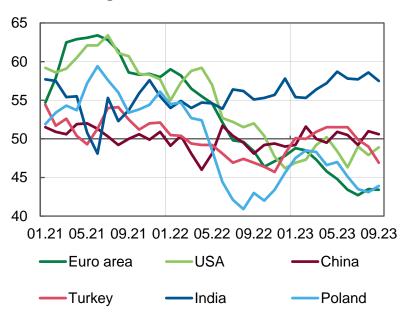
- Economic growth in Ukraine's MTPs is slowing down, but inflation pressures remain persistent. Energy prices, especially for oil, continued to rise amid tight supply. Prices for commodities prevailing in Ukrainian exports were highly volatile under the influence of specific factors. The main issue on the agenda of major CBs' is how long to keep interest rates at high levels. At the same time, more and more EM central banks are moving to cut rates
- Consumer inflation in Ukraine continued to decelerate rapidly (headline inflation to 8.6% yoy, core inflation to 10.0% yoy in August), primarily due to an expanded supply of foods, particularly newly harvested vegetables and fruits. Underlying inflationary pressures also eased, including due to improved expectations. According to the NBU's estimates, inflation slowed in September as well, driven by the same factors
- In September, economic activity was supported by an ongoing harvesting campaign, as well as related transportation and processing works of larger harvests than last year. Significant capital expenditures from the budget stimulated construction, which also supported railway transportation
- The revival of economic activity underpins an increase in labor demand, which is leading to a gradual improvement in employment and household income from labor
- In September, the state budget deficit, excluding grants from revenues, remained significant despite increased revenues. As expected, the primary sources of deficit financing were international aid and domestic borrowings
- In August, the merchandise trade deficit remained nearly unchanged from July. However, the current account deficit expanded due to the grant from the US being shifted. Coupled with a reduction in capital inflows under the financial account, this resulted in a decrease in reserves by the end of August. Yet, reserves remained historically high, exceeding USD 40 bn
- The yields on hryvnia assets remain attractive, even in the face of the nominal rate cuts. The NBU saw an increase in its FX sales due to heightened net FX demand, primarily attributable to seasonal and situational factors
 - The steady progress in reducing inflation, the accumulation of a significant level of international reserves, the increase in the attractiveness of hryvnia assets allowed the NBU to move to a regime of managed place of the exchange rate



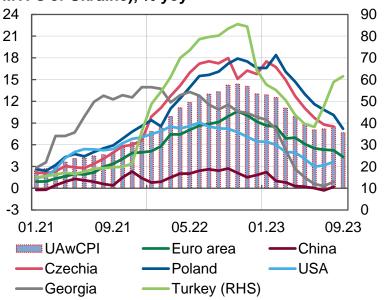
External Environment

Economic growth in Ukraine's MTPs is further slowing down, but inflation pressures remain persistent

Manufacturing PMI of selected countries



CPI in selected countries and UAwCPI (price index in MTPs of Ukraine), % yoy



Source: S&P Global.

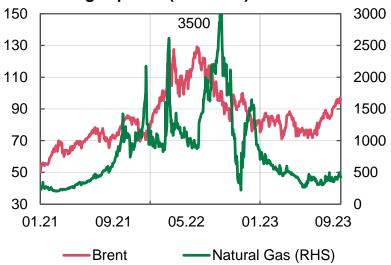
Source: National statistical offices, NBU staff estimates.

- The slowdown in the economies of Ukraine's main trading partners (MTPs), as evidenced by leading indicators, was due to both a decline in manufacturing and a slowdown in the growth of the services sector. European countries showed the worst performance among other MTPs
- Tight financial conditions amid a decline in new orders, including export orders, were significant factors behind these developments
- Inflation pressures from Ukraine's MTP countries remained persistently high, especially in the services sector. Input costs resumed rising due to higher energy prices, primarily for oil



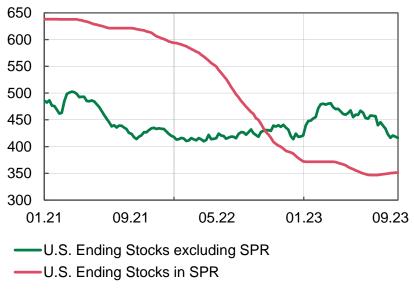
Global energy prices, especially for crude oil, continued to rise amid tight supply

World Brent oil prices (USD/bbl) and Netherlands TTF natural gas prices (USD/kcm)



Source: Refinitiv.

U.S. ending stocks of crude oil, million barrels



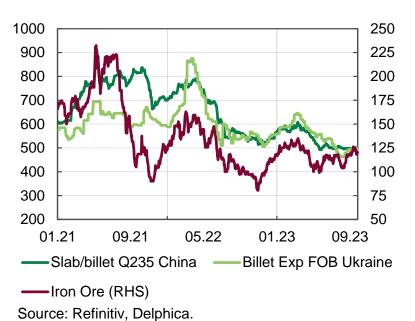
Source: U.S. Energy Information Administration, as of 22.09.2023.

- In September, oil prices accelerated their growth. The announcement that Saudi Arabia would extend its voluntary oil production cuts and russia would extend its export cuts until the end of 2023, amid a general output reduction by the OPEC+, heightened fears of an oil shortage. Only the weakness of the global economy and increased production by Iran and the United States restrained price growth
- Gas prices in Europe remained under pressure from rising prices in the Asian market due to increased demand from China and India. Thus, as of the end of September, total gas imports by European countries decreased by 22% yoy (according to Bruegel). At the same time, the accumulation of sufficiently high levels of gas reserves (over 94%) in EU storage facilities restrained price growth

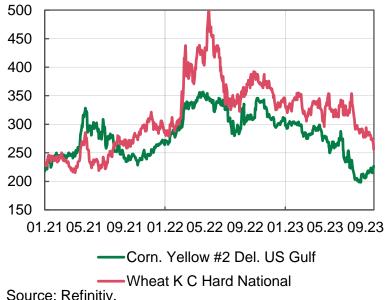


World prices for commodities prevailing in Ukrainian exports were highly volatile under the influence of specific factors

Global steel and iron ore prices, USD/MT



Global grain prices, USD/MT

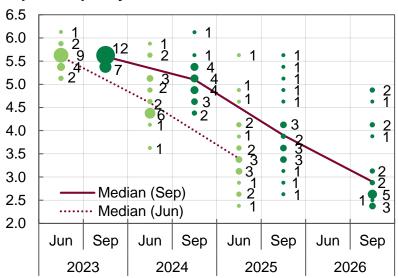


- Steel and iron ore prices in September were mainly driven by the seasonal autumn demand growth in China and the Asia-Pacific countries (Indonesia, Vietnam, Thailand), as well as by restocking during the pre-holiday period (the so-called Golden Week). However, weak demand in most regions of the world restrained this growth, and the beginning of the holidays at the end of the month even adjusted prices downward
- Wheat and corn prices moved in opposite directions. Wheat prices declined due to: significant supplies of cheap grains from Russia; ships with Ukrainian grains leaving the Black Sea port through a temporary humanitarian corridor; and the USDA's unexpected increase in wheat production figures in the US. Corn prices, on the other hand, rose despite Brazil's record harvest. Rising oil prices supported corn as a feedstock for ethanol production. An additional factor was doubts about the potential for yields and stocks in the US after the drought



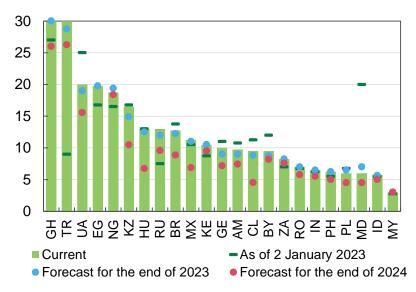
Major CBs are debating how long to keep rates high, while more and more EM CBs are cutting rates

The number of FOMC members that expect the respective policy rate



Source: Fed.

Key policy rates in selected EM countries, %



Source: official web pages of central banks, Focus Economics, Oxford Economics, as of 30.09.23.

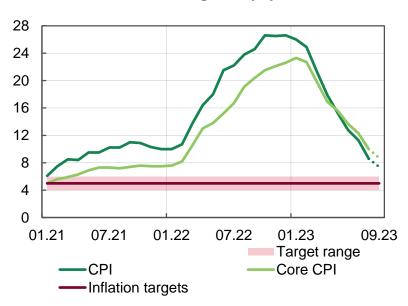
- The Fed left rates unchanged in September, while the ECB, as expected, raised them by 25 bps. Both CBs signaled readiness for further increases if needed (the Fed's rhetoric was more hawkish) and the necessity to keep rates higher for longer. However, markets see no further rate hikes and anticipate rate cuts in mid-2024. At the same time, The Bank of England and CB of Switzerland, contrary to expectations, refrained from raising rates
- CBs of Poland and Peru have joined a large group of EM CBs that have started cutting rates. The CB of Hungary has concluded 'the normalisation of the extraordinary interest rate environment', closing the gap between the one-day deposit tenders rate (which served as the policy rate) and the base rate
- At the same time, in September the CB of **Turkey** raised its key rate again (by 500 bps) and reiterated that it will continue the monetary tightening process, confirming a return to the orthodox policy





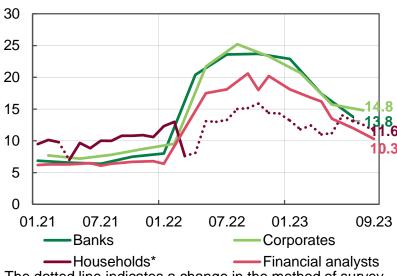
Consumer inflation continued to decelerate fast

Inflation* and inflation target, % yoy



^{*} Data for September reflects nowcast. Source: SSSU, NBU staff estimates.

Inflation expectations for the next 12 months,%



* The dotted line indicates a change in the method of survey for a telephone interview.

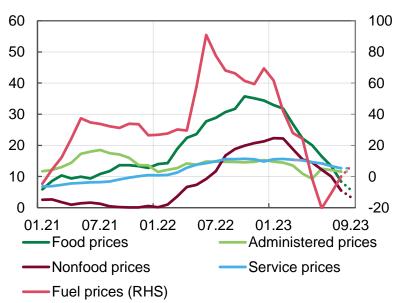
Source: NBU, GfK Ukraine, Info Sapiens.

- The faster deceleration in inflation was driven by a larger supply of foods, in particular fruits and vegetables from the new, larger-than-expected harvest due to exceptionally benign weather conditions
- Underlying inflationary pressures also eased. This was driven by improved expectations given exchange rate stability and reduced pressure from business costs
- According to the NBU's estimates, inflation will continue to slow in September



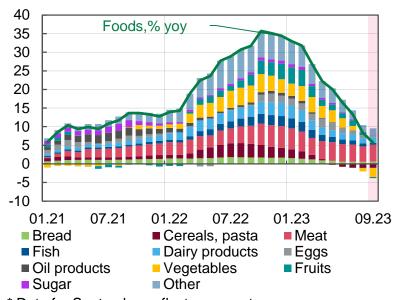
The price growth of most food products has decreased, while some products even grew cheaper

Selected CPI components*,% yoy



* Data for September reflects nowcast. Source: SSSU, NBU staff estimates.

Contributions to the annual change in food prices*, pp



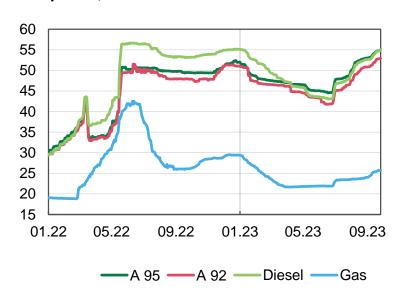
* Data for September reflects nowcast. Source: SSSU, NBU staff estimates.

- Increased production of vegetables and watermelons owing to favorable weather conditions and increased farming in certain regions led to a rapid decline in prices for these agricultural products
- Prices for cereals and flour also continued to decline amid low export prices and larger harvests than
 last year. The decline in sunflower oil prices deepened due to lower global prices and difficulties with
 exports, and in September, additionally due to a faster supply of new crops than last year amid
 favorable weather for sunflower harvesting
- The growth rate of prices for other foods also declined due to further easing of pressure from business
 costs amid improved exchange-rate and inflation expectations

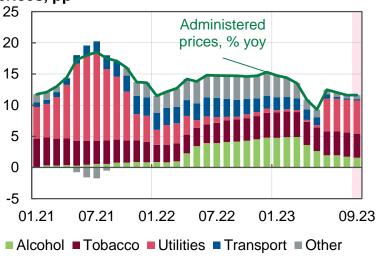


Fuel prices continued to rise, while the administered price inflation slowed

Fuel prices, UAH / L



Contributions to the annual change in administered prices, pp



* Data for September reflects nowcast. Source: SSSU, NBU staff estimates.

Source: minfin.com.ua, NBU staff estimates.

- In August, fuel prices reached last year's levels, reflecting the effects of the return of full taxation amid depleting stocks. According to the NBU's estimates, fuel price growth accelerated in September amid rising global oil prices
- Nevertheless, prices of transportation services kept benefiting from low fuel prices of the previous months, with their growth continuing to slow
- The rise in prices for alcoholic beverages also slowed further amid favorable FX market conditions and pressures from shadow supply

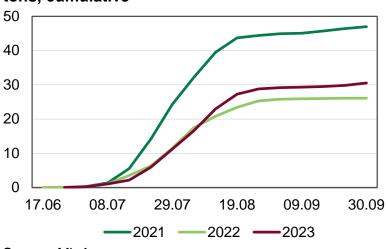
The moratorium on raising tariffs for a number of utility services also restrained administered inflation



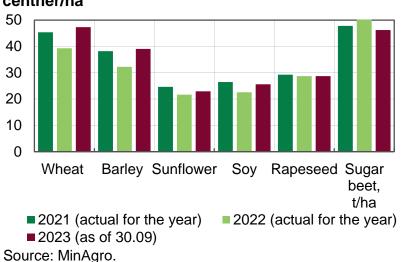


Harvest of late crops is exceeding expectations. High yields support the food industry

Volumes of harvested grains and legumes, million tons, cumulative



Productivity of the main agricultural crops, centner/ha



Source: MinAgro.

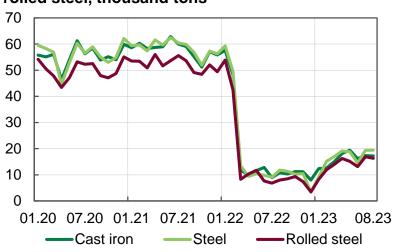
 A dry and warm autumn <u>speed up the harvesting</u> works of late grains and oilseeds (the yields of which <u>exceeded expectations</u>). The weather allows to reduce farmers' drying costs, but <u>restrains the sowing</u> of winter crops

- The high <u>harvest of vegetables</u> amid the lack of storage facilities stimulated their <u>processing</u>, in particular at the <u>restored capacities</u> of the Kherson region. The arrival of the new harvest seasonally supported <u>oil production</u>, whereas the decrease in oil prices and the high workload of rapeseed processing plants in August restrained the increase in production
- The sugar-making season is gaining momentum. <u>30 factories</u> are expected to operate (vs 23 in 2022).
 <u>Sugar production</u> is expected to increase significantly
- Due to <u>difficulties with the exports</u>, investments in food processing are revitalizing: in September, factories for the production of flour, fodder, and oil were opened
 - The production of <u>dairy products</u>, <u>cheeses</u> and <u>butter</u> revived thanks to the growth of domestic demand. The situation on the meat market is improving, and <u>meat processing</u> is gradually recovering 13 after the seasonal slowdown in the summer

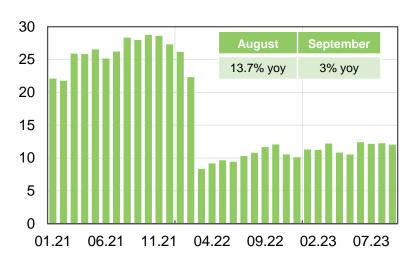


The revival in construction supported the growth of freight transportation, while state orders underpinned engineering

Average daily production of steel, cast iron and rolled steel, thousand tons



Rail freight transportation, million tons



Source: Ukrmetalurgprom.

Source: SSSU, Rail.insider, UZ

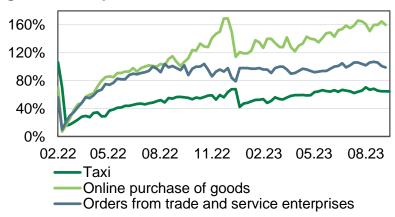
- In September, metallurgical production remained at the level of August against the background of repairs of main facilities. At the same time, some metallurgical enterprises set up the production of new products, in particular thanks to the <u>demand from foreign customers</u> and the <u>defense sector</u>
- Also in September, some MPPs and <u>iron ore enterprises</u> <u>resumed work</u> thanks to the stable situation in the energy sector and <u>export orders</u>; gas production companies launched a <u>number of new facilities</u>, in particular at old fields, as well as <u>discovered new gas fields</u>
- Orders for equipment for the <u>military</u>, <u>coal mines</u> and the <u>agricultural sector</u> supported mechanical engineering, while state orders supported the <u>production of buses</u> and <u>trains</u>
- The revitalization of the construction industry continued due the development of exports <u>logistics</u> and <u>storage facilities</u> by farmers, as well as the <u>construction of roads</u> and <u>railway infrastructure</u>. The launch of <u>restoring programs</u> supported housing construction and the <u>production of building materials</u>

Railway freight transportation in September increased by 3% yoy, boosted by the domestic market transportation (+35.5%), in particular of building materials (+77.3% yoy)



Consumer demand continued to grow

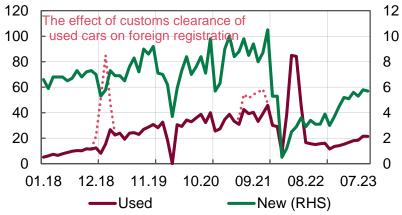
The number of taxi orders and online purchases of goods, % of pre-war levels



Source: Opendatabot (Bond taxi service and Khoroshop service).

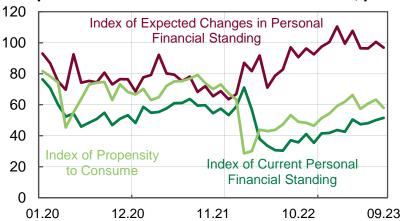
- Trade picked up in September, partly reflecting a return of seasonality. The transition of education to an offline format supported the return of pre-war trends in sales of school supplies and children's clothing. Preparation for winter supported sales of energy equipment. However, a lower number of consumers and frugal consumption are still holding back a return to 2021 levels
- Against the background of the growth in domestic tourism, hotel occupancy remained high in September
- Sales of new passenger cars in September National Bank remained at the level of August, but were up by 67% yoy

The first registration of passenger cars, thousand units



Source: Ukravtoprom.

Components of the consumer sentiment index, p.

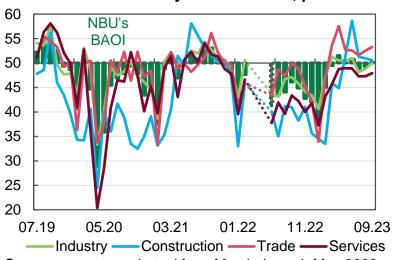


From March 2023, the survey method was changed from faceto-face to telephone interviews. 15

Source: Infosapiens.

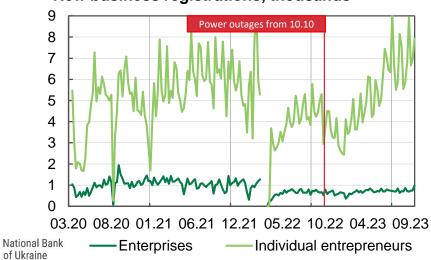
Other types of economic activity have been also reviving, which, however, was largely due to seasonality

NBU's business activity outlook index, p



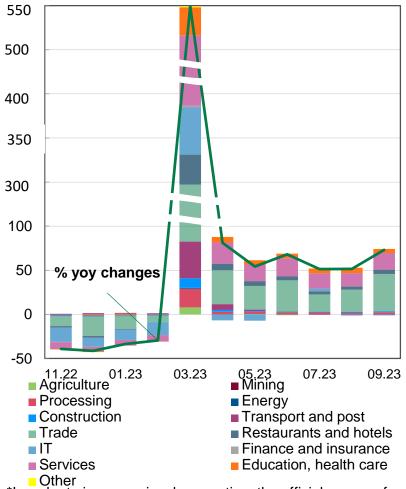
Survey was not conducted from March through May 2022. Source: NBU.

New business registrations, thousands



Source: opendatabot.ua.

Contributions to the annual increase in the number of new individual enterprises by type of activity*, pp



*In order to improve visual perception, the official names of economic activities by Classification of types of economic activity have been shortened.

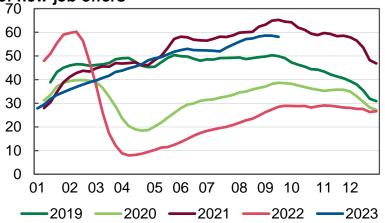
16

Source: opendatabot.ua, NBU staff estimates.

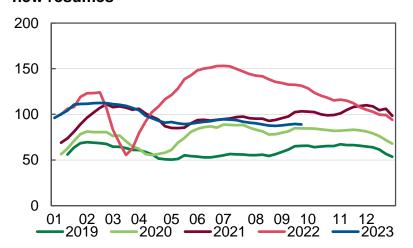


Growing demand for workers amid economic recovery leads to gradual improvement in employment

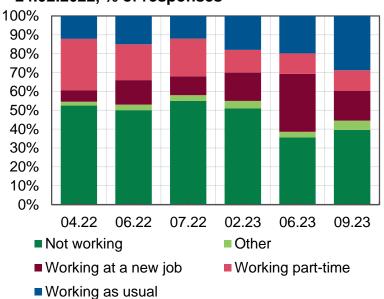
Labor demand, 4-week moving average, thousands of new job offers



Labor supply, 4-week moving average, thousands of new resumes



Current status of those who had a job before 24.02.2022, % of responses



Source: Rating.

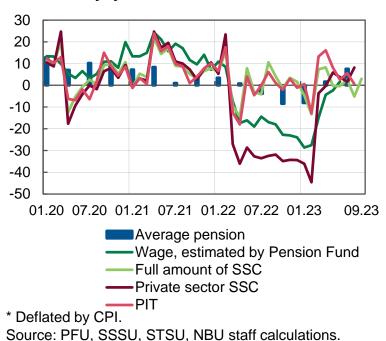
- The number of job offers continued to grow due to both seasonality and economic recovery
- At the same time, the number of resumes was declining, which may reflect:
 - the gradual recovery of Ukrainians' employment (according to the Rating survey, the share of unemployed people who had jobs before the fullscale invasion has decreased to 25%)
 - limited labor supply, in part due to migration and mobilization

18



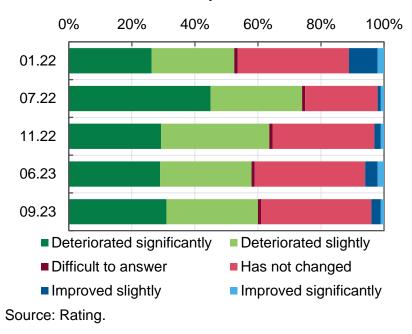
Households' incomes are growing mainly due to budget payments

Indirect indicators for estimating real household income*, % yoy



wage growth in the private sector

Self-assessment of household economic situation for the last 6 months, % of responses

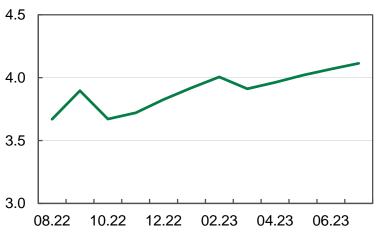


- Household incomes are growing moderately, supported by social payments and payments to the military, as well as by the recovery in economic activity, which in turn is leading to a gradual renewal of
- At the same time, the situation with wage income in the private sector remains difficult. According to a
 September <u>survey by the Rating</u>, more than half (60%) of respondents believed that their financial
 standing had worsened over the past year, while only 4% said it had improved



The adaptation of migrants abroad continues, although a significant number of migrants still want to return

Number of Ukrainian citizens granted temporary protection status in EU, million persons



Source: Eurostat.

"Would you like to stay abroad for permanent residence?", % of answers by employment status Do not work 41 13 Working in Ukraine 35 Working abroad 24 27 by income of refugees 0% 20% 40% 60% 80% 100% Low-income 42 Middle-income 16 33 High-income 32 22 0% 20% 40% 60% 80% 100% Source: Rating

According to Eurostat, the total number of Ukrainian citizens granted temporary protection is slowly
increasing. However, according to the UNHCR, the number of migrants outside Ukraine has slightly
decreased throughout the summer (to 6.2 million as of 3 October, compared to 6.3 million in June).

Yes

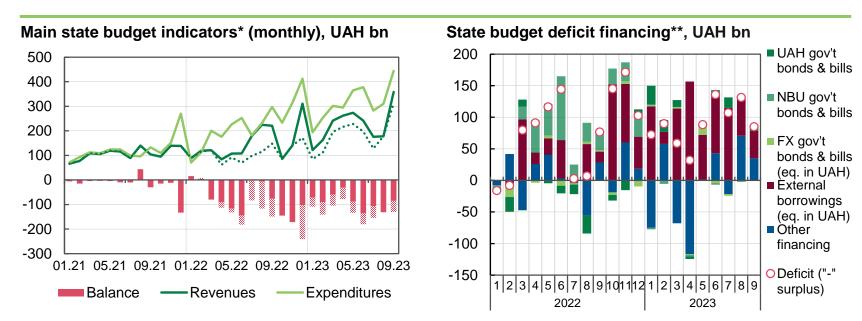
 According to a <u>July poll by the Rating Group</u>, 49% of Ukrainians who moved abroad after the full-scale invasion would not like to remain there. However, the adaptation of migrants continues, and according to polls, the share of those who plan to return is relatively lower among migrants who find it easier to adapt (due to language skills, quick employment, education, etc.)



■ No



The budget deficit remained considerable



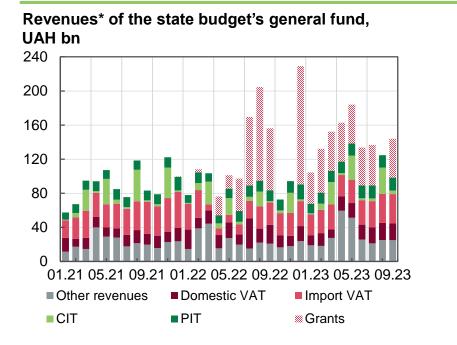
^{*} Dotted and patterned fillings show relevant indicators excluding grants. Balance includes net lending. ** Debt transactions are net borrowings. Other financing represents active operations (in particular, includes the change in volumes of gov't funds) and privatization proceeds.

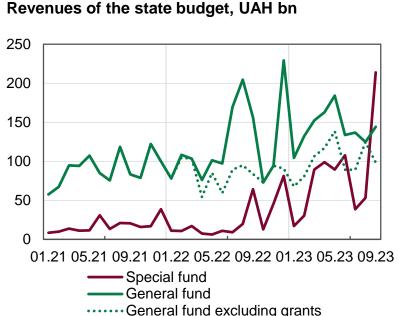
September – preliminary and high-frequency data from the MFU website. NBU calculations based on the MoF website data. Source: Treasury, MoF, NBU staff calculations.

- In September, the state budget deficit, excluding grants from revenues, remained unchanged from the previous month: an increase in revenues was offset by the rise in expenditures. In the first nine months of 2023, the deficit reached over UAH 1,164 bn (UAH 801.6 bn with grant financing)
- International aid played a crucial role in covering budget needs: about USD 3 bn in September and a total of USD 32.6 bn since the beginning of the year, including nearly USD 10 bn in grants.
- Additionally, domestic borrowing has become a significant source of budget financing this year thanks to attractive yields and the ability of banks to use benchmark domestic debt securities to meet reserve National Bank of Ukraine requirements



Revenues are gradually improving thanks to increased tax proceeds and own income of budget institutions ...





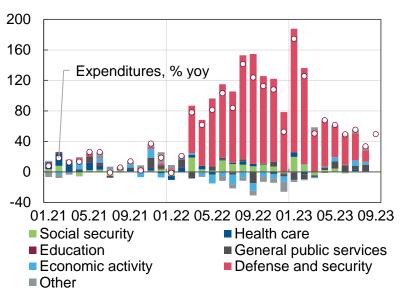
^{*} September – preliminary and high-frequency data from the MFU website. NBU calculations based on the MoF data. Source: Treasury, MoF, NBU staff calculations.

- The growth in tax revenue can be attributed to economic factors, such as the revival of economic activity, increased imports of goods, and rising energy product prices. Additionally, improved tax administration played a role
- The substantial increase in special fund revenues is likely due to higher own income of budget institutions. This increase may reflect ongoing voluntary contributions from individuals and legal entities and increased demand for educational services this year

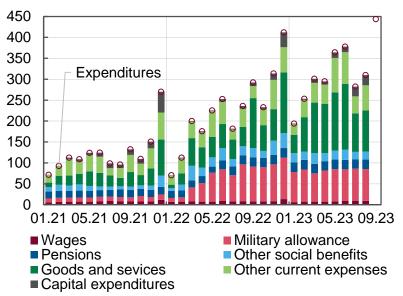


... however, the expenditures are rising rapidly

Contributions to annual changes in expenditures of the state budget*, pp (functional classification)



Expenditures of the state budget, UAH bn (economic classification)



* September – preliminary data from the MoF website. NBU calculations based on the MoF data. Source: Treasury, MoF, NBU staff calculations.

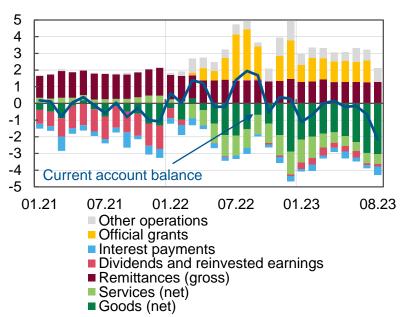
- In September, monthly amount of state budget expenditures reached another record high. Defense and security and social care remained the top priority spending directions (more than 64% and almost 13% of all expenditures in January August 2023, respectively)
- Capital expenditures also continued to increase, given to need to implement the infrastructure projects and carry out repair works





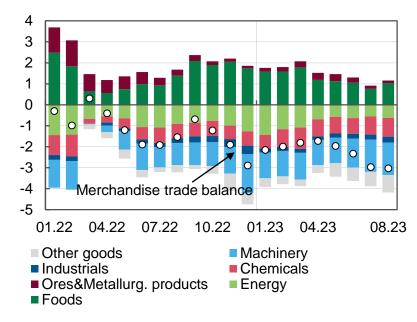
As the grant from the US was shifted to September, the current account deficit widened in August

Current account balance, USD bn



Source: NBU staff calculations.

Trade in goods balance, USD bn



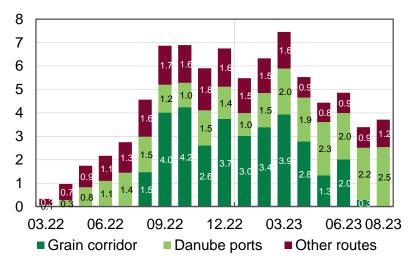
Source: NBU staff calculations.

- The expansion of the goods trade deficit decelerated in August, thanks to increased supplies from the new harvest, even though the "grain corridor" ceased operations
- However, the current account deficit significantly widened as the receipt of another grant from the US was shifted to September



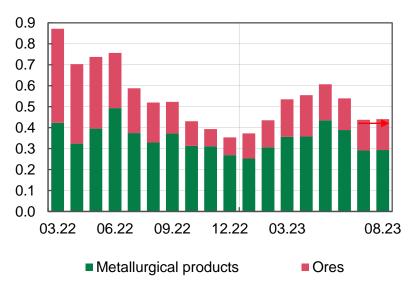
Further expansion in shipments through alternative routes and seasonal increase in supply bolstered export growth

Exports of selected agro-industrial products*, m t



* Grains, oilseeds, sunflower and soybean oils, oil cakes. Source: Ministry of Agrarian Policy and Food of Ukraine, Black Sea Grain Initiative JCC.

Exports of ores&metallurgical products, USD bn



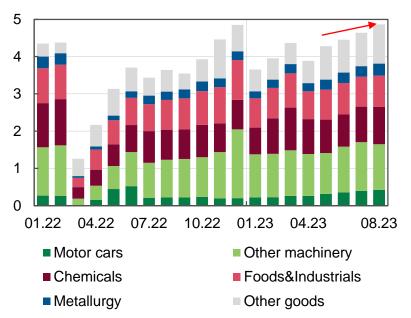
Source: NBU.

- Despite the termination of the "grain corridor" operations, food exports increased in comparison to July. This can be primarily attributed to the seasonal rise in rapeseed supplies and record shipments of rapeseed oil. This growth was facilitated by the continued expansion of transshipment volumes at the Danube ports and intensified exports through rail and road transport
- However, there were factors that hindered the growth of food exports. These included a decrease in wheat prices due to its lower quality and an increase in freight rates at the Danube ports, which occurred against the backdrop of ongoing terror attacks by russia
- Exports of ores and metallurgical products remained nearly unchanged compared to July. The increase in iron ore supplies was offset by a decline in its prices in the European market. Additionally, the lowest pig iron supplies since April 2022 were compensated by an increase in shipments of seamless pipes

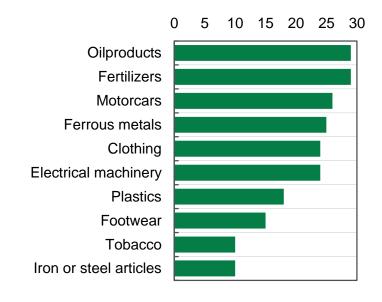


Imports of goods increased due to the rise in petroleum prices, coupled with high demand from farmers and the defense sector

Non-energy imports, USD bn



Imports of selected goods, change compared to previous month, USD m



Source: NBU staff calculations.

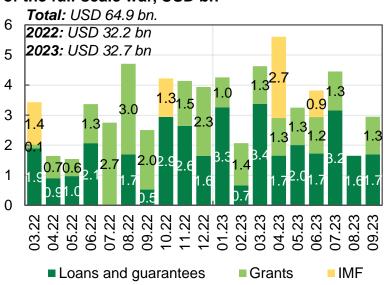
Source: NBU.

- In August, farmers increased their fertilizer imports in preparation for the upcoming autumn sowing campaign. The rise in the purchases of industrial goods and dual-purpose products reflected strong demand from the defense sector. Imports of metallurgical products continued to grow due to increased construction activity. Additionally, the volume of humanitarian aid provided to Ukraine rose
- The imports of new cars reached their highest level since the start of the full-scale invasion, while used cars – since June 2022
- The imports of energy products increased in response to the rising prices of petroleum products in the European market and a boost in electricity imports, driven by a shortage caused by hot weather

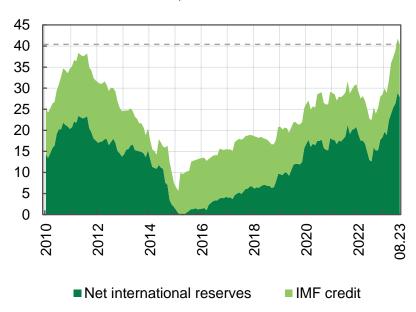


International reserves remained at a substantial level

International financial assistance since the beginning of the full-scale war, USD bn



International reserves, USD bn



Source: open sources data, MoFU, NBU

 In August, the international aid received (another tranche of USD 1.6 bn in macro-financial assistance from the EU) was lower than that of July. This led to a reduction in capital inflows to the public sector

Source: NBU

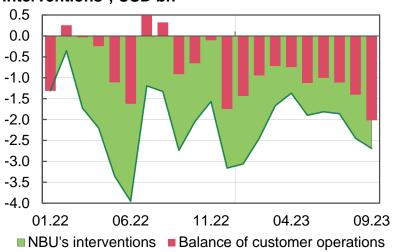
- In addition, a moderate outflow from the private sector resumed due to the repayments of trade credits debt to non-residents and higher growth in FX cash outside banks
- The widening of the current account deficit and reduced capital inflows under the financial account (USD 1 bn) led to a decrease in reserves. However, they still stood at above USD 40 bn at the end of August. The receipt of a grant from the US and another EU tranche in September are likely to maintain the current reserve level





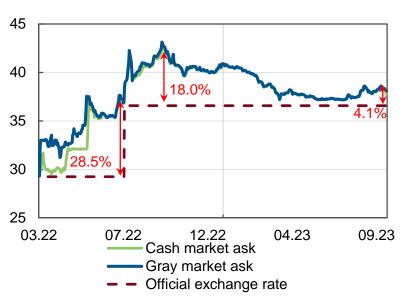
FX market situation remained under control thanks to the NBU's active participation





^{*} Net sale and purchase of noncash and cash foreign currency by bank clients (Tod, Tom, Spot). Source: NBU.

Hryvnia exchange rates, UAH per USD



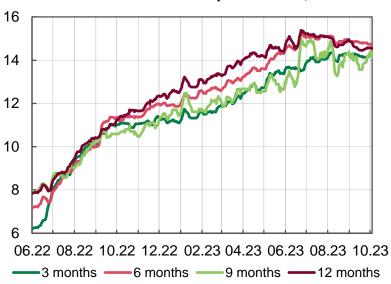
Source: NBU, open data sources.

- In September, net FX demand increased in response to seasonal and situational factors. This also led
 to slight weakening of the FX cash exchange rate and some widening of the spread between official
 and gray market exchange rates
- The NBU intervened FX market to cover the demand for foreign currency. This together with the effects
 of FX liberalizations, which allowed to increase foreign currency flows between markets, resulted in
 spread narrowing by the end of the month
- The steady progress in reducing inflation, the accumulation of a significant level of international reserves, the increase in the attractiveness of hryvnia assets allowed the NBU to move to a regime of managed flexibility of the exchange rate. Despite the new regime, the NBU will continue to focus on maintaining exchange rate sustainability and by significantly limiting exchange rate fluctuation through 31 FX interventions



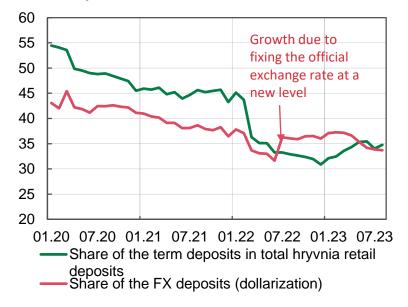
Despite nominal rate cuts, the profitability of hryvnia deposits remains attractive,...

Ukrainian Index of Retail Deposit rates*, %



^{* 5-}day moving average. Source: Thomson Reuters.

Retail deposits, share in total, %



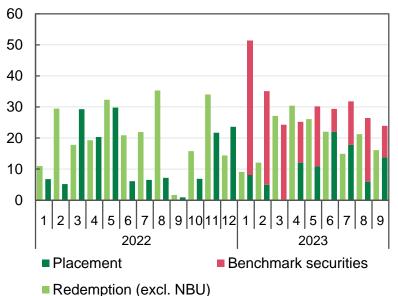
Source: NBU.

- In September, interest rates on hryvnia term deposits of individuals decreased moderately, reacting to easing of interest rate policy. However, their level (more than 14%) allows to cover the expected inflation
- The share of retail term deposits continued to grow. The certain suspension of this dynamics in July is explained by the reclassification of term deposits (redeemable at notice) by individual banks



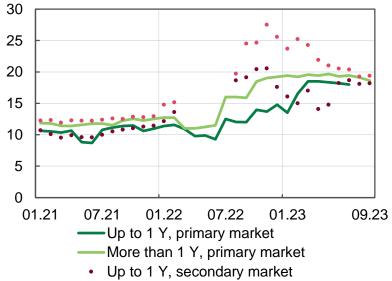
... as well as the yields on hryvnia domestic government debt securities

Placement* and redemption of domestic government T-bills & bonds, UAH bn and YTM



* Excluding hryvnia domestic government T-bills & bonds issued in December for recapitalization of Ukrfinzhytlo. Source: NBU.

Yields on hryvnia domestic government T-bills & bonds, %



- More than 1 Y, secondary market

Source: NBU.

- In September, the NBU expanded the list of benchmark securities to further support the government's efforts to increase domestic borrowings
- For 9 months 2023, the volume of hryvnia borrowings in the domestic market amounted to 120% of annual repayment
- Profitability in the secondary market is nearly on par with the primary market

