National Bank
of Ukraine

Monthly Macroeconomic and Monetary Review

March 2023

Monetary Policy and Economic Analysis
Department

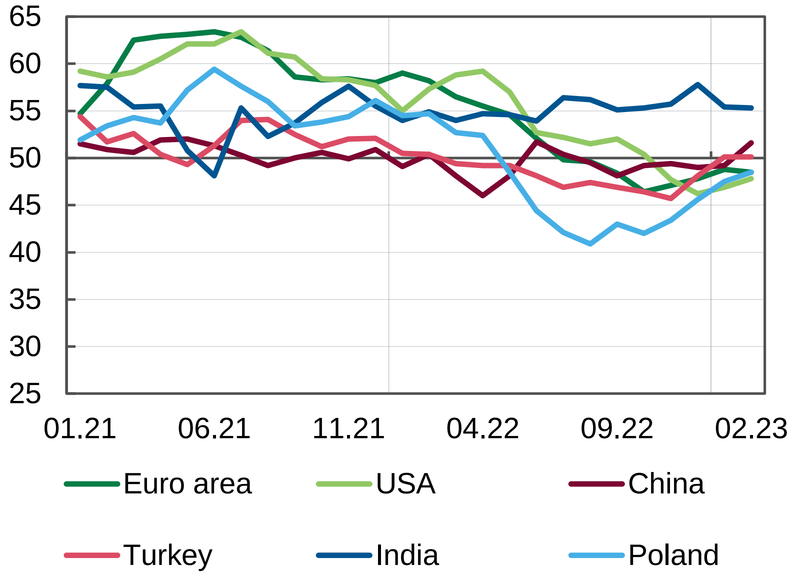
Summary

- **Risks of a global recession are easing.** World energy prices mainly decreased, while prices for commodities, prevailing in Ukrainian exports, moved in different directions, with grain prices decreasing and those for steel increasing. Inflation pressures remained significant and persistent, despite the downward trend in energy prices. As a result, the **interest rates of major central banks may peak at higher** levels than previously expected. In contrast, most EM central banks take a wait-and-see position
- **Consumer inflation started to decline earlier than the NBU expected.** CPI growth decelerated to 26.0% yoy in January due to ample supply of foods and fuels, weak consumer demand, further effects of the de-occupation of Ukraine's regions, improved situation on the FX market, and unchanged utility tariffs. According to the NBU’s estimates, the slowdown in price growth continued in February. However, underlying inflation pressures remained elevated, reflecting pass-through effects of rising business costs, in particular due to the electricity shortages
- In February, improved energy sector performance and more favorable external environment, the activation of the work of the "grain corridor" and better consumer and business sentiments helped **revive activates in both the manufacturing and services sectors**. However, to a large extent, the revival was caused by the seasonal factors
- The **labor market** also continued to recover seasonally, with both labor supply and demand on the rise. **However, the number of candidates per job opening remained high**, and a significant number of Ukrainians who used to work before the full-scale invasion were still unemployed. This restrained the growth of household income. The number of migrants abroad was gradually increasing
- In January-February, as expected, the **state budget showed a significant deficit, which was financed with the help of external disbursements and domestic debt borrowings.** The increase in the latter was largely due to the mechanism allowing the banks to use certain benchmark securities to meet the requirements
- In January, **the deficit in trade in goods narrowed** due to market saturation with machinery products, primarily with emergency power supply goods. However, the **current account turned to a deficit amid lower disbursements of grants**. The **international financing was key for the capital inflows, helping to raise international reserves** to USD 29.9 bn as of the end of January
- **The attractiveness of certain hryvnia assets has been increasing** in response to maintaining the key policy rate high and tightening of reserve requirements. An increase in cash and non-cash FX supply helped **to improve FX market situation** and to decrease the NBU’s interventions

External Environment

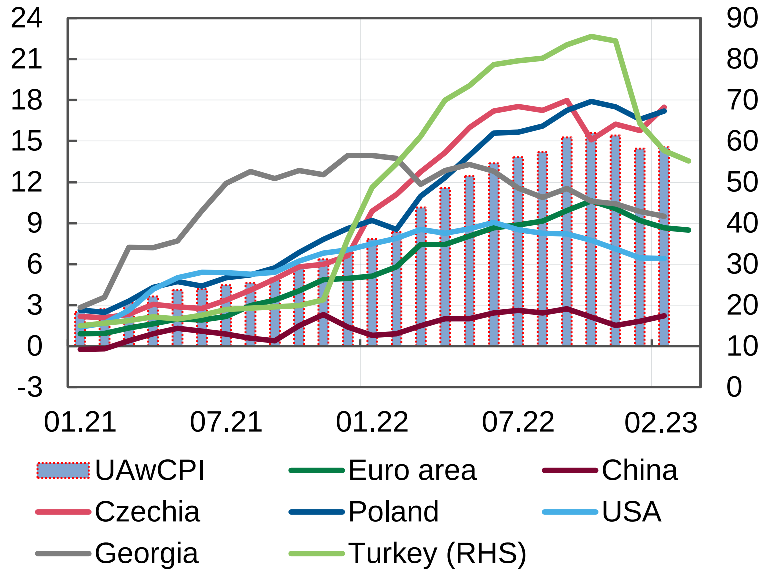
Risks of a global recession are easing. Inflation pressures remained significant and persistent

Manufacturing PMI of selected countries



Source: S&P Global.

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

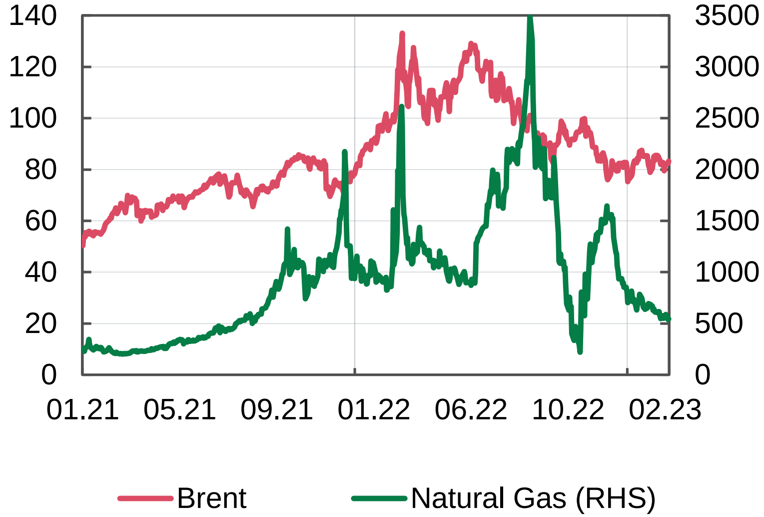


Source: National statistical offices, NBU staff estimates.

- Leading indicators in February signaled the recovery of economic growth in most countries. This was underpinned by a warm winter and a reduction in supply shortages, including thanks to improvements in supply chains. The service sector activity showed a sharp upturn
- Inflation pressures in Ukraine's MTP countries (UAwCPI) remained high and persistent as food prices stayed elevated due to limited supply and costs of services were on a rise, mostly due to higher wages
- On the other hand, the decrease in global energy prices pushed inflation down. However, the expiration in some countries (in particular, the U.S., France, Poland, and the Czech Republic) of a number of state support measures to compensate for high tariffs/prices for fuels and electricity led to an increase in domestic energy prices

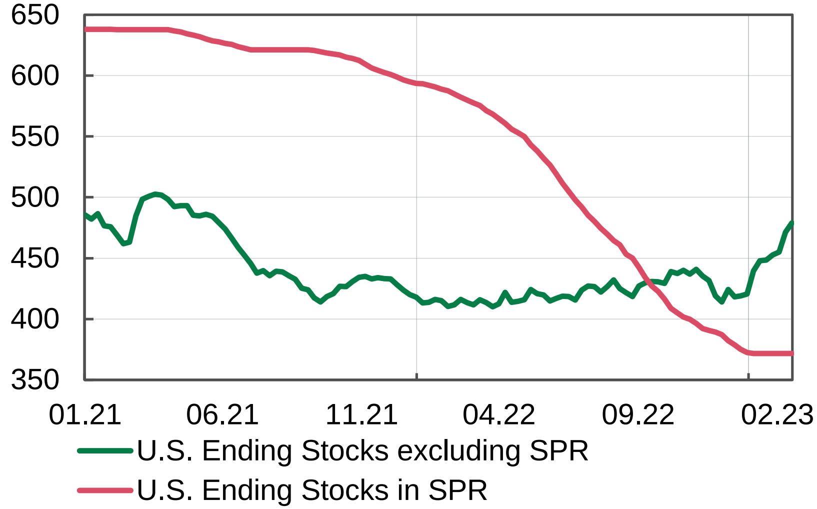
Global energy prices, primarily for natural gas, showed a downward trend

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

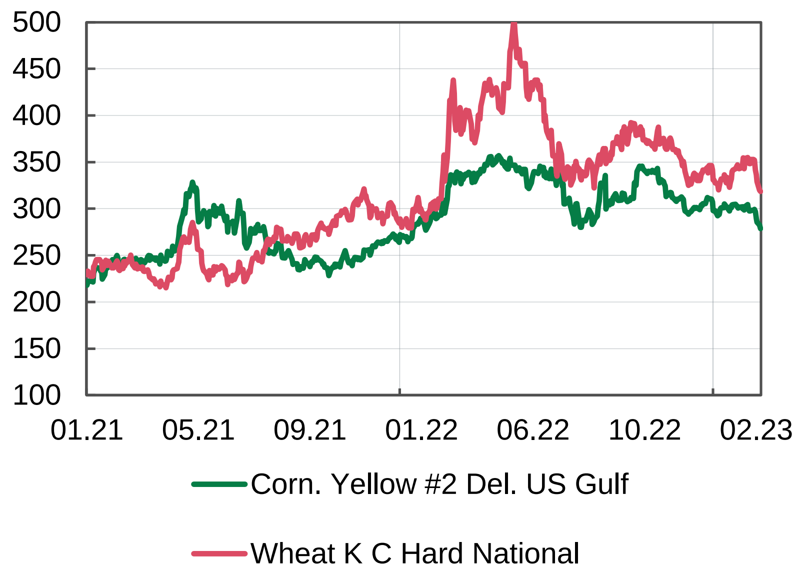


Source: U.S. Energy Information Administration, as of 17.02.2023.

- Throughout February, world oil prices fluctuated within narrow range with a prevailing downward pressure. The downward factors for prices were: the growth of stocks in the USA (to the highest level since May 2021); weak global demand and increased concerns of its further slowdown due to hawkish signals from representatives of the leading central banks (the Fed and the ECB) against the background of strong labor market data and high inflation. In contrast, Russia's plans to cut exports from its western ports by 25% in March amid the EU embargo on the purchase of Russian oil and petroleum products along with the price caps restrained the decline in prices
- Gas prices have been steadily decreasing due to relatively mild winter weather conditions, high gas inventory levels (45% above the 5-year average) in Europe, continued significant volumes of EU LNG imports, increased U.S. gas inventories allowing to export actively, and restored operation of the Freeport LNG terminal (the second largest export-oriented LNG plant in the U.S.)

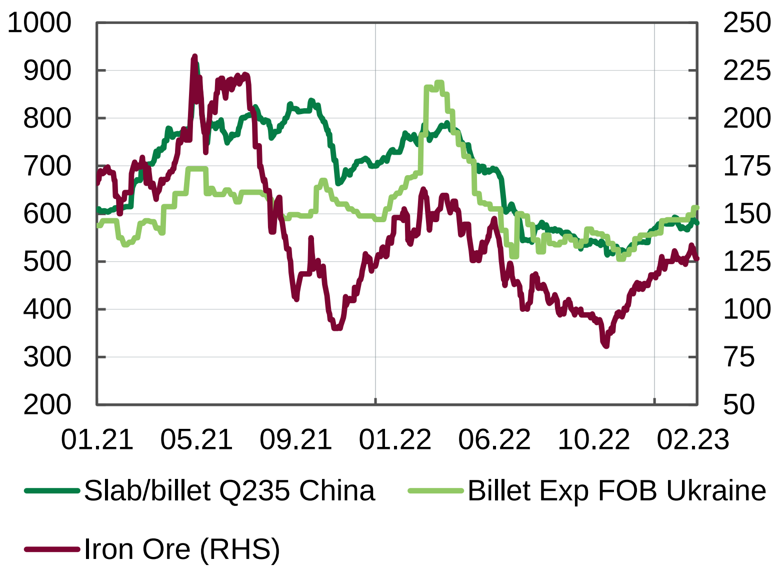
World prices for major Ukrainian export commodities moved in opposite directions: decreased for grains and increased for steel

World grain prices, USD/MT



Source: Refinitiv.

World steel and iron ore prices, USD/MT

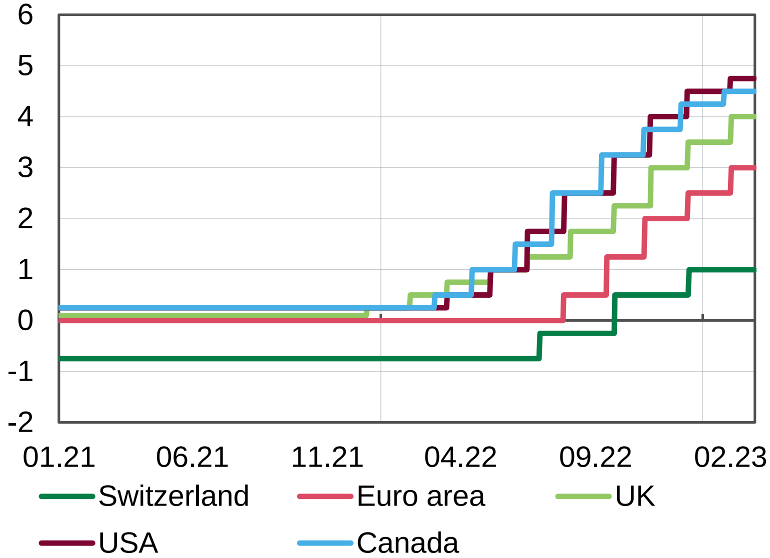


Source: Refinitiv, Delphica.

- World grain markets were mainly under the influence of factors pressuring prices downwards. These factors included: forecasts of an increase in the U.S. harvest (according to preliminary estimates by the USDA), negotiations on the continuation of the "grain corridor" from Ukraine, and increased competition from cheaper grains from the Black Sea region
- Global steel and iron ore prices resumed growth in February due to China's gradual recovery following the end of the New Year holidays and the lifting of quarantine measures. An additional factor was the seasonal accumulation of stocks on the eve of spring work

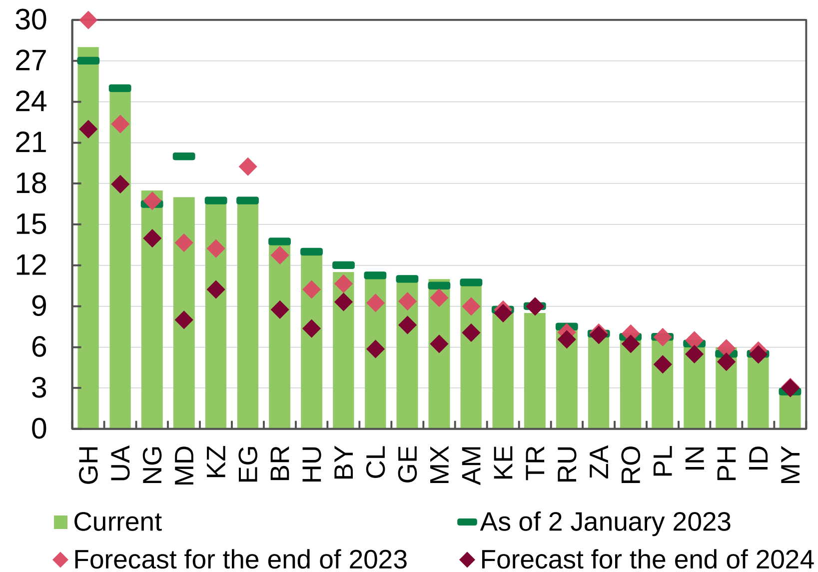
Major CBs are set to tighten their policy further: rates may peak at higher levels. Most EM CBs are in a wait-and-see mode

Key interest rates in selected developed countries, %



Source: official web pages of central banks.

Key policy rates in selected EM countries, %



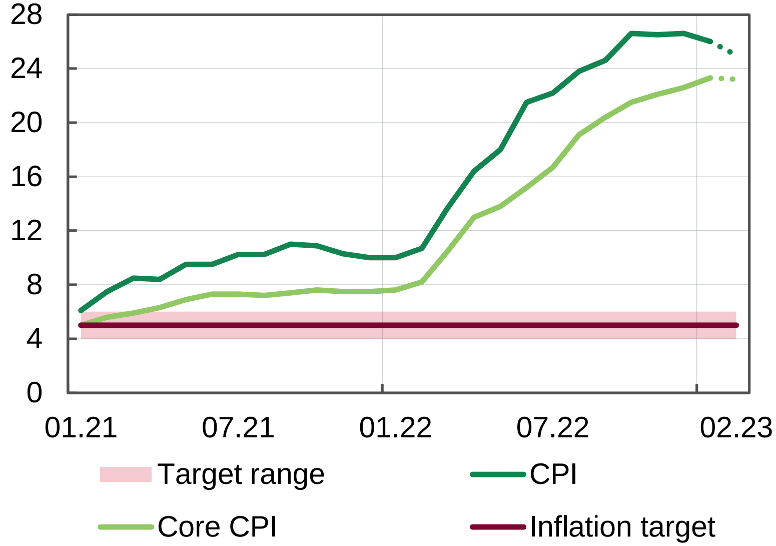
Source: official web pages of central banks, Focus Economics, Oxford Economics, as of 28.02.23.

- **The Fed** has again slowed the pace of monetary policy tightening, but foresees a “couple" of more rate hikes and will continue to reduce the size of the balance sheet. The policy rates may peak at higher levles than previously forecast, although the disinflation process has already begun. Markets expect a 25 bp rate hike by the Fed (with a probability of about 74%) in March
- **The ECB** has raised its rates by 50 bps, plans the same step in March, and has signaled it will continue monetary policy tightening in the future. Financial markets raised the expected level of the deposit rate peak to about 3.75% (up from previous 3.4%)
- Although most **EM CBs** take a wait-and-see approach and admit the need to maintain the restrictive policy for some time, the CB of Moldova have already cut rates

Ukraine: Inflation

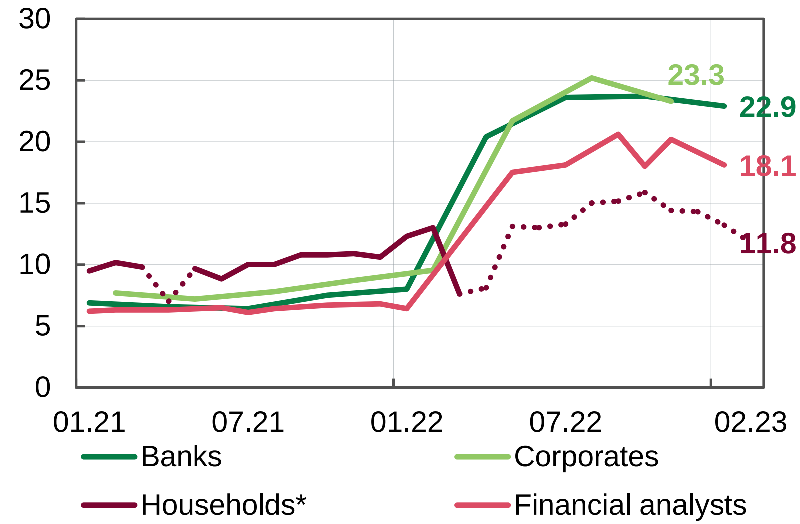
Consumer inflation started to decline earlier than expected, but underlying pressures remained elevated

Headline and underlying inflation measures, and inflation target, % yoy



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

Inflation expectations for the next 12 months,%

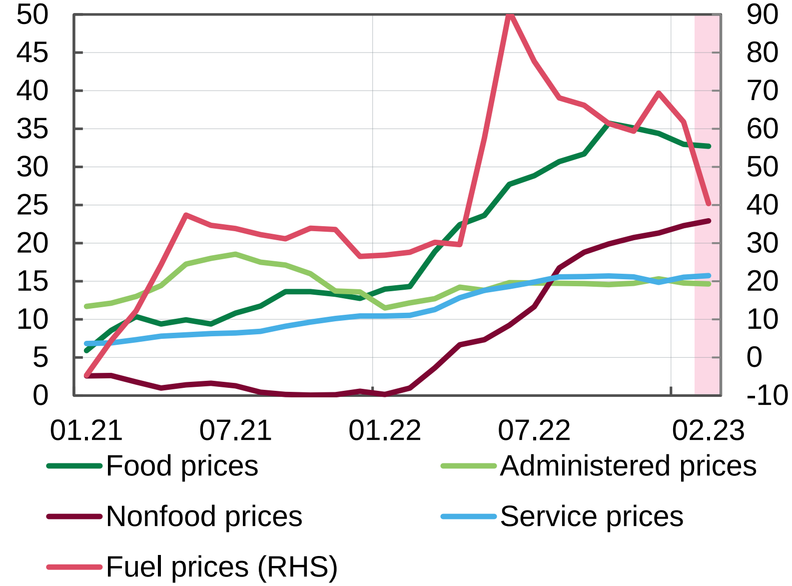


* The dotted line indicates a change in the method of survey for a telephone interview.
Source: NBU, GfK Ukraine, Info Sapiens.

- In January 2023, headline consumer inflation declined to 26% yoy. The NBU estimates that the slowdown in price growth continued in February
- The decline in headline inflation started earlier than the NBU had expected in its forecast (January 2023 Inflation Report), in part due to an improved situation in the energy sector and a warm winter
- However, underlying inflation pressures, as measured by core CPI, remained high, reflecting ongoing pass-through of higher business costs, including due to the electricity shortages

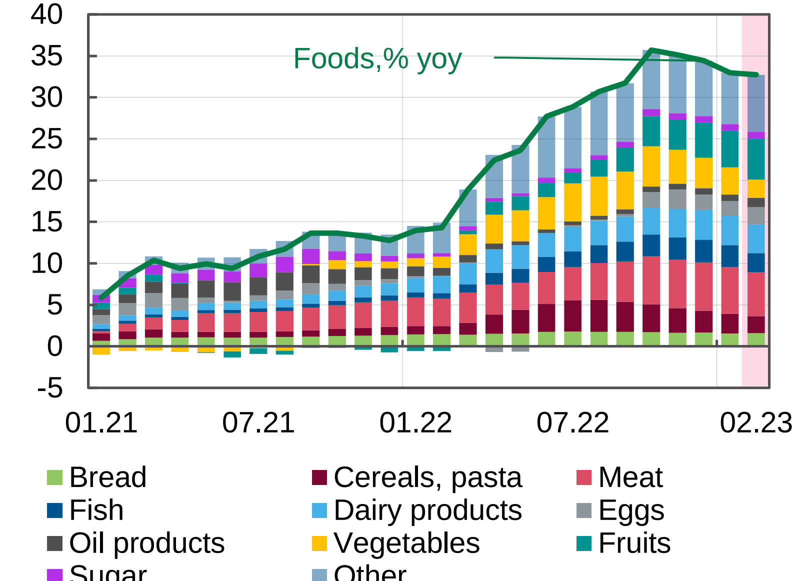
Inflation declined due to sufficient food supply, de-occupation of the territories, a stable exchange rate,…

Selected CPI components,% yoy



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

Contributions to the annual change in food prices, pp

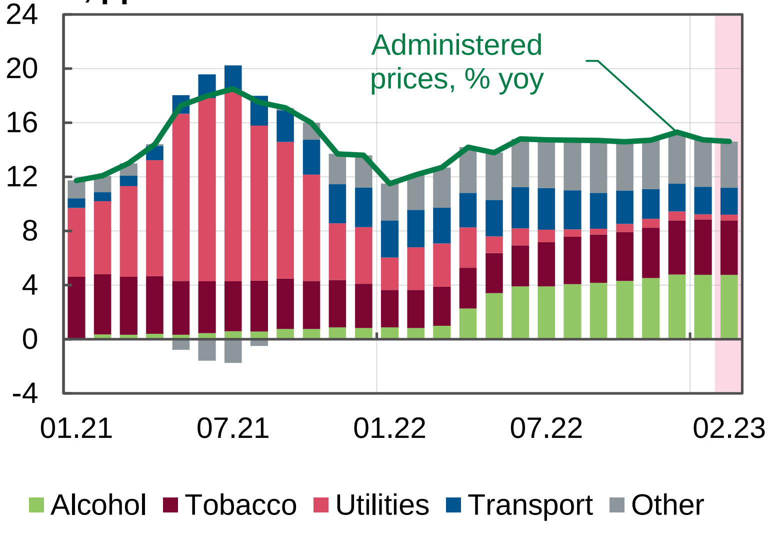


* Data for February reflects nowcast.
Source: SSSU, NBU staff estimates.

- The growth in food prices, especially for raw foods, slowed due to an increase in the supply of borshch vegetables, meat, and cereals. Mild weather conditions, the effects of the de-occupation of part of the Kherson oblast, which unblocked supplies of goods from other regions of Ukraine, and a favorable situation on the foreign exchange market were important factors behind the slowdown in food inflation
- In contrast, the slowdown in inflation was restrained by the continued pass-through of higher costs incurred by businesses earlier, in particular due to the electricity shortages. As these factors, as well as the stock depletion of durable goods, continued to drive up prices for processed foods and non-foods

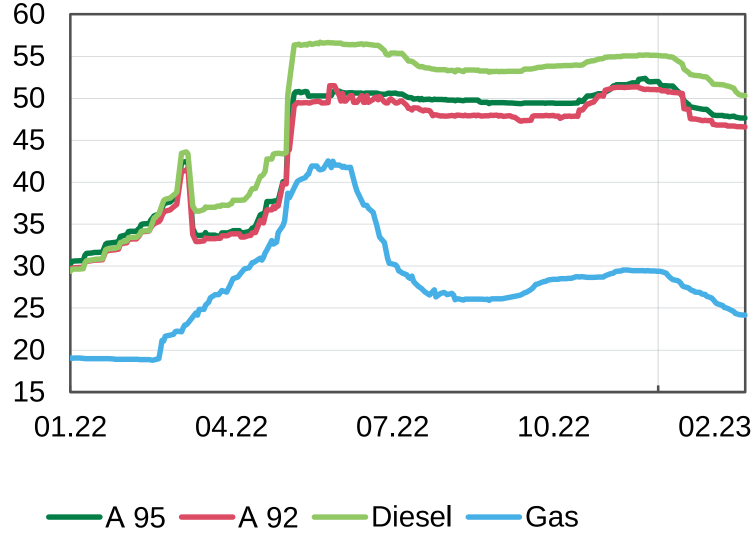
… better situation in the energy sector, and fixed utility tariffs

Contributions to the annual change in administered prices, pp



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

Fuel prices, UAH / L



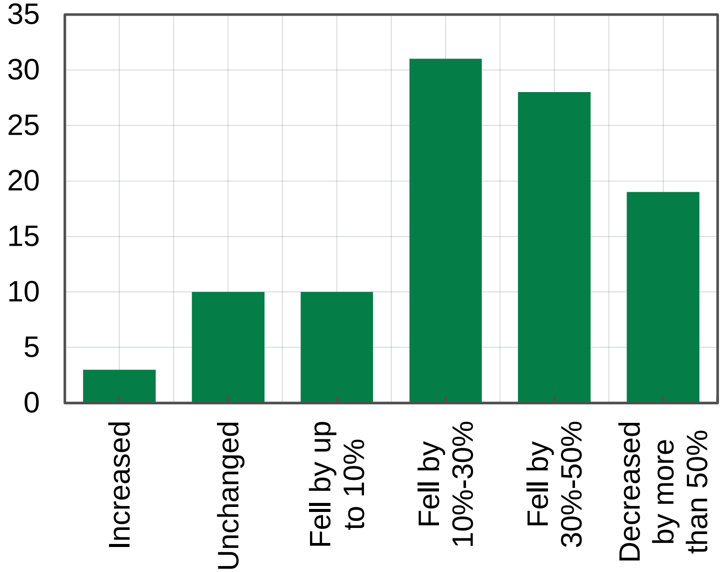
Source: minfin.com.ua, NBU staff calculations.

- Fuel price growth declined sharply amid ample supply and weaker demand for fuels, including due to an improved situation in the energy sector and relatively warm weather, as well as a decline in global oil prices in annual terms
- Due to lower pressure from fuel prices, the costs of transportation services grew at a slower pace. The rise in prices for alcoholic beverages slowed down due to weaker consumer demand
- The growth in administered prices continued to be restrained by the moratorium on increases in utility tariffs for households

Ukraine: Economic activity

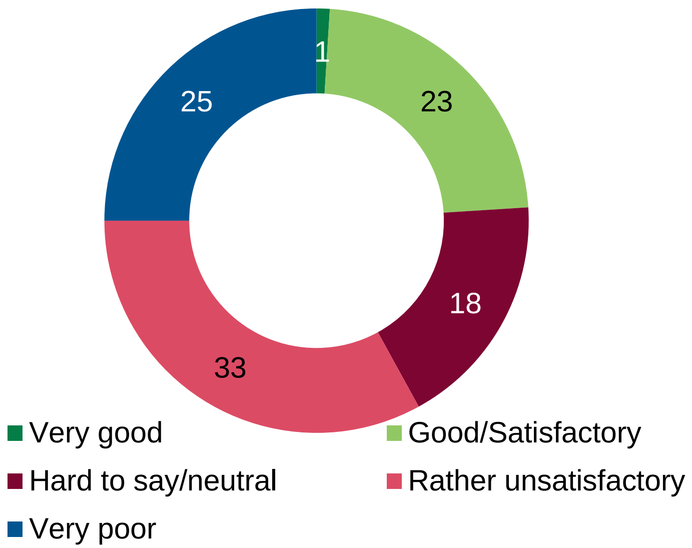
After an extremely hard 2022...

How have your sales volumes changed? % responses



Source: AmCham.

Assessment of the state of own business, % responses

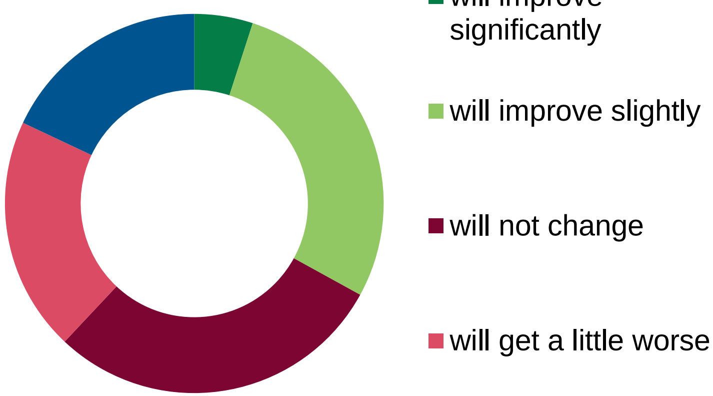


Source: EBA.

- According to the AmCham survey, almost half (47%) of the surveyed companies reported their sales declined by 30% or more in 2022, including a decline of more than 50% for 19% of respondents. Most often, the loss of more than half of sales volumes was reported by trade and transportation businesses (67% of respondents each), agriculture, mining and food industries (63%)

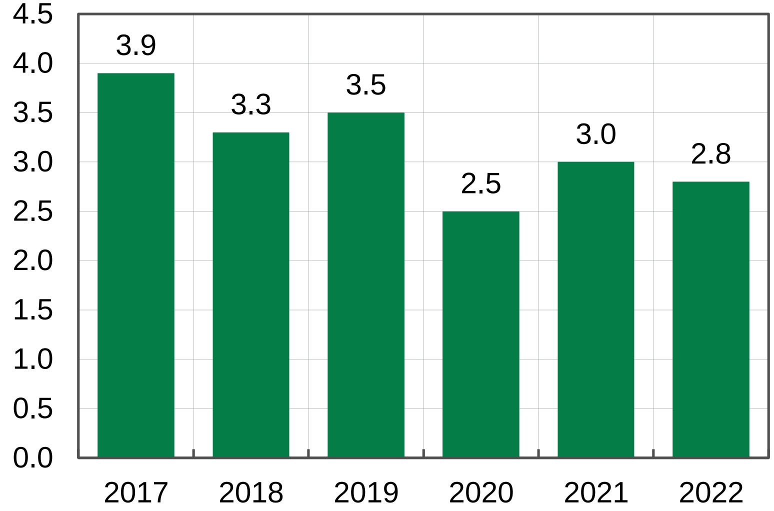
...business expectations for the near term are cautiously optimistic

Forecasts of changes in the state of the business for the next six months, % of responses



Source: EBA.

Assessment of changes in the state of your business* in the next six months, % of responses

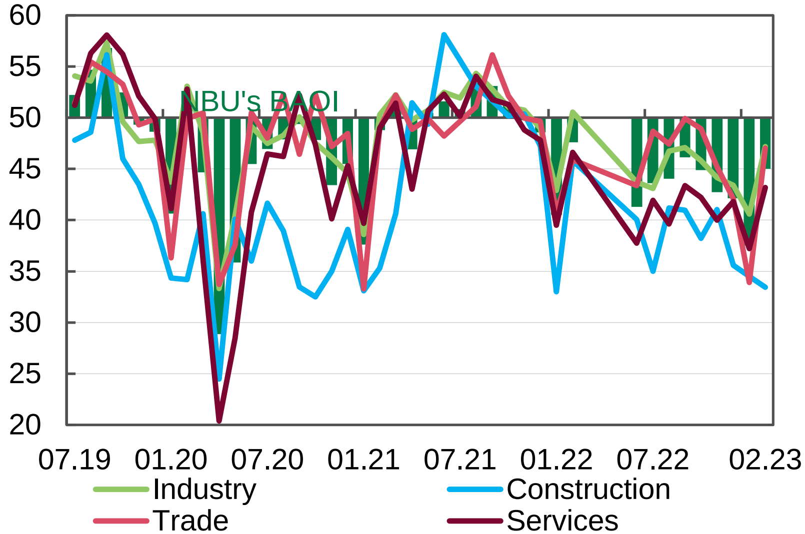


* The answers to the questions were converted into a score in the range from 1 (the worst score) to 5 (the best score)
Source: EBA.

- According to the EBA survey, the shares optimists and pessimists were almost equal: 38% of companies predicted that the business situation will deteriorate in the next six months, 33% expected the situation to improve, and the rest (29%) do not expect significant changes.
- At the same time, ¾ of respondents (76%) planned to expand their business

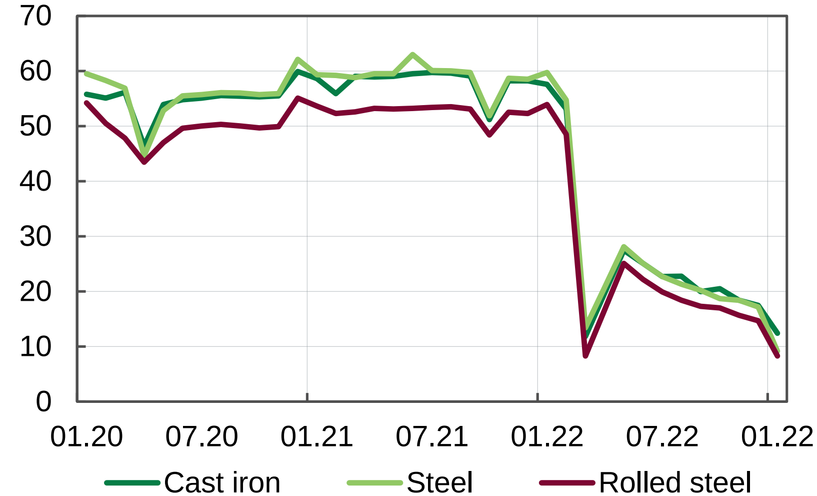
Improved situation in the energy sector and a seasonal pick-up in activity supported industrial sector...

NBU's business activity outlook index, p



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

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

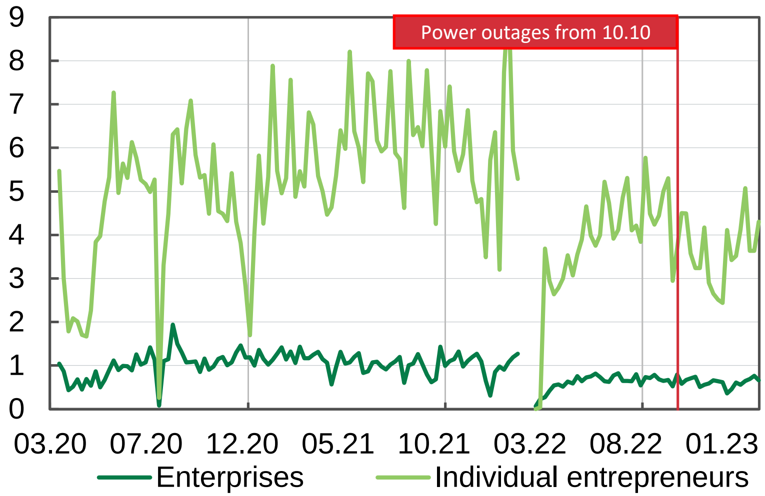


Source: Ukrmetalurgprom.

- From the beginning of February, the electricity deficit began to decrease and was absent in the second half of the month thanks to imports, warmer weather and repairs, and increases in hydropower generation due to flooding and renewable generation amid increased daylight hours and clear weather. As a result, electricity imports were minor by the end of February
- This helped increase the loading of metallurgical and pipe enterprises and, along with more favorable global pricing environment, restore the work of certain MPPs and the iron ore mines
- Chemical enterprises increased the production of mineral fertilizers in the run up to spring sowing
- A number of large food factories have resumed operations. The impact of the energy crisis on milk and meat processing industry has eased, although in February it saw a seasonal slowdown in activity. Bread factories continued to install generators

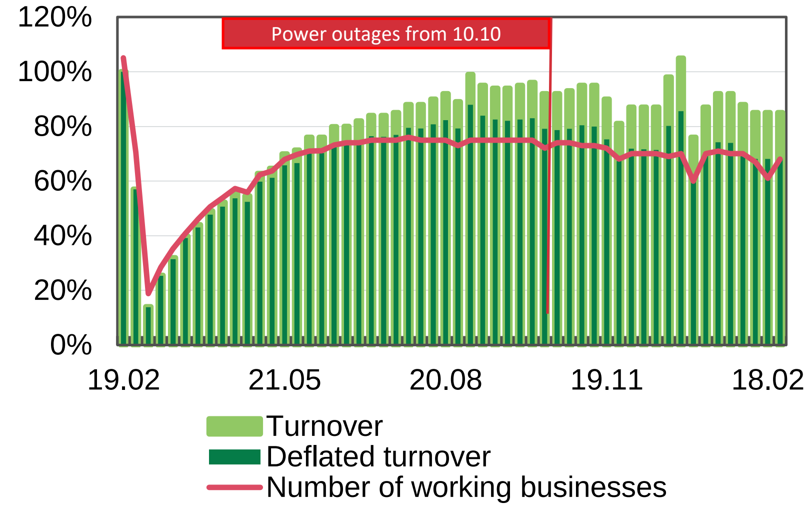
...and the services sector

New business registrations, thousands



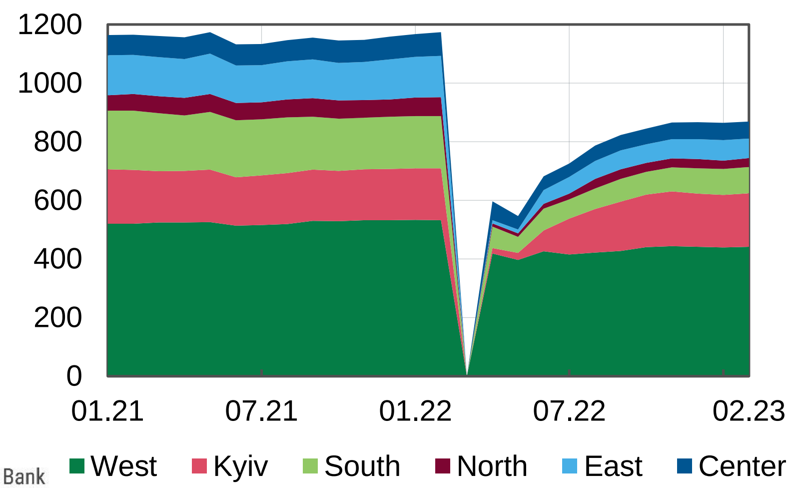
Source: opendatabot.ua.

Performance indicators of the restaurant business, %

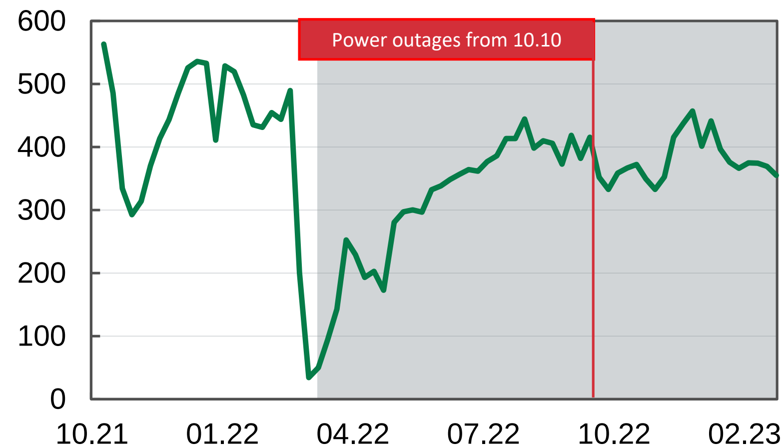


Source: SSSU, Poster, NBU staff estimates.

Number of new buildings for sale



Number of UZ tickets sold per week, thousands



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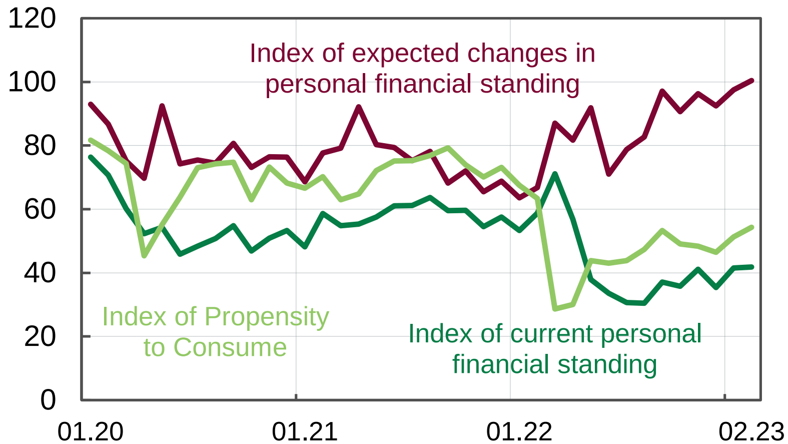
Source: Lun.City.

Source: UZ.

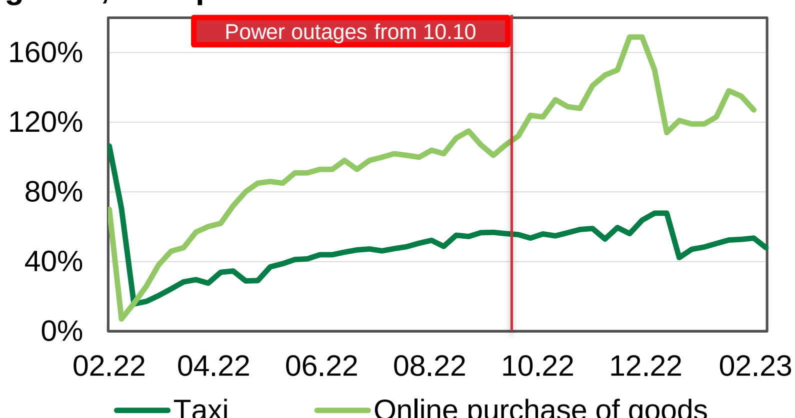
Consumer sentiments also improved

Components of the consumer sentiment index, p



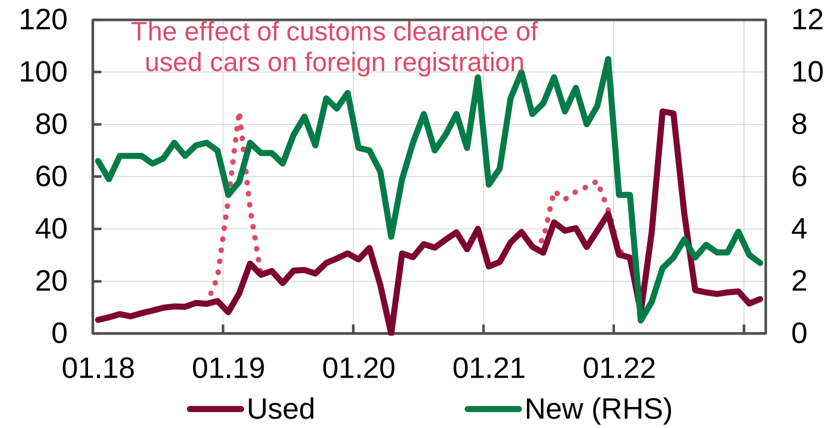
From March 2022, the survey method was changed from face-to-face to telephone interviews.
Source: Infosapiens.

Indicators of taxi operation and online purchase of goods, % to pre-war level



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

The first registration of passenger cars, thousand units

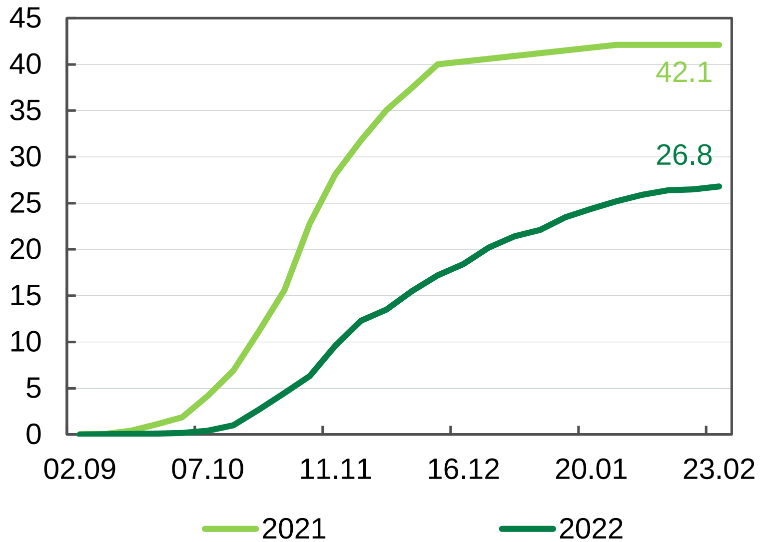


* New and used ones, excluding customs clearance of cars with foreign registration, which were imported in violation of the customs regime.
Source: SSSU, Ukravtoprom.

- In February, the number of visits to cafes and restaurants increased in almost all regions in the west and in the center of the country, while in Kyiv it remains 15% lower than before the war
- However, the trade in fuels decreased, as farmers delayed purchases of fuels for sowing, and in the second half of February sales of fuels for generators have decreased significantly

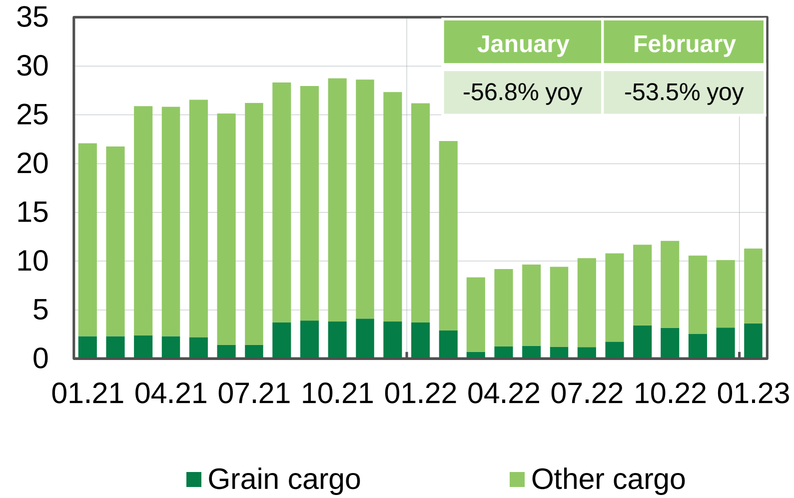
At the end of February, spring sowing began. Transportation through the "grain corridor" was increasing

Corn harvest volumes, million tons, cumulative



Source: MinAgro, SSSU.

Freight transportation by railway, million tons



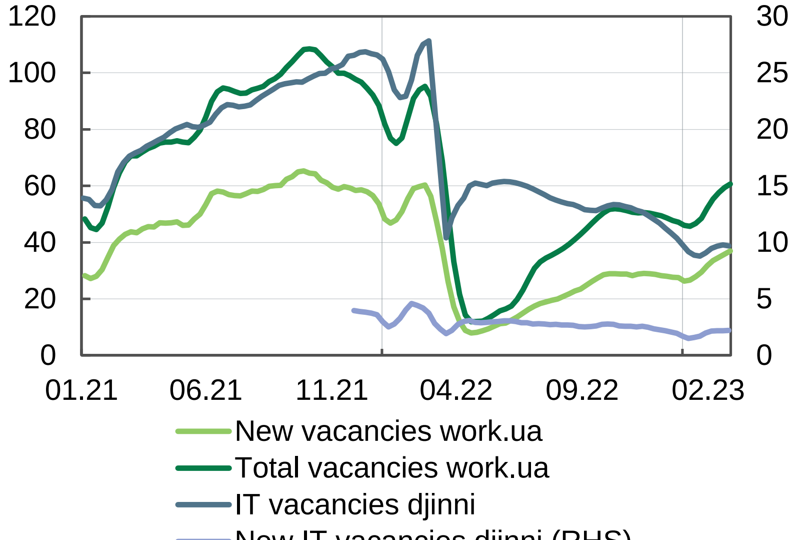
Source : SSSU, Rail.insider, UZ.

- Spring sowing has begun, which is, however, complicated by the late harvesting of corn (still 5% of areas remained unharvested). Greenhouse plants have started selling cucumbers of a new turnover
- In animal husbandry, the supply of raw milk decreased seasonally, but it is expected to increase from the end of February. Thanks to a rise in the number of chickens, an increase in egg production is expected in the coming months
- In February, transportation through the "grain corridor" increased by 19% mom; average daily UZ loads were at the level of previous month (the volume of ore transportation increased against the background of favorable external conditions and the release of train cars due to lower volumes of grain transportation. The resumption of electric transport operations supported passenger transportation

Ukraine: Labor market

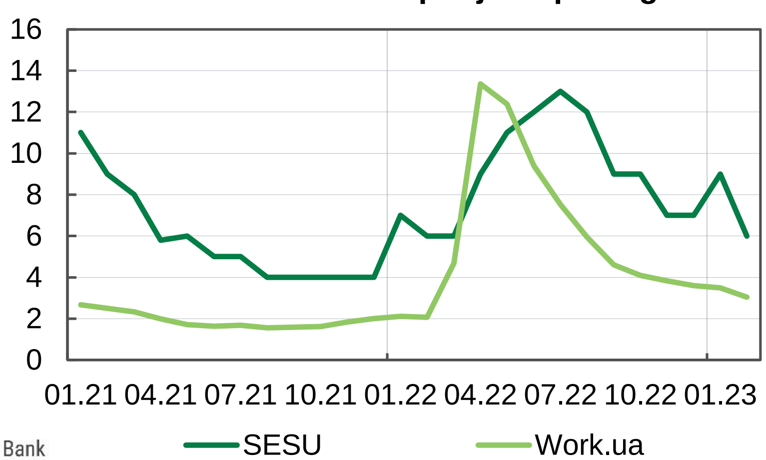
The seasonal recovery of economic activity supported the labor market...

Labor demand, four-week average



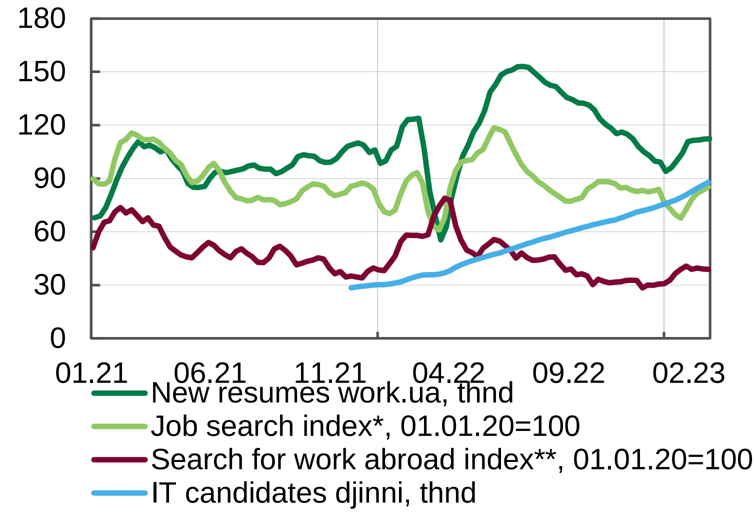
Source: work.ua, Opendatabot, NBU staff estimates.

The number of candidates per job opening



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

Labor supply, four-week average

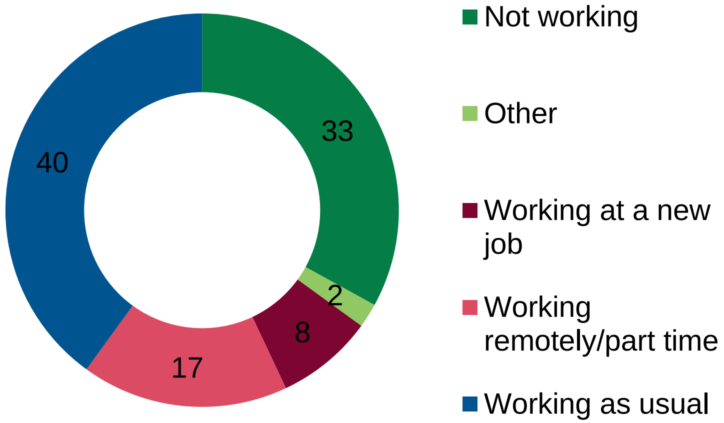


* Includes job search queries in Ukrainian and Russian. ** Includes job search requests in Poland, the Czech Republic, Russia and Germany in Ukrainian and Russian from Ukraine. Source: work.ua, Opendatabot, Google Trends, NBU staff estimates.

- In February, both the number of resumes and the number of job openings grew, mainly due to the seasonal revival of activity after the holidays
- However, the market was dominated by employers - the number of candidates per job opening remained significant

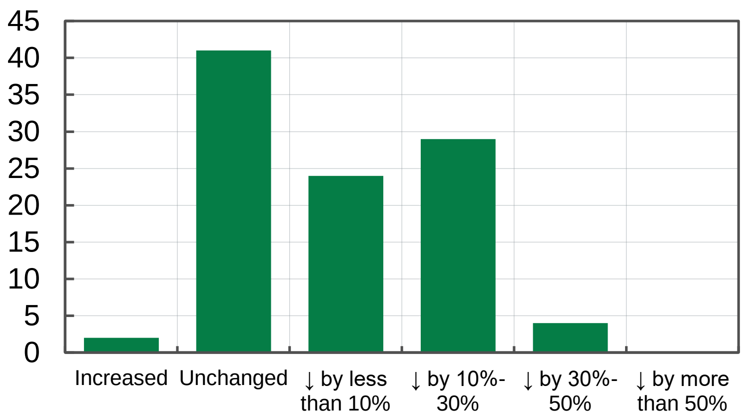
...but many Ukrainians who had a job before the war were still unemployed/ This hindered the growth of household income

Current employment status among those who worked before the full-scale war, % of responses



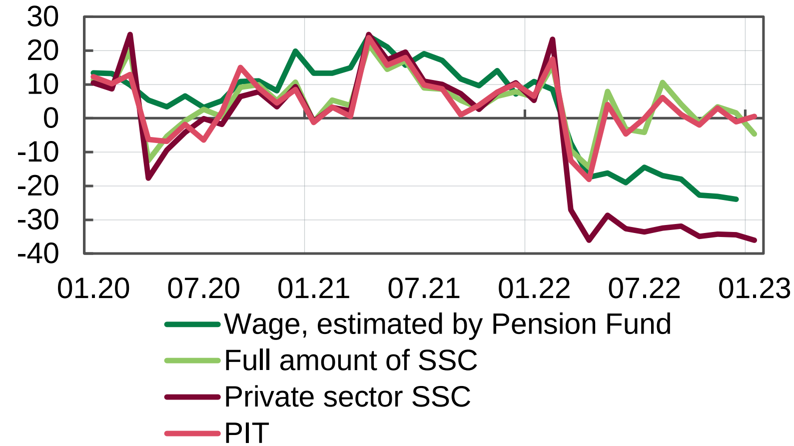
Source: Rating Group survey (Dec 2022).

Changes in the number of employees at enterprises in 2022, % of responses



Source: AmCham.

Indirect indicators for estimating household incomes in real terms*, % yoy

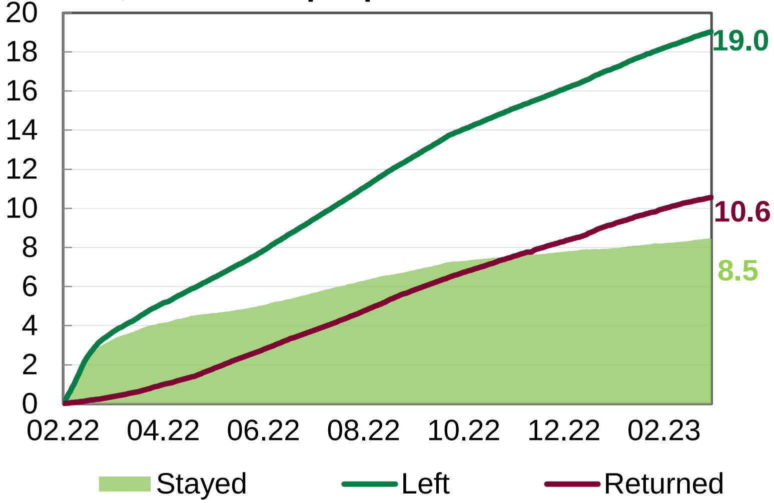


* Deflated by CPI. Source: Pension Fund of Ukraine, SSSU, STSU, NBU calculations.

- According to the Rating survey, 33% of those who had a job before 24 February 2022 were still unemployed in December (35% in June). This was due, in particular, to enterprises optimizing their staff - according to the AmCham survey, such enterprises constituted more than a half of the total
- It is estimated that in early 2023, the growth of household income will be supported mainly by payments in the public sector, in particular to the military. According to the EBA survey, in 2023, the majority of firms (61%) do not plan to change wages, while 28% plan to increase them. Pensions are to be indexed by 19.7% in March

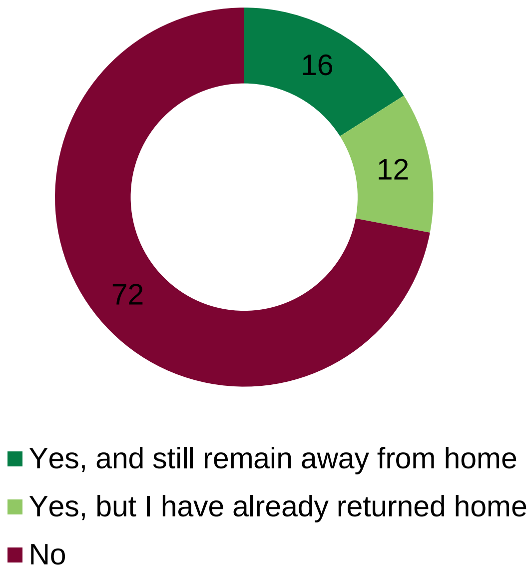
The scale of internal and external migration remains significant. Adaptation of Ukrainians abroad is growing

Number of citizens who crossed the border of Ukraine, millions of people



Source: UNHCR.

Have you changed your place of residence after 24 February 2022? % of responses



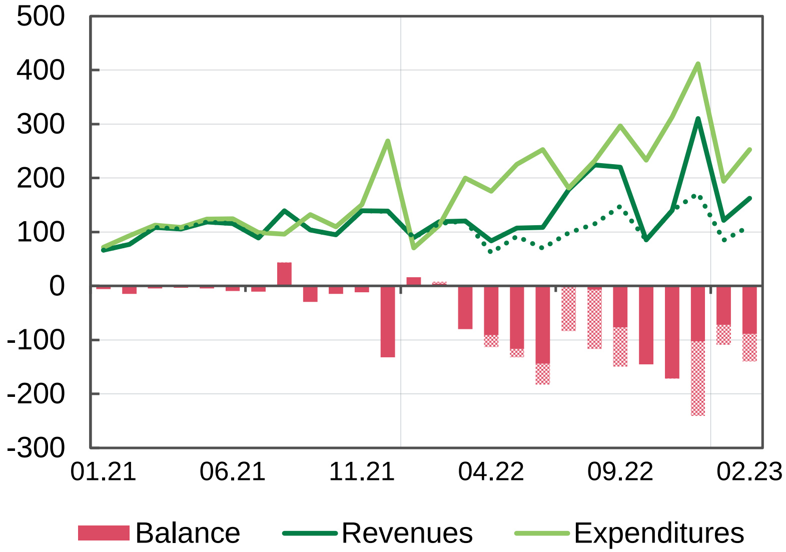
Source: Rating Group survey (Dec 2022).

- According to the UNHCR, as of 28 February 2023, 19 million people left Ukraine, and 10.6 million returned. There were still 8.5 million people outside Ukraine, of whom 4.9 million had temporary protection status in the EU. According to the IOM, the number of IDPs as of 23 January 2023 was estimated at 5.4 million
- According to the Rating survey (23-26 December 2022), conducted in Ukraine, 28% of respondents changed their place of residence after the start of the full-scale invasion, 16% of respondents still lived outside their homes, most of them (63%) were from the war zone (south-east) and (30%) were from the de-occupied territories. 52% planned to return home when the war ends, 11% did not plan to return
- According to a survey by the EU Agency for Fundamental Rights, 1/3 of Ukrainian migrants in the EU planned to return home. However, another third already felt as a part of the recipient country, meaning that the adaptation of Ukrainians abroad is growing

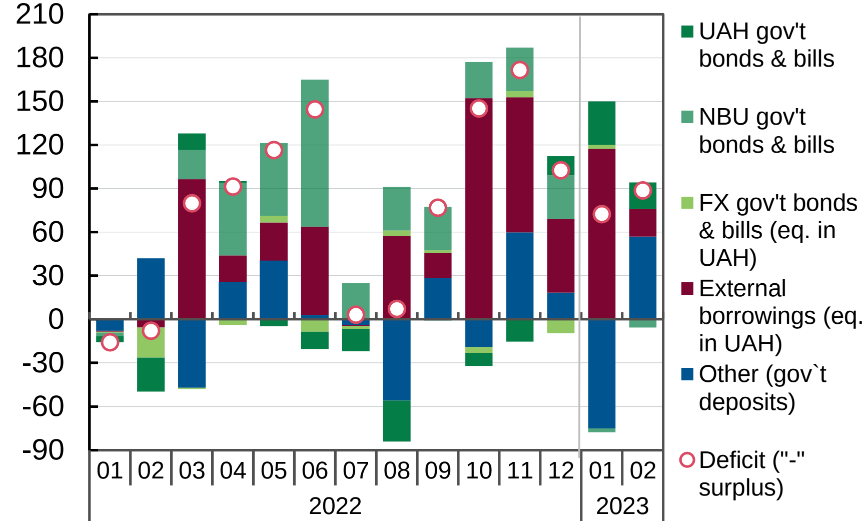
Ukraine: Fiscal sector

A considerable state budget deficit was covered by international financing and domestic debt borrowings

Main state budget indicators*, UAH bn



State budget financing, UAH bn**

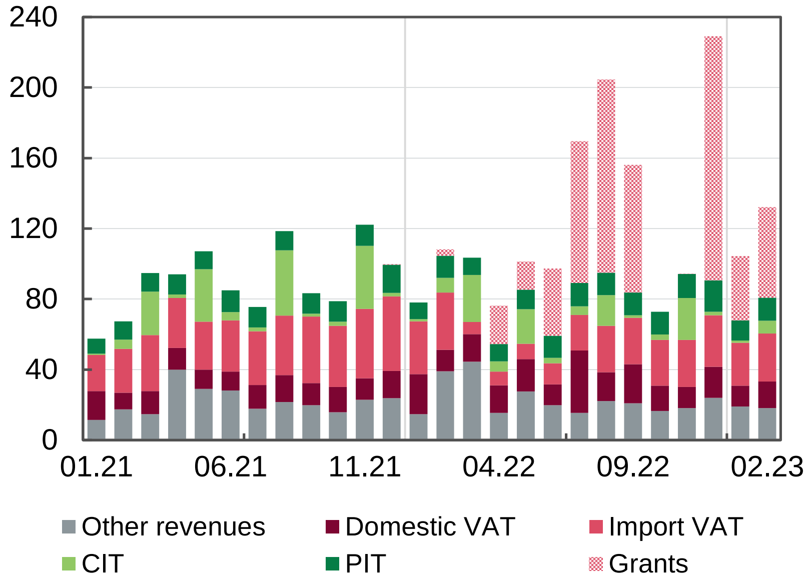


* Dotted lines and patterned fillings show relevant indicators excluding grants. Balance includes net lending. ** Debt transactions are net borrowings. Other financing represents active operations (in particular, includes the change in volumes of government funds accumulated in the previous periods) and privatization.
February – preliminary data from the MoF website and NBU staff calculations based on these data.
Source: Treasury, MoF, NBU staff calculations.

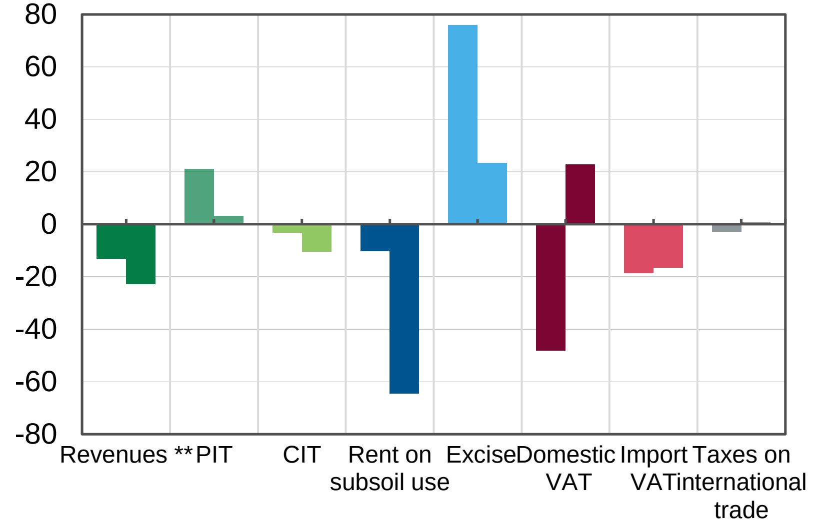
- The state budget ran a significant deficit in January - February (UAH 161.1 bn and above UAH 249 bn excluding grants in revenues) due to sizable expenditures and weak tax revenues
- Budget needs were financed by:
  - International financing, which, as in 2022, came in the form of both grants (USD 2.4 bn) and loans (USD 3.9 bn)
  - An increase in domestic debt borrowings (to UAH 84 bn), which was largely due to the mechanism allowing the banks to use certain benchmark securities to meet the reserve requirements

Revenues from domestic sources remained subdued

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



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

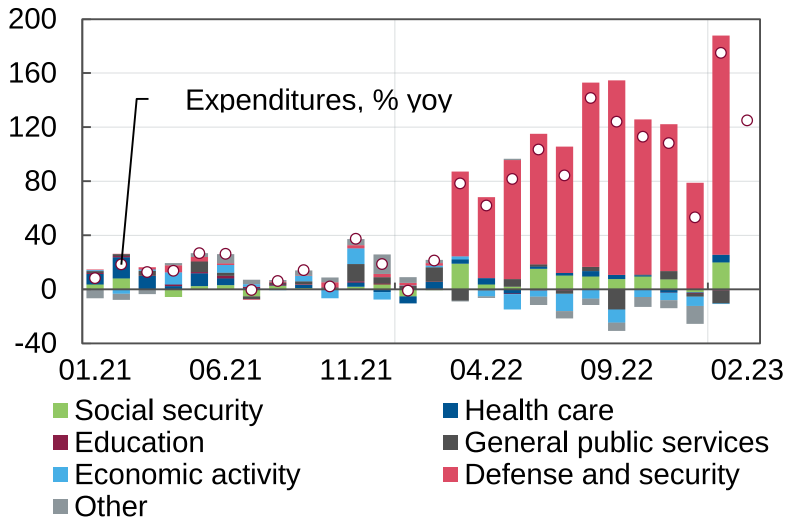


* February – preliminary data from the MoF website and NBU calculations based on these data. ** Excluding grants.
Source: Treasury, MoF, NBU staff calculations.

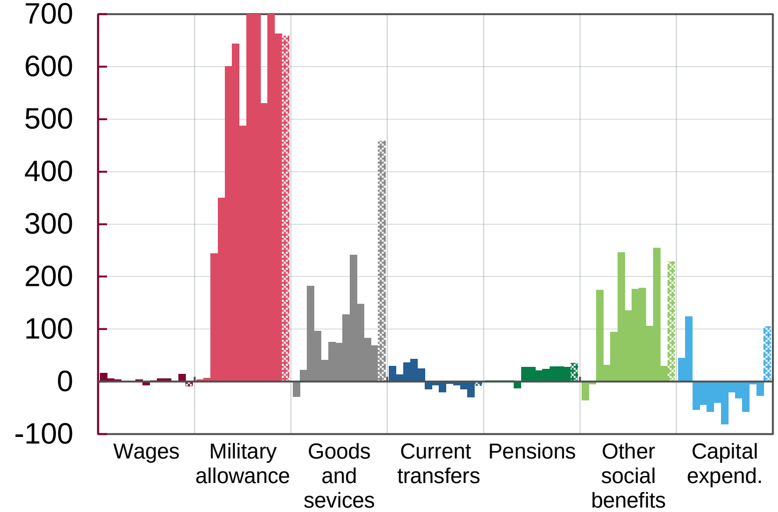
- In January-February, revenues (excluding grants) were lower than in the respective period last year, primarily on account of weaker tax proceeds. The decrease in revenues was due to a narrowed tax base as a result of the full-scale war, the base effect due to an early transfer of NBU profits in February last year, and rather high volumes of VAT refunds in January-February 2023
- Revenues were supported primarily by considerable payments to military personnel (supporting the proceeds from PIT and other consumption taxes), inflation and exchange rate factors, as well as an increase in the excise tax rate on tobacco products
- Owing to grants, the general fund revenues grew by 27% yoy in two months of 2023

Expenditures continued to grow at high paces

Contributions to annual change in expenditures of the state budget*, pp



Growth in expenditures* of the state budget in 2022-2023, % yoy**



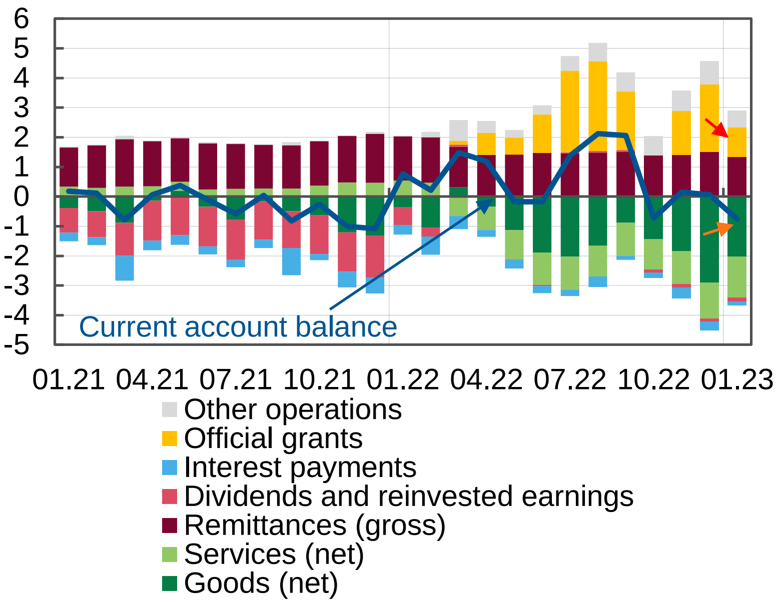
* February – preliminary data from the MoF website and NBU calculations based on these data.
** January 2023 is shown with a pattern fill.
Source: Treasury, MoF, NBU staff calculations.

- Defense and security related expenses (primarily on military allowances), spending on social programs and the use of goods and services were the major expenditure directions
- At the same time, capital expenditures increased in January and probably February, in particular due to the need to restore damaged infrastructure

Ukraine: Balance of Payments

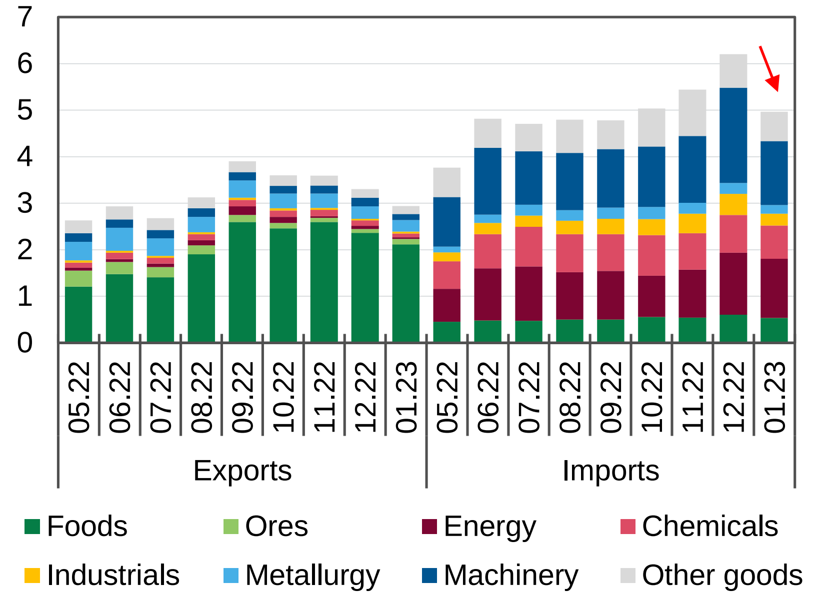
In January, the current account returned to negative values, despite the narrowed deficit in trade in goods

Current account balance, USD bn



Source: NBU staff calculations.

Merchandise trade, USD bn

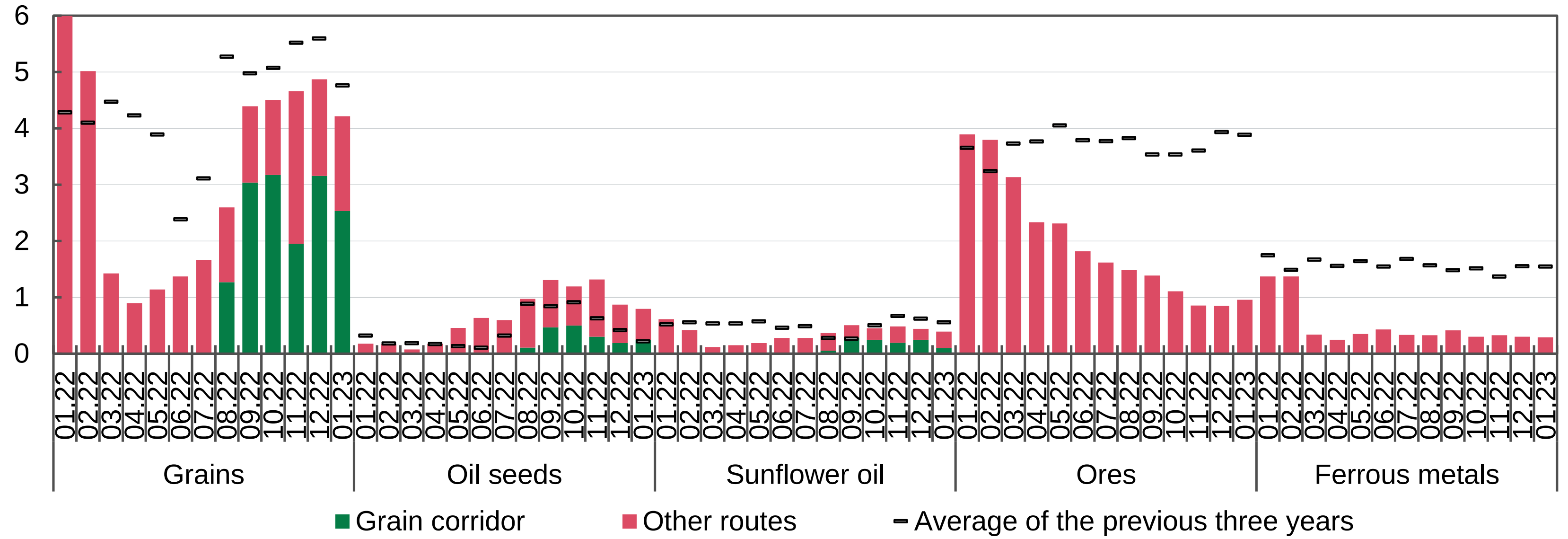


Source: NBU staff calculations.

- In January, compared to December, the decline in imports of goods was more significant than that of exports due to lower import volumes of machinery and industrial products. As a result, the deficit in trade in goods narrowed, although remained significant
- However, due to lower grant receipts, the current account returned to a deficit

The obstruction of the grain corridor by russia and a lower harvest last year restrained the recovery in exports of goods

Exports of selected goods, m t

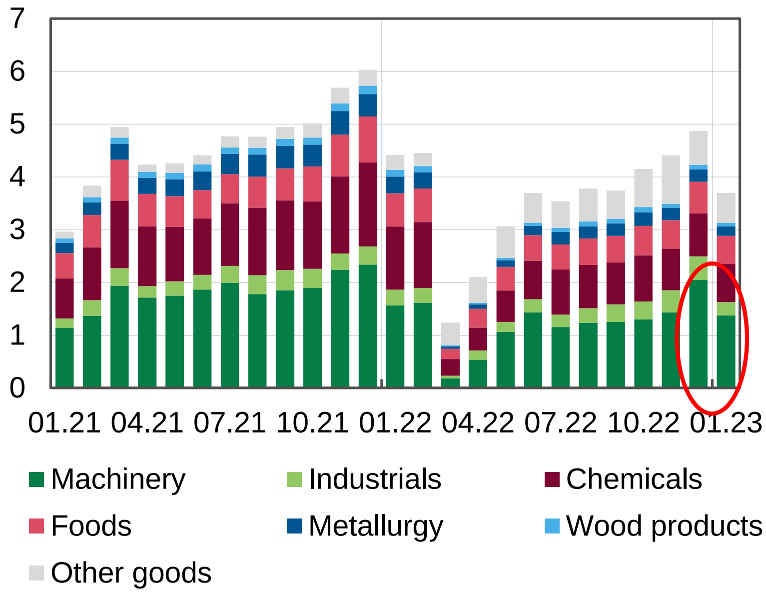


Source: SCSU, Black Sea Grain Initiative JCC.

- In January, export volumes of key food products decreased compared to previous months due to russia's obstruction of the grain corridor and last year's lower crop harvest
- In the meantime, the decrease in food exports freed up some transport capacities for other products, and, coupled with an improvement in energy sector and rising external prices, led to some increase in iron ore exports. At the same time, exports of ferrous metals remained at the low levels of previous months

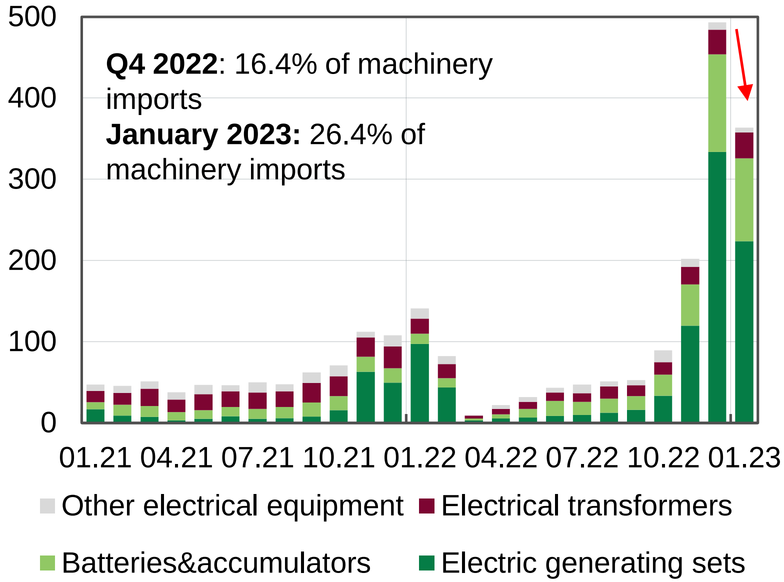
Import of goods decreased, primarily due to a certain saturation of domestic demand for machinery products

Non-energy imports, USD bn



Source: NBU staff calculations.

Import of emergency power supply goods, USD m

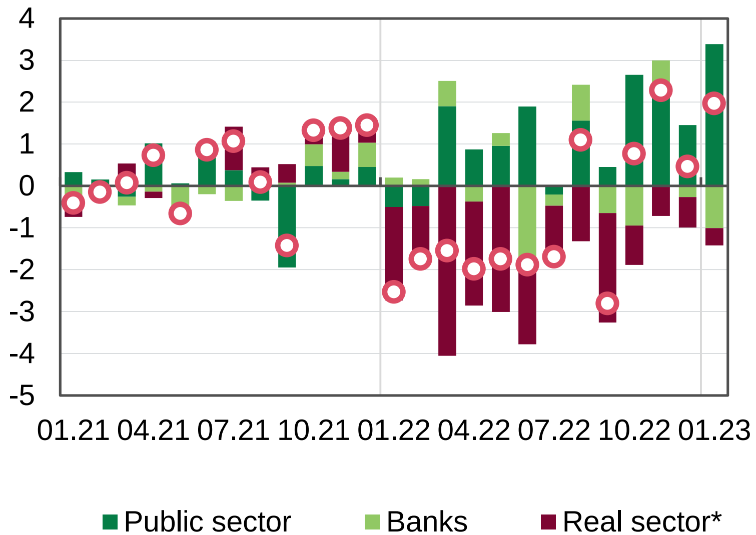


Source: SCSU, NBU staff calculations.

- Import volumes of emergency power supply goods and petroleum products declined due to the domestic market being saturated with these goods at the end of last year, as well as an improvement of the energy situation thanks to warmer weather
- Additionally, шmports of industrial goods, particularly clothing, declined, possibly because the major needs of Ukraine's defense and security forces were met in the previous months

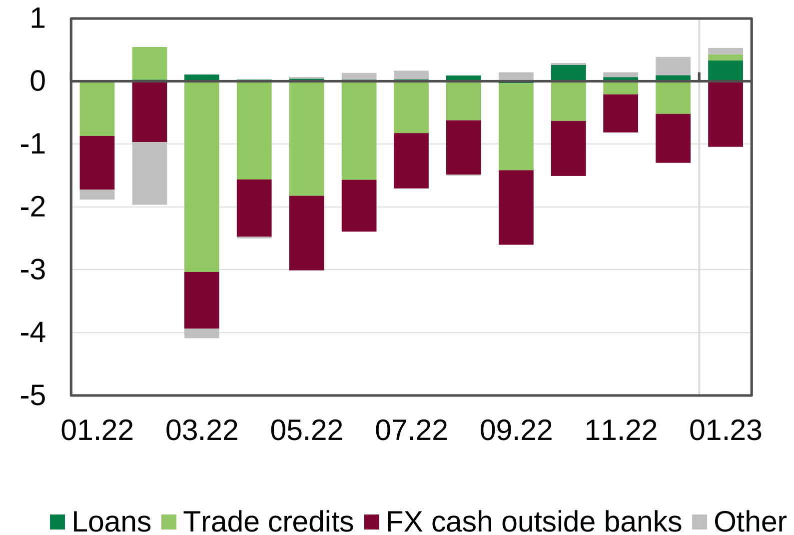
The international financing was an important source of capital inflows …

Financial account: net external liabilities, USD bn



* Including E&O
Source: NBU.

Real sector: net external liabilities, USD bn

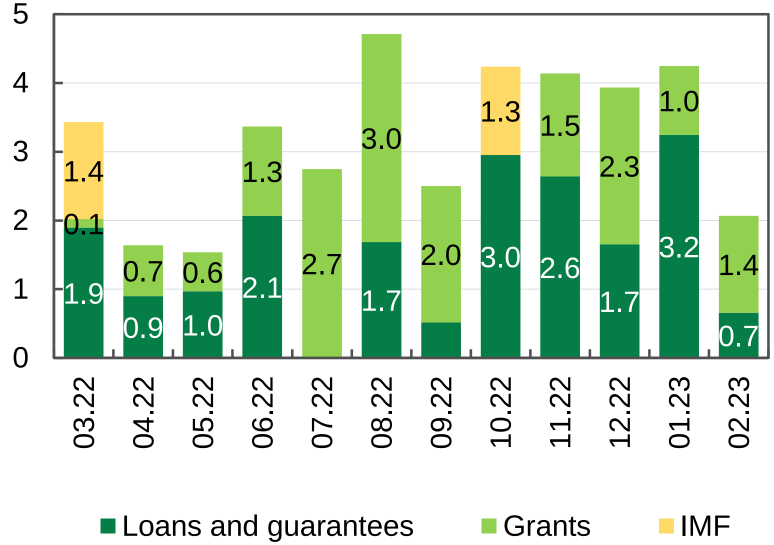


Source: NBU.

- As before, capital inflows to the public sector were ensured by the significant amounts of international financial support. Thus, in January, Ukraine received the first tranche in the amount of EUR 3 bn under the new large-scale EU Macro-Financial Assistance Program for 2023
- Also, the net capital outflows from the real sector decreased due to the lower accumulation of trade credit liabilities by non-residents and the inflows of guaranteed loans to the energy sector
- At the same time, the capital outflows from the banking sector increased amid the increase in deposits of non-financial corporations in foreign currency, which is partly related to the seasonal accumulation of funds by agrarians before the sowing campaign

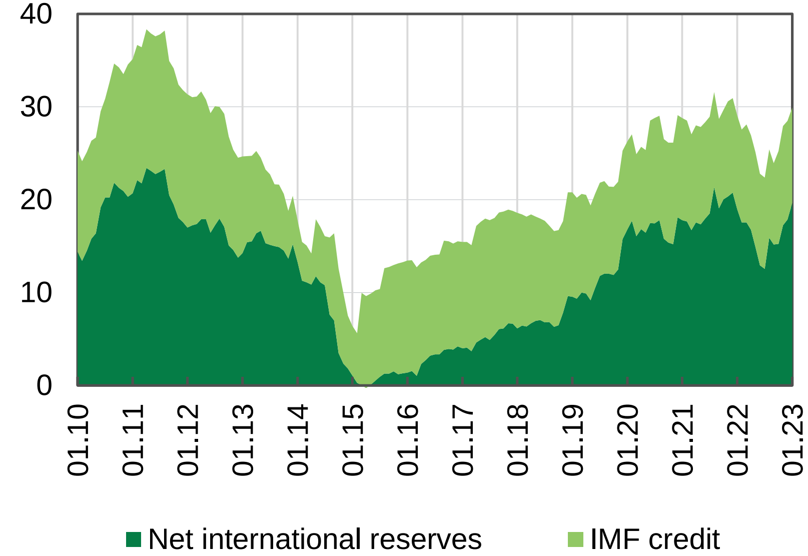
… helping increase international reserves

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



Source: open sources data, MoFU, NBU.

International reserves, USD bn



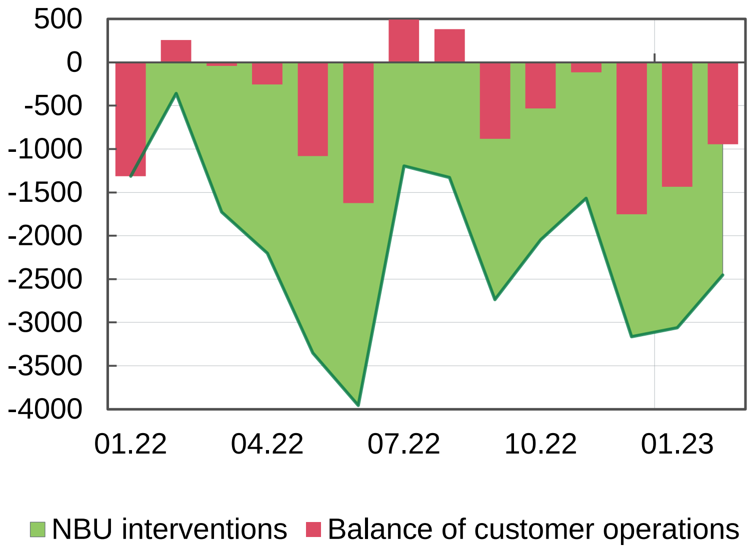
Source:

- Since the beginning of the full-scale war, the amount of international aid exceeded USD 38 bn as of the end of February 2023
- Thanks to the inflow of foreign financing, international reserves grew starting in October 2022 and reached USD 29.9 bn as of the end of January 2023

Ukraine: Monetary sector

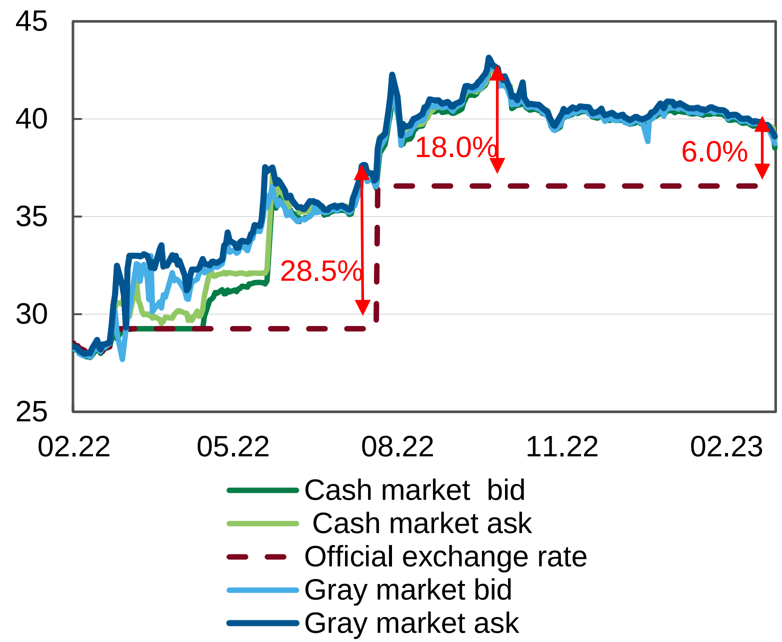
The NBU's interventions in the FX market declined due to improved FX supply

Net sale and purchase of non-cash and cash foreign currency by bank customers, USD m



Source: NBU

Exchange rates UAH/USD

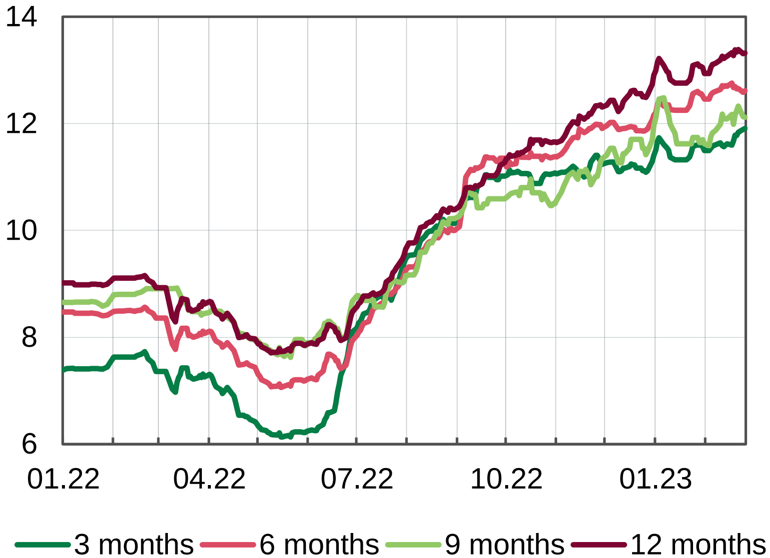


Source: NBU, open public

- In February, the seasonal increase in FX sales mainly by agricultural businesses to prepare for the spring sowing campaign, as well as the market saturation with FX cash supported the supply. The available options for individuals to purchase cashless foreign currency for the purpose of making deposits reduced demand for FX cash
- The absence of monetary financing of the budget deficit since the beginning of 2023 was an additional factor for the FX market stabilization

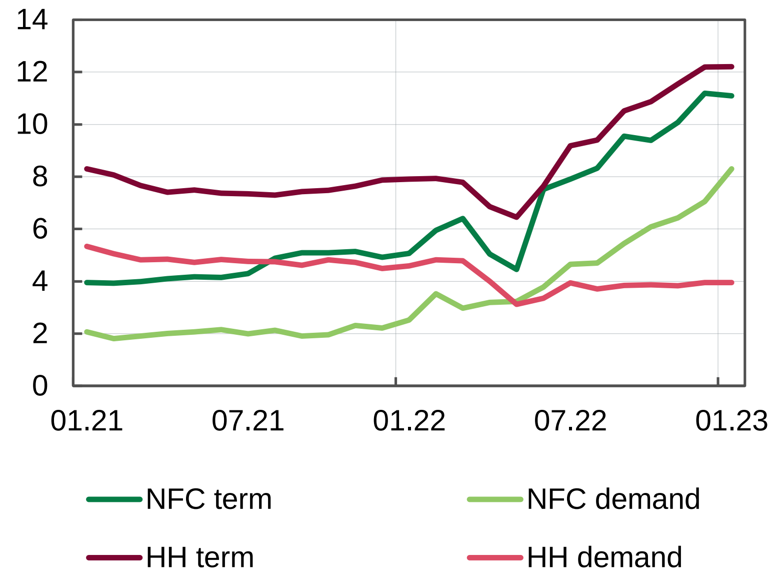
The attractiveness of hryvnia assets was rising on expectations that the key policy rate will be kept high for some time

Ukrainian index of retail deposit rates*, %



* 5-day moving-average.
Source: Thomson Reuters.

Weighted average interest rates on new hryvnia deposits, %

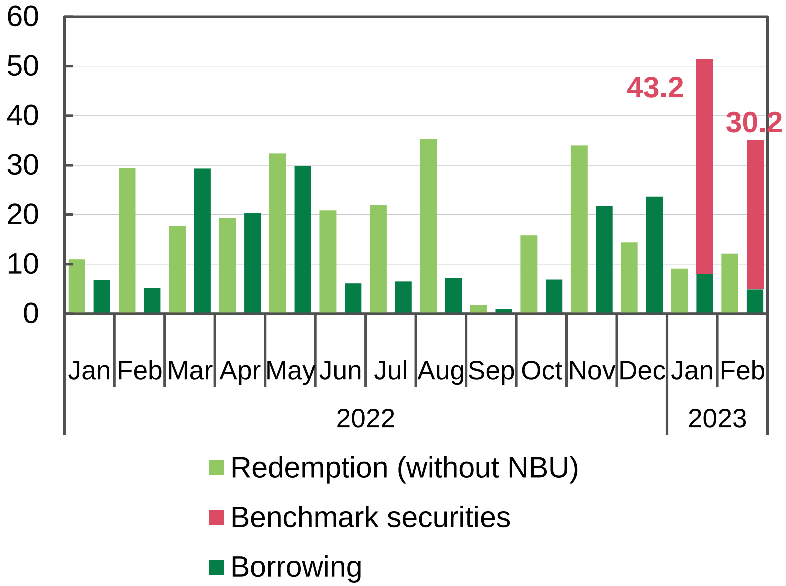


Source: NBU.

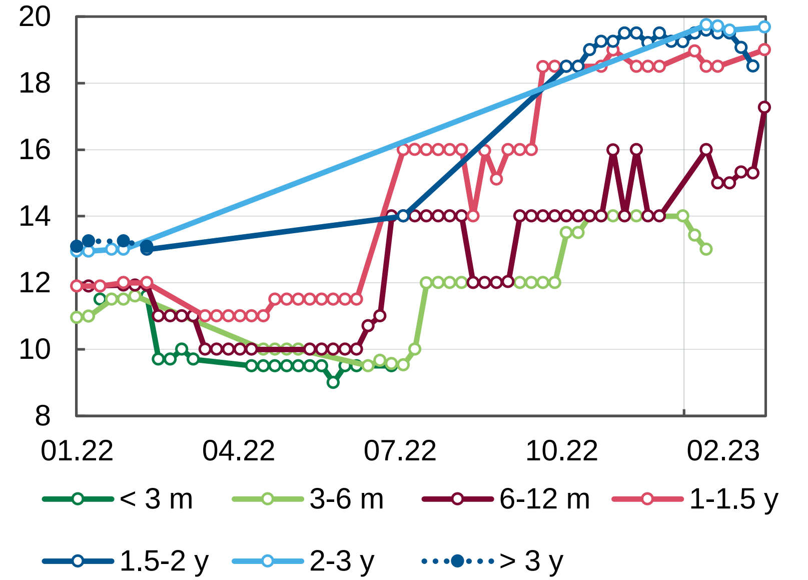
- Interest rates on hryvnia deposits have been gradually rising, however they remain much lower than the key policy rate. This does not create strong incentives for investors to give preference to hryvnia assets over the FX instruments
- The NBU is taking additional steps to enhance monetary transmission and encourage the banks to compete more actively for term deposits, in particular by increasing reserve requirements for banks

Benchmark securities accounted for the lions' share of transactions with domestic gov't bonds in the primary market

Transactions with hryvnia government debt securities*, UAH bn



Yields on hryvnia government bonds in the primary market, %



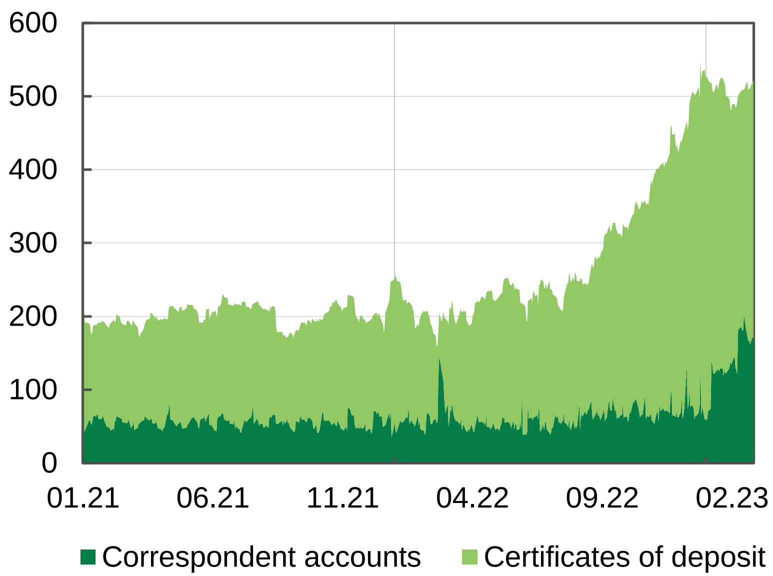
* Without taking into account hryvnia bonds issued in December for the recapitalization of “Ukrfinzhytlo”.
Source: NBU.

Source: NBU staff estimates.

- Having been allowed to use benchmark securities to cover up to 50% of their total required reserves, banks increased their participation in the primary market for domestic government debt securities
- The attractiveness of hryvnia government debt securities increased on the back of increase in some yields in the primary market

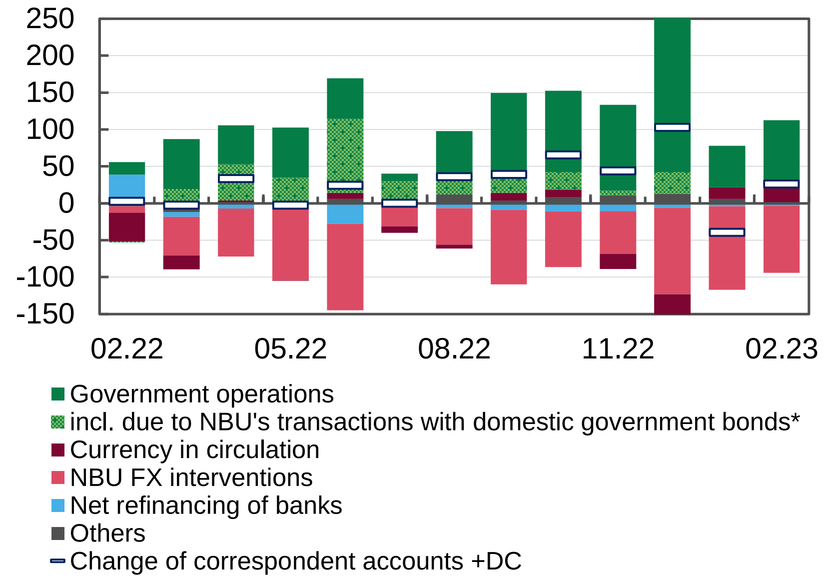
The banking system liquidity resumed growth

Banking system liquidity, UAH bn



Source: NBU.

Factors affecting the liquidity of the banking system (correspondent accounts + CDs), UAH bn

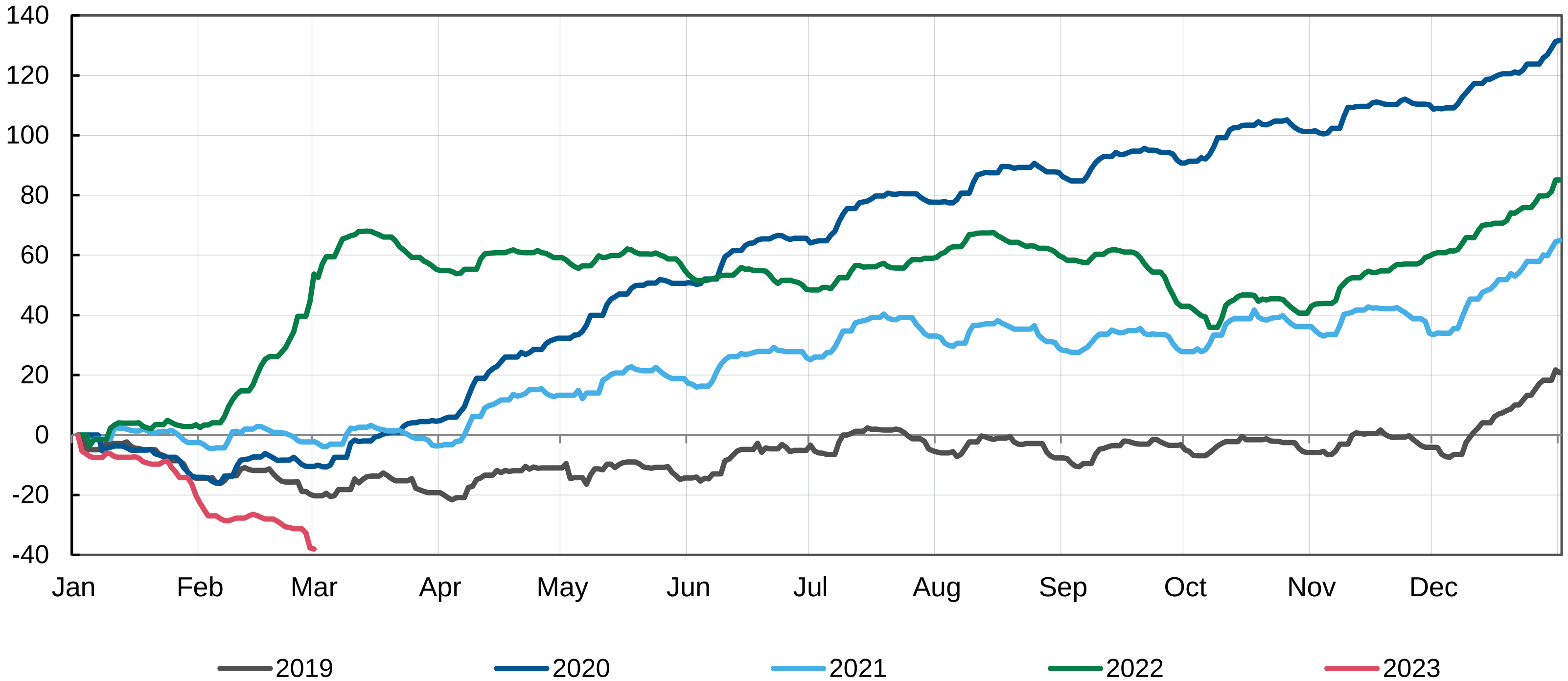


* The NBU's purchase of the war bonds (+) / principal and interest payments on government bonds (-) in the NBU's portfolio.
Source: NBU.

- The banking system liquidity rose somewhat in February as a gradual increase in government expenditures and a decline in cash in circulation outweighed the impact of the NBU's net FX sales
- Due to the increase in reserve requirements for banks, average daily balances of certificates of deposit decreased by UAH 51.4 billion in February (for the period from 10 to 28 February, compared to the previous corresponding period of fulfilling reserve requirements). At the same time, the average daily balances of correspondent accounts grew up by almost the same amount

Cash hryvnia has been returning to the banking system

Cash outside banks, YTD, UAH bn



Source: NBU.

- The main drivers of accelerated decrease in cash in circulation at the beginning of the year were both seasonal factor and adaptation of businesses and households to power outages
- Another important contributor to this was the improvement in FX market conditions, including due to successful implementation of deposit instruments to hedge foreign exchange rate risks, demand for which has been growing over the last few months