

Monthly Macroeconomic and Monetary Review

July 2022

Monetary Policy and Economic Analysis Department



Summary

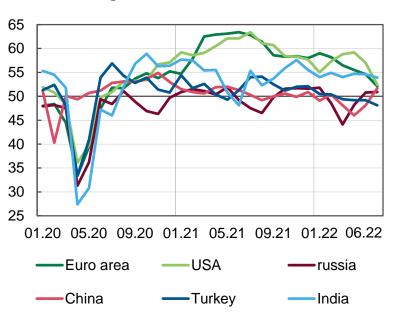
- Global inflationary pressure is intensifying, including due to high energy prices. The latter
 resumed growth in June amid increasing geopolitical tensions. High inflation adversely affects
 growth of the global economy and prompts the CBs across the world to accelerate their interest
 rate policy tightening
- Consumer inflation in Ukraine continues to accelerate (to 20.1% yoy in June, according to web scraping, from 18.0% yoy in May). High energy prices, disruption to production chains and logistics routes, destruction of capacities and infrastructure, occupation of territories remain the main factors of increasing inflationary pressure
- In June, the recovery of economic activity continued in most sectors of the economy: the
 population and business are adapting to new conditions, setting up new processes. However, the
 recovery is hampered by logistical difficulties and the destruction of capacities
- Households are increasingly looking for a job, but the demand for labor remains weak, which puts downward pressure on the wages offered. As financial situation of enterprises is worsening, primarily of SMEs, their capacity to support staff has been narrowing
- In May, despite a rapid recovery in imports, the current account surplus was maintained due to the grants and higher transfers. International financial aid helps in supporting reserves, which however continued to decline due to large NBU's FX interventions
- The volume of NBU interventions is growing every month in order to meet the demand for foreign currency, which, in particular, is a consequence of significant monetary financing of the budget
- In June, the state budget deficit continued to widen due to the further increase in expenditures
 against the background of weak revenues. The negative balance was covered mainly by
 international and monetary financing, while the volume of domestic market borrowings
 decreased
- Interest rates on deposit products of individual banks react slowly to the policy rate hike in



External Environment

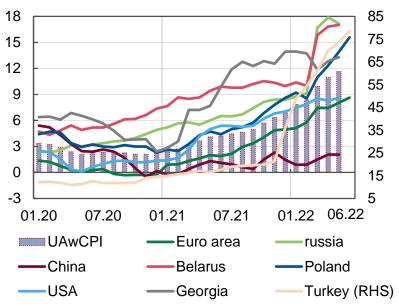
Global inflationary pressure is intensifying, which adversely affects growth of the global economy

Manufacturing PMI in selected countries



Source: S&P Global.

CPI of selected countries and Weighted Average of Ukraine's MTP countries' CPI (UAwCPI), % yoy



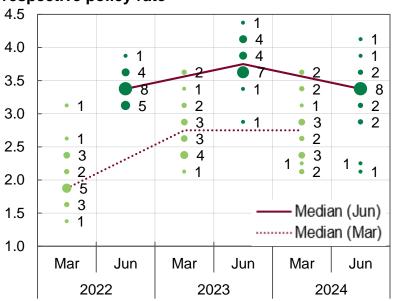
Source: National statistical offices, NBU staff estimates

- Inflation continues to rise around the world, primarily due to high energy prices, which increasingly raises production costs and, accordingly, worsens business expectations
- The tightening of global financial conditions restrains economic activity additionally
- Instead, the easing of quarantine restrictions in China, which supported the country's economic growth in June and helped restore the supply chains, improved expectations slightly



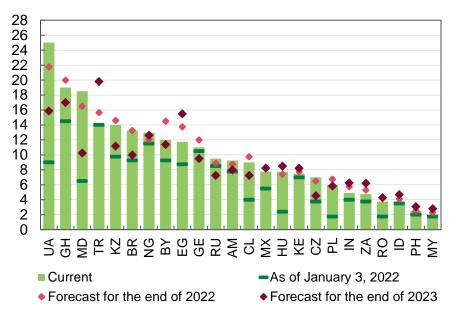
To curb high inflation, the CBs across the world accelerate the interest rate policy tightening

The number of FOMC members that expect the respective policy rate*



^{*} The previous meeting (March) is marked in light green, the current meeting (June) – in dark green. Source: Fed.

Key policy rates in selected EM countries, %



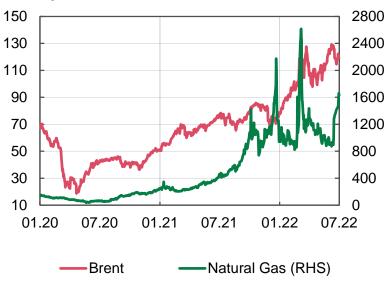
Source: official web-pages of central banks, Focus Economics, Trading Economics, as of 04.07.22.

- The Fed has significantly revised the rate hikes pace in 2022-2023 to curb inflation. The latter reached the highest level in more than 40 years, significantly exceeding the long-term goal
- Eurozone inflation has risen to the highest level in the entire history of the union. The ECB announced an interest rate hike as soon as in July
- The rate hikes cycle continues in EM countries as well



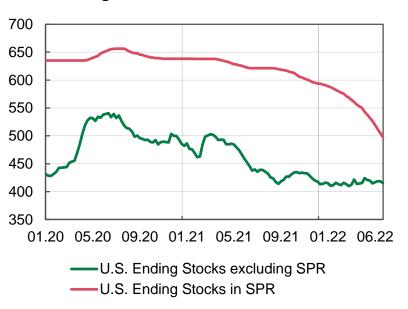
Global energy prices have resumed growth amid heightened geopolitical tensions

Crude oil (USD/bbl) and natural gas (TTF, USD/kcm) world prices



Source: Refinitiv.

U.S. Ending Stocks of Crude Oil, Million Barrels



Source: U.S. Energy Information Administration, as of 24.06.2022.

- Global oil prices, despite the correction at the end of the month, rose due to: market uncertainty in the
 oil supply sufficiency after the approval of a partial EU embargo on russian oil, increased seasonal
 summer demand in Asia, and a decrease in global oil stocks. Only growing concerns about more
 significant global economy slowdown caused a price correction
- Natural gas prices on the European market resumed growth due to russia's restrictions on gas supply via the PP1 pipeline: the russian gas flows to Europe fell to record lows and supplies to France, Germany and Italy were suspended



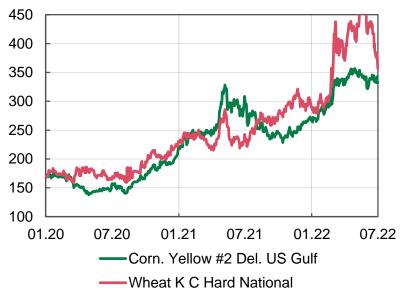
Global prices on other commodity markets were mainly decreasing amid weakening demand

Steel and iron ore world prices, USD/MT



Source: Refinitiv.

Wheat and maize world prices, USD/MT



Source: Refinitiv.

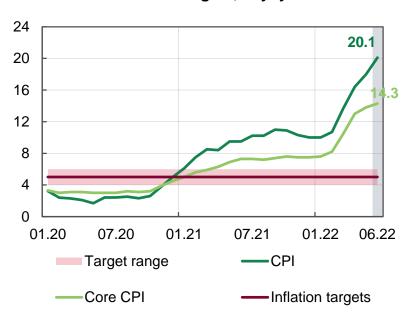
- Global steel and iron ore prices fell on weak business activity in most regions and high global stocks amid excess supply
- The start of wheat harvesting campaign in the Northern hemisphere countries and improved weather conditions in the corn-growing regions contributed to a decrease in grain prices





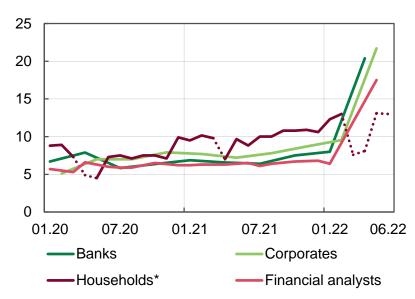
Inflation in Ukraine continues to accelerate...

Inflation* and inflation targets, % yoy



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

Inflation expectations for the next 12 months,%



^{*} The dotted line indicates switching to the survey method of telephone interviews.

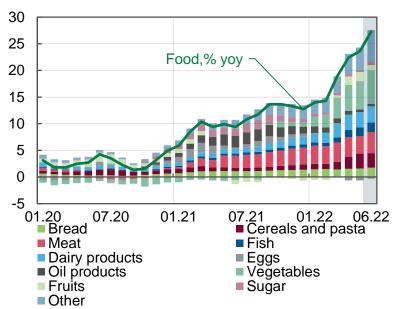
Source: NBU, GfK Ukraine, Info Sapiens.

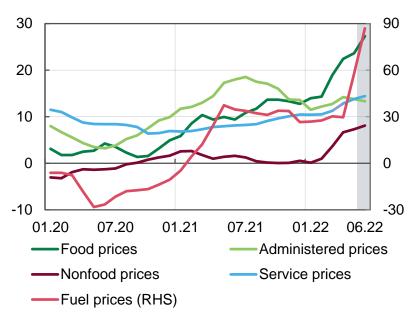
- Acceleration of inflation was caused both by global trends, in particular by high prices for energy resources, and by internal factors, primarily related to the war:
 - production and supply chain disruptions
 - destruction to capacity and infrastructure
 - limited stocks and opportunities for imports
 - occupation of territories
- Inflation expectations continue to deteriorate



...underpinned by rising costs and limited supply

Contributions to the annual change in food prices, pp Selected CPI components*,% yoy





^{*} Data for June reflects nowcast.

Source: SSSU, NBU staff estimates.

* Data for June reflects nowcast.

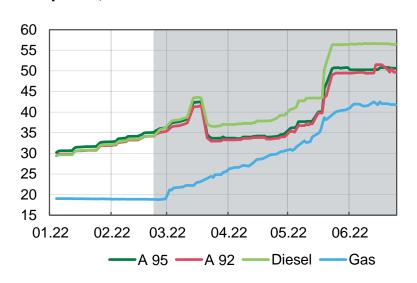
Source: SSSU, NBU staff estimates.

- Raw food inflation accelerated further primarily due to the arrival of early vegetables. They are much more expensive this year due to the temporary occupation of the southern regions specializing in their cultivation, as well as the increase in the costs of their production and supply
- Cereals, primarily buckwheat, also became more expensive due to limited own stocks and imports.
 Meat prices rose faster, mainly owing to a <u>reduced supply</u> from the eastern and central regions
- Accelerating prices for services and non-food goods may primarily reflect rising business costs
- The fixed exchange rate of the hryvnia and the <u>moratorium on raising tariffs for heat and gas</u> <u>distribution</u> for the period of martial law and 6 months after its completion are keeping inflation down

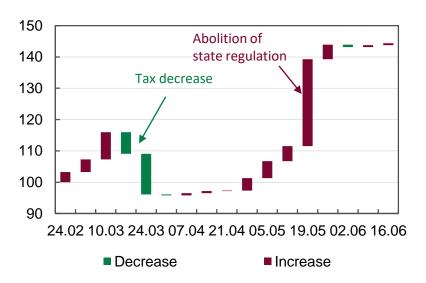


Fuel prices have stabilized at a high level

Fuel prices, UAH / L



Prices for gasoline A-95, 17-23.02.22 = 100



Source: minfin.com.ua, NBU calculations.

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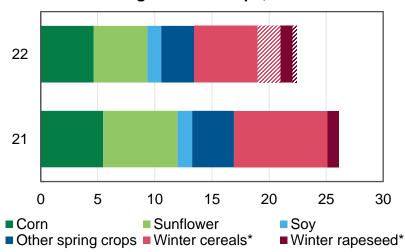
- After the abolition of state regulation of fuel prices, the market is gradually saturated
- Although fuel shortages in Ukraine are estimated to <u>disappear closer to the fall</u>, when long-term contracts with foreign suppliers will have been signed, prices have already stabilized, albeit at a high level





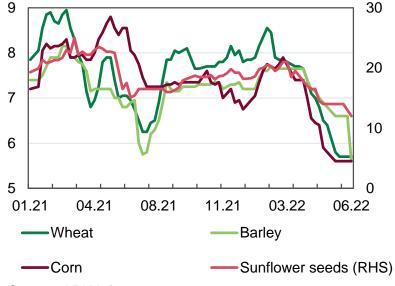
The spring sowing campaign is over, and harvesting has already begun in southern regions

The structure of agricultural crops, million hectares



*According to NBU estimates, about 30% of winter crops were in the territory of active hostilities or under occupation. Source: Ministry of Agriculture, SSSU.

Demand prices for basic agricultural foraging cultures, EXW, exports, UAH per t



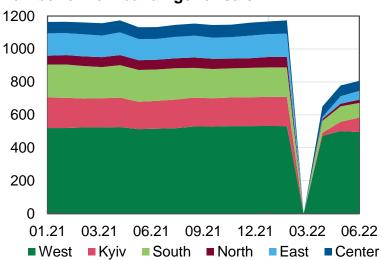
Source: APK-inform.

- According to the Ministry of Agriculture, sowing in 2022 was carried out on an area of 13.4 million hectares, which is 20.6% less than last year. However, the actual harvest may be smaller due to the occupation of the territories, difficulties with harvesting campaign in the front-line regions, as well as the physical destruction of crops, equipment and elevators
- It is also expected that the yield of most crops will decrease due to a shift in the timing of application or a lack of fertilizers and plant care measures. Problems with exports, lost capacities for crop storage and a further reduction in purchase prices for agricultural products pose significant risks for next year's crop
- The harvesting in 2022 began a week earlier than last year. As of July 1, 294 thousand tons of early grain and leguminous crops have already been harvested from an area of 131 thousand hectares



Economic activity continued to pick up in June, but ...

Number of new buildings for sale

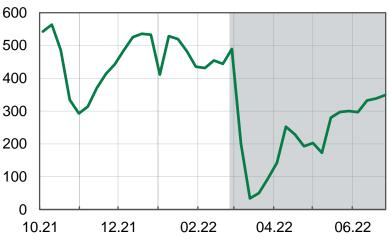


West: Volyn, Zakarpattia, Ivano-Frankivsk, Lviv, Rivne, Ternopil, Khmelnytsky, Chernivtsi; **Kyiv** and the region; **South**: Odesa, Mykolaiv, Kherson; North: Chernihiv, Zhytomyr, Sumy; **East**: Zaporizhia, Dnipropetrovsk, Kharkiv; **Center**: Vinnytsia, Poltava, Kirovohrad, Cherkasy. * June - as of 26 June 2022.

Source: Lun.City.

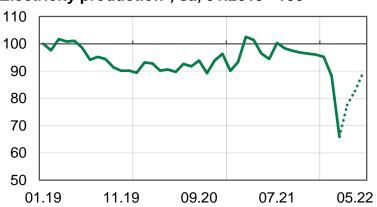
- The recovery can be explained by the further adaptation of businesses and population to war conditions, the return of citizens to their places of residence, as well as seasonal factors
- The recovery is also evidenced by the increase in electricity production, though to a large extent this could be a substitution effect due to shortages and high prices for other types of energy, as well as the expansion of export opportunities

Number of UZ tickets sold per week, thousands



Source: UZ.

Electricity production*, sa, 01.2019 =100

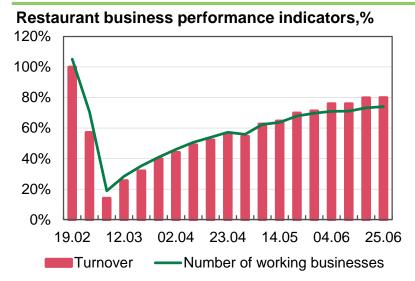


^{*} Data for April-June - NBU calculations based on UEEX data, news.

Source: Ukrenergo, UEEX, NBU calculations.



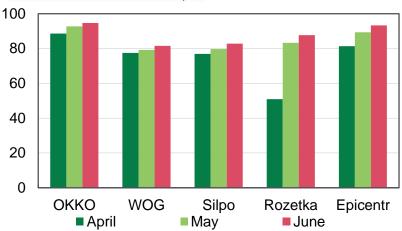
...the recovery is uneven and shows signs of stabilization at a low level



Source: Data from more than 9,000 Poster customers.

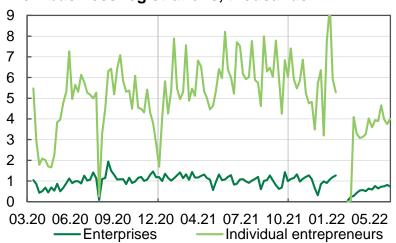
- The situation differs significantly by region (in the west, businesses are hit to a lesser extent), as well as by formats (smaller businesses return to work faster due to simpler processes)
- Market participants are adapting to new conditions, in particular amid limited imports the assortment is reduced or it is reoriented to domestic products
- Retail trade is gradually recovering at the expense of large players and individual entrepreneurs (IEs whose main activities are related to retail and wholesale trade accounted for 37% of new registrations in June)

Operating establishments of some of the largest retail chains in Ukraine, %



Source: Chain web sites.

New business registrations, thousands



Source: Opendatabot (data not available for the period of registration suspension).



Problems with logistics and the destruction of capacities are holding back the recovery of heavy industries

Metallurgy

- Although some enterprises continued to resume production and even carried out planned repair work, in general, the recovery in metallurgy was held back by difficulties with the sale of products
- Coke plants (except Avdiivskyi) as well as mining and beneficiation plants continue to work and invest in capacity renewal. But a number of enterprises have reported the work suspension since July due to problems with exports
- Pipe manufacturers arrange export deliveries, in particular by road freight transport to foreign ports

Mining

- Mining is gradually returning to pre-war volumes: coal production at state-owned mines has fallen by a third due to the occupation and destruction of facilities; mining by private mines operates at close to pre-war capacities and increases volumes
- Gas production is expected to drop by 10%-15%, as a number of wells and auxiliary infrastructure facilities are located in the occupied territories or close to the war zone

Oil refining, chemical industry

- The domestic oil refining industry does not work due to the destruction of capacities
- The production of nitrogen fertilizers has decreased by a factor of five since the beginning of the fullscale invasion against the background of the shutdown of key enterprises and the destruction of some facilities

Engineering

- The production of special equipment, in particular at the expense of state orders and for defense needs, together with the energy and transport segments, support the engineering industry
- Part of the capacities of large machine-building enterprises was destroyed; a number of smaller enterprises are resuming production after relocation to safer regions



Food and light industries are increasing production, in particular, due to the surplus of agricultural raw materials and limited imports. Construction is supported by infrastructure restoration

Food Industry

- Food industry enterprises are increasing production through the central-western regions and reorienting the range to more affordable products
- Due to the lack of vegetables and fruits from the southern regions, some processing plants do not use all their capacities, others increase production against the background of a surplus of raw materials and after relocation
- The production of sunflower oil is 30%-40% of the pre-war level due to export problems
- Meat processing works at maximum capacity in safe areas; individual chicken producers returned to pre-war volumes
- Milk processing enterprises restore operations including due to the revival of exports; the reduction of livestock, the decrease in demand and the increase in the cost of production restrain the industry

Light and pharmaceutical industries

- All major pharmaceutical companies are operating; military needs and a change in the structure of consumption towards low-cost medicines support domestic producers
- The shortage of imported clothing stimulates Ukrainian manufacturers of inexpensive products
- A number of light industry enterprises are resuming their activities amid relocation to the west and reorientation to defense needs

Construction

- Construction is supported by the restoration of housing and social infrastructure; temporary housing is created, bridges and roads are rebuilt; elevator capacities and processing plants are being expanded in the central and western regions
- In the capital, 40% of construction sites are operational, but the recovery is held back by low demand, a lack of labor and a sharp increase in the cost of materials
- Some companies are investing in the development of construction technologies and resuming the
 production of construction materials



The export of electricity to Europe has begun, transportation continues to revive, trade is restoring, adapting to changes in consumer demand

Energy

- Ukraine begins commercial electricity export to European countries
- Since the beginning of the war, 5% of generating capacities have been destroyed, 35% are under occupation; 50% of thermal, 30% of solar and more than 90% of wind generation are disabled
- In June, the Kremenchuk CHP was destroyed, the Kryvorizka and Vugleghirska CHPs were damaged;
 Kharkiv CHP-5 resumed work after an emergency shutdown; as in May, half of the NPP power units are operating
- Gas, electricity and water supplies were restored in most of the liberated settlements; "Ukrenergo" repaired 100% of the damaged trunk networks in the de-occupied territories

Transportation

- Railway passenger transportation is growing against the background of the return of citizens and the
 resumption of business and tourist trips in the absence of air traffic; cargo transportation remains at
 significantly lower than pre-war levels, as the existing export routes do not compensate for the volume
 of ore and grain cargo transportation to Black Sea ports
- Land transport companies are actively resuming work against the background of growing demand for freight transportation from the businesses
- On 1 June, another border crossing was added for the transportation of grain to the EU, but the Danube ports are working at the limit of their capacity, and the queues of railway cars are growing
- Large agricultural enterprises are expanding their fleets of grain trucks, actively looking for ways to export grain and increasing elevator capacities near new logistics routes

Trade

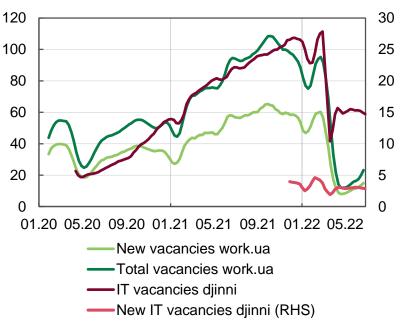
- The return of the population to the cities and the relative stabilization of the military situation in most regions contributes to the recovery of trade
- The decline and change in the structure of consumer demand forces networks to limit activity at lower than pre-war levels, work on stocks and refocus on cheaper goods





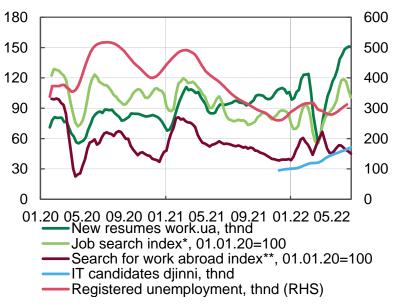
Population is actively looking for a job, but demand for workers remains weak

Demand for labor force: number of vacancies, thousands (4-weeks moving average)



Source: work.ua, Opendatabot, NBU staff estimates.

Labor force supply (4-weeks moving average)



^{*} Includes job search queries in Ukrainian and Russian. ** Includes job search requests in Poland, the Czech Republic, Russia and Germany in Ukrainian and Russian from Ukraine.

Source: work.ua, Opendatabot, Google Trends, NBU staff estimates.

- The growth in the number of resumes has noticeably accelerated
- Instead, the number of vacancies increases extremely slowly, even for IT specialists



As a result, offered salaries are decreasing, and with the worsening of financial situation of enterprises, in particular SMEs, support programs for existing staff are reduced



Average offered wage in May and its changes compared to pre-war levels



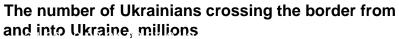
Source: GRC.ua

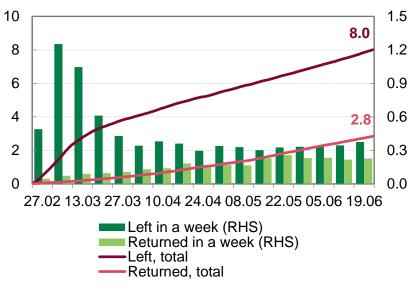
Staff situation

1,070,000
workers were dismissed

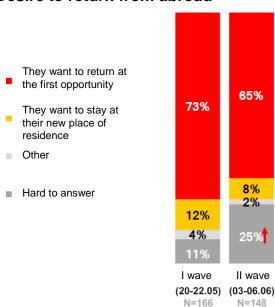
The share of staff, who are working under conditions of salary reduction at the moment	27%
The share of staff (compared to 23.02) sent on vacation	20%
The share of staff dismissed (compared to 23.02)	20%

The flow of refugees from Ukraine has slowed down, but a significant amount of Ukrainian citizens remain abroad





Desire to return from abroad



Source: UNHCR. Source: Gradus.

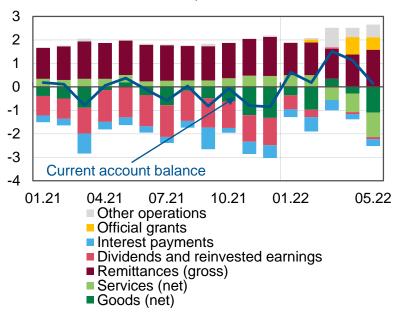
- <u>According to the UN</u>, as of 21 May, the number of refugees from Ukraine exceeded 8 million, of which the largest number remained in Poland (almost 1.2 million) and Germany (0.8 million). At the same time, since the beginning of the war, more than 2.8 million citizens have returned to Ukraine
- The <u>risks of non-return of refugees</u> to Ukraine after the end of the war are increasing:
 - According to the <u>Work.ua survey</u>, 59% of Ukrainian refugees were looking for a job in the country of temporary stay
 - According to the Gradus survey, although fewer people plan to stay at their new place in June (8% vs. 12% in May), confidence in a quick return also decreased (65% vs. 73% in May)



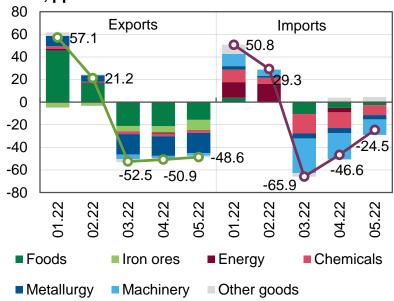


In May, despite a rapid recovery in imports, the current account surplus was maintained due to grants and higher remittances

Current account balance, USD bn



Contributions to the annual change in merchandise trade, pp



Source: NBU staff calculations.

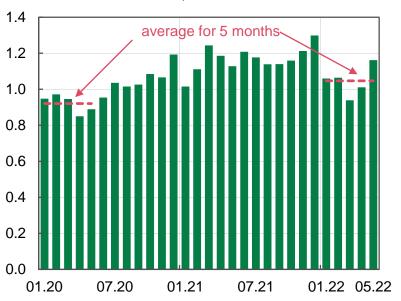
Source: NBU.

- Imports of goods have been recovering much faster than exports, which made the merchandise trade deficit widen significantly
- Also, the deficit in services trade continued to widen as imports under the "travel" item have been dynamically increasing. The latter was primarily determined by the expenses of Ukrainians who went abroad fleeing the war with russia
- However, the current account surplus was maintained thanks to grant-based international support, the resumption of remittances growth, the ban on dividend repatriation, and a significant decrease in reinvested earnings



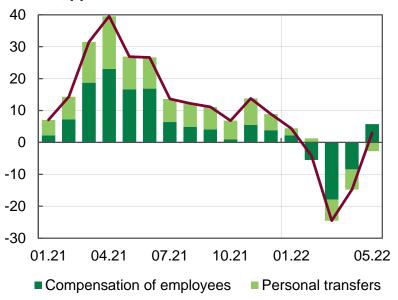
In May, remittances exceeded the pre-war levels on the back of rising employment of Ukrainians abroad

Remittances to Ukraine, USD bn



Source: NBU.

Contributions to the annual change in remittances to Ukraine, pp



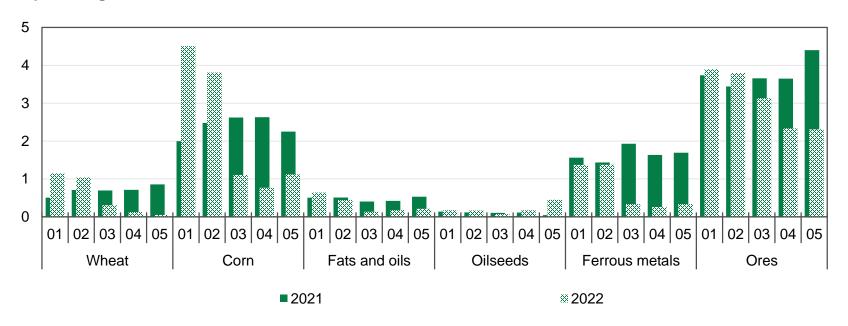
Source: NBU staff calculations.

- In May, remittances reached the pre-war levels, and its 5-month average for 2022 exceeded the levels
 of 2020. Their growth in annual terms resumed for the first time since the beginning of the war due,
 among other things, to rising employment of Ukrainians abroad who were forced to flee the country
- Instead, the lower volumes of personal transfers can be also explained by Ukrainians leaving the country



The recovery in merchandise exports is restrained by logistical problems and the destruction of production facilities

Exports of goods, m t

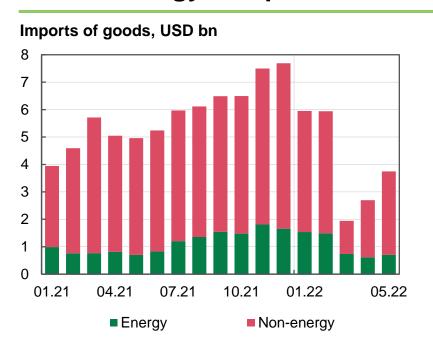


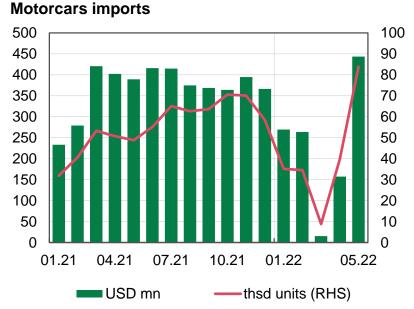
Source: SCSU.

- Compared to April, export volumes increased somewhat:
 - the gradual improvement of logistics contributed to the higher supply of sunflower seeds, soybeans, oil, corn, and metallurgical products
 - a certain recovery of production volumes by individual metallurgical plants became an additional factor
- However, export volumes remained significantly lower compared to last year



Meanwhile, imports of goods have been recovering fast driven by its non-energy component





Source: NBU staff calculations.

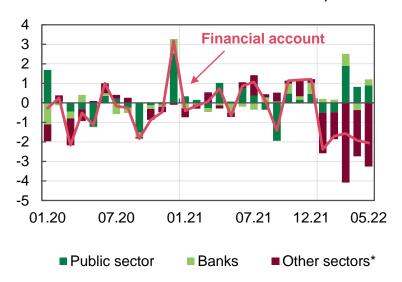
Source: SCSU, UkrAvtoprom, The Main Service Center of the Ministry of Internal Affairs, other open data sources.

- Purchases of motorcars surged, exceeding pre-war volumes. Preferential taxation was one of the key factors behind such growth
- Also, the gradual adaptation of real sector enterprises to function in wartime conditions and the destruction or shutdown of certain domestic production facilities stimulated an increase in purchases of other machinery, foods and chemical products
- The import of energy products slightly increased compared to the previous month primarily due to the price factor. It remained at last year's level. Its further recovery was still hampered by logistical constraints on the western border



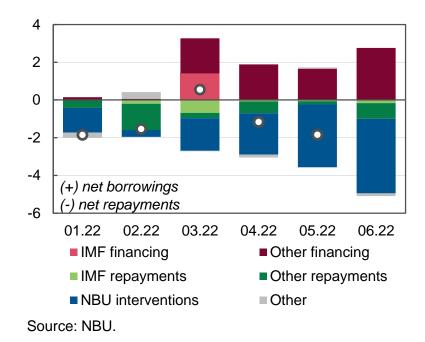
Despite strong international financial support, reserves continued to decline due to large currency interventions

Financial account: net external liabilities, USD bn



^{*} Including net errors and omissions. Source: NBU.

Change in reserves by its main components, USD bn



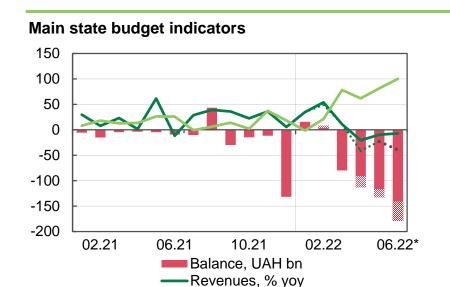
In May, capital outflow from the private sector slightly sped up, primarily due to the growing amount of FX cash outside banks (in particular, resulting from larger volumes of cash withdrawals from bank cards abroad)

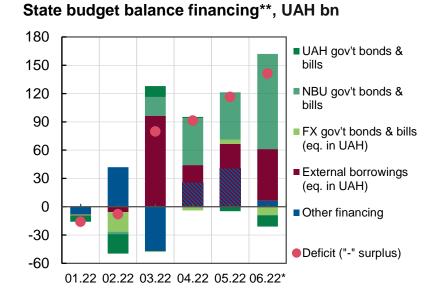
 Disbursement of international financial aid ensured inflows to the public sector. However, due to the large negative NBU interventions, reserves continued to decrease





As in previous months, the deficit was formed as a result of larger expenditures amid low revenues





^{*} High-frequency data from the MFU website. Dotted and patterned fillings show relevant indicators excluding grants.

Source: Treasury, MoF, openbudget.gov.ua, NBU staff estimates.

Expenditures, % yoy

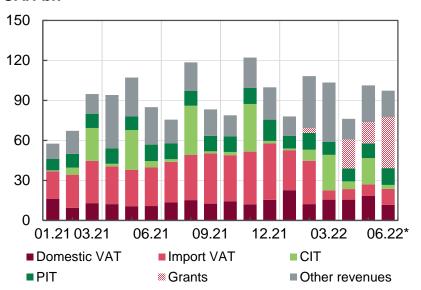
- In June, the state budget deficit continued to widen due to the further increase in expenditures, primarily those directed to defense needs and social programs
- Revenues continued to decline, reflecting, in particular, the statistical effect of advance dividend payments by SOEs in March this year (while they are usually paid in June)
- For 1H 2022, budget expenditures exceeded revenues, excluding grants, by almost 1.9 times
- The state budget deficit continued to be mainly covered by international and monetary financing. The latter comprises more than 50% of the deficit for Jan Jun 2022



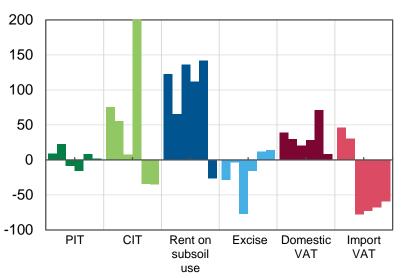
^{**} Debt transactions are net borrowings. NBU calculations based on the MoF's website information.

Tax collections improved slightly, although they continued to decline in annual terms

Revenues of the state budget's general fund, UAH bn



Growth in tax revenues of the state budget's general fund in 2022, monthly, % yoy



Source: Treasury, MFU, openbudget.gov.ua, NBU staff estimates.

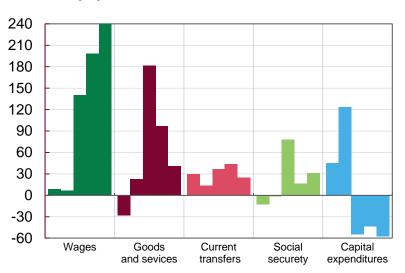
- Domestic taxes predictably remained a key revenue source. In particular, domestic VAT proceeds increased even with the renewal of VAT refunds (UAH 9.5 bn)
- At the moment tax revenues were supported by a certain recovery of the economic activity, companies' efforts to retain staff and pay wages, and accelerated inflation
- The decline in import VAT proceeds slowed down somewhat, which was related to the increase in the imports of goods



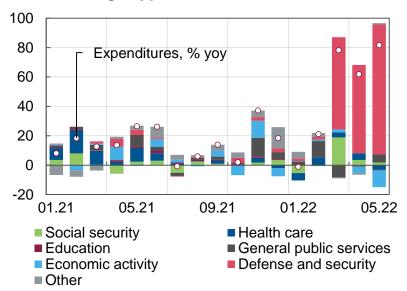
^{*}Operative data from the MFU website.

Expenditures continued to grow at a rapid pace





Contributions to annual changes in expenditures of the state budget, pp



Source: Treasury, openbudget.gov.ua, NBU staff calculations.

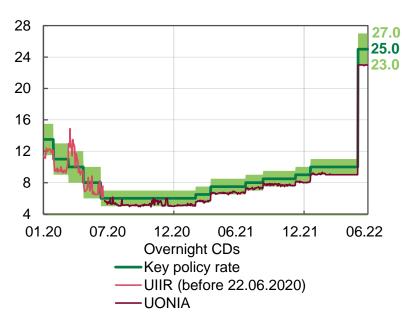
- Expenditures on the defense sector (in particular due to a significant increase in military allowance) and social support (programs launched since the beginning of the war and programs that existed before the war, in particular, subsidies) expectedly continued to grow
- At the same time, the approach to financing expenses based on the basis of ad-hoc needs persisted, which in particular was reflected in the government's use of goods and services, as well as capital expenditures





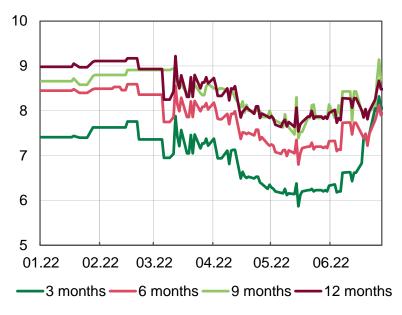
Interest rates on deposit products of individual banks started to react slowly to June's policy rate hike





^{*} Upper limit – interest rate on overnight loans, lower limit – on overnight CDs Source: NBU.

Ukrainian Index of Retail Deposit Rates, %



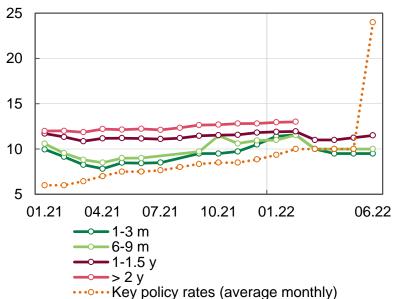
Source: Thomson Reuters.

 However, the decision to raise interest rates on household hryvnia deposits was mostly made by small banks



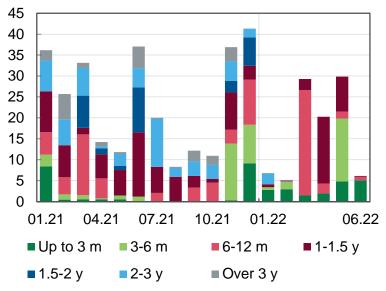
Due to low yields, the demand for government bonds is sluggish

The yields on hryvnia government bonds on the primary market, % per annum



Source: NBU.

Volumes of hryvnia government bonds on the primary market by maturity, UAH bn



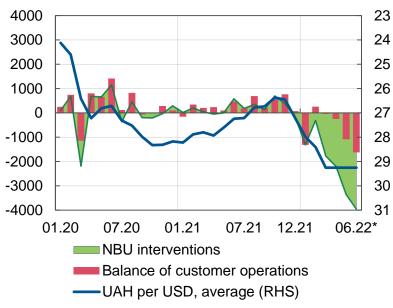
Source: NBU.

- Although banks, businesses, and households continue to buy government war bonds, government redemptions on domestic debt instruments exceed the volumes of new placements
- The market-level yield of government bonds may revive interest in hryvnia securities as an investment instrument



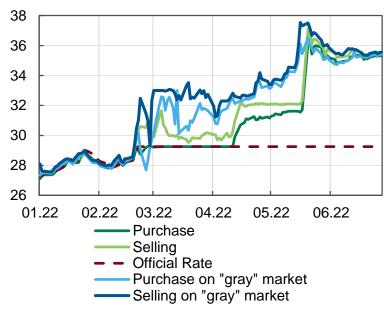
The FX market continues to be balanced by the NBU interventions, the volumes of which are growing every month...

Net purchase of non-cash and cash foreign currency by banks' clients, USD m



^{*} According to preliminary data. Source: NBU.

Selected hryvnia exchange rates to the US dollar



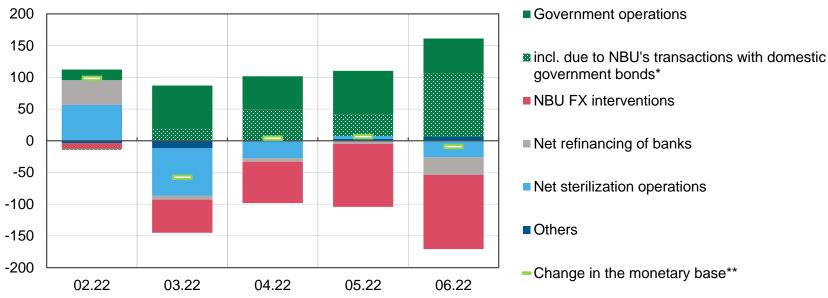
Source: NBU, open sources.

- Higher demand for foreign currency, in addition to the revival of imports, also results from transactions with bank cards abroad
- After the restrictions on cash exchange rates have been abolished, banks became the main players in this market segment, successfully competing with 'gray' exchange offices. Increased competition has led to the convergence of cash rates across various market segments



... in particular, as a result of monetary financing of the budget





^{*} NBU purchase of the war bonds (+) / principal and interest payments from government securities (-) in the NBU portfolio.

Source: NBU.

- The growing volumes of budget deficit financing with monetary instruments leads to higher losses in international reserves since the hryvnias put into circulation eventually end up on the FX market
- This depletes international reserves and exacerbates risks to macro-financial stability



^{**} Preliminary data for June 2022.