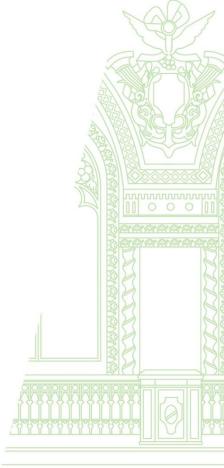


Macroeconomic and Monetary Review

January 2025

Monetary Policy and Economic Analysis Department







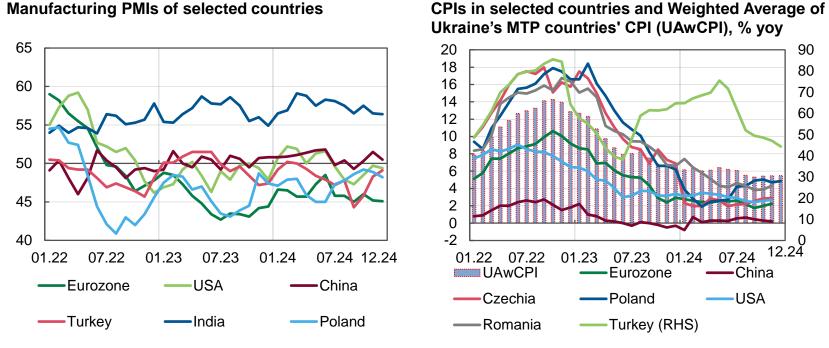
Summary

- Economic growth of Ukraine's MTPs is fragile, and inflationary pressures remain elevated. Global
 prices for both energy and commodities prevailing in Ukraine's exports fluctuated within relatively narrow
 ranges. Major CBs completed the year with synchronized rate cuts, while the policies of EM CBs had
 some idiosyncratic features
- In recent months, consumer inflation has been accelerating, reaching 11.2% yoy in November, and underlying inflationary pressures have intensified (to 9.3% yoy). These trends were driven by a reduction in the supply of certain food products, further growth in production costs, and the effects of the exchange rate depreciation in previous periods. According to the NBU's estimates, inflation continued to accelerate sharply in December
- In December, business sentiment continued to deteriorate and economic activity slowed in a number of sectors amid a difficult energy and security situation, shortages of personnel and agricultural raw materials. At the same time, domestic demand, both consumer and investment, remained stable, supporting retail trade and industry
- In December, the shortage of employees remained significant, causing wages to grow further. Both demand and supply in the labor market weakened somewhat due to seasonal factors
- The state budget deficit in both December and the entire 2024 exceeded the 2023 levels, although the annual amount was slightly below the planned one. Budget needs were financed by international aid (which was record high in December) and domestic borrowings
- A significant negative merchandise trade balance and increased demand for FX cash in the last months of the year generated a noticeable structural FX deficit. Meanwhile, external aid inflows significantly increased towards the end of the year. As a result, reserves rose to USD 39.9 bn in November and surged rapidly in December
- In December, the demand for FX increased significantly, mainly due to high budget expenditures. In response to this seasonal increase, and in order to ensure a sustainable situation in the FX market, the NBU substantially increased its FX sales. However, given the increase in net demand, the official hryvnia exchange rate weakened moderately against the US dollar. To ensure the sustainability of the FX
 Mational Bank market and the gradual deceleration of inflation to the 5% target, the NBU raised its key policy of Ukraine

External Environment



Economic growth of Ukraine's MTPs is fragile, and inflationary pressures remain elevated



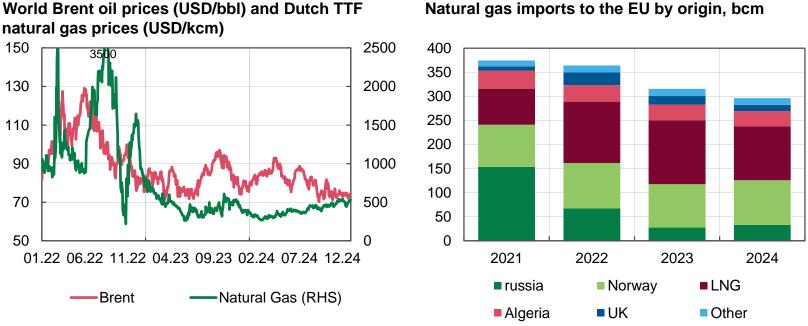
Source: S&P Global.

Source: national statistical offices, NBU staff estimates.

- Leading indicators point to growth in Ukraine's MTPs, driven by the resilience of the services sector. In contrast, production and new orders in manufacturing declined, primarily in intermediate and investment goods, while consumer goods production increased. Regional differences are becoming more pronounced
- International trade continues to weaken, and business optimism has deteriorated as the likelihood of significant import tariffs in the United States has increased
- Inflationary pressures from Ukraine's main trading partners (UAwCPI) expectedly stabilized at a high level



Global energy prices fluctuated within a narrow range amid weak demand and sufficient supply



Natural gas imports to the EU by origin, bcm

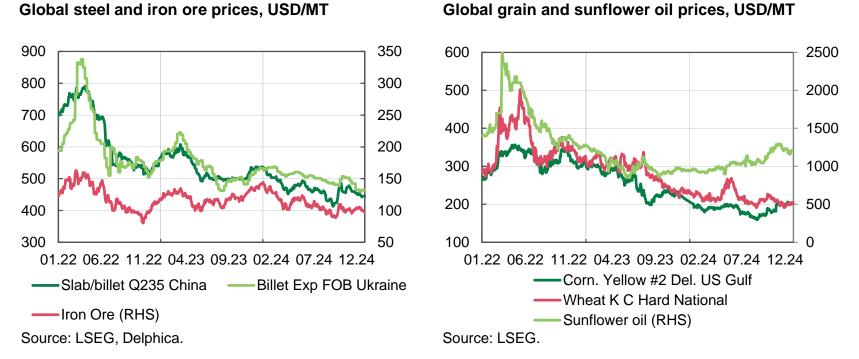
Source: LSEG.

Source: Bruegel (russia, Norway, Algeria – pipelines).

- Global oil prices stabilized under the influence of weak global demand, primarily from China, and steady supply from non-OPEC+ countries, particularly the United States. It is only the effect of OPEC+ restrictions and the inherent risk premium due to geopolitical uncertainty with the consequent possible oil supply disruptions that kept prices from falling deeply
- Natural gas prices in Europe were also driven by weak demand, primarily from industrial consumers, amid ample gas storage and LNG supply due to a relatively warm start to winter in Asia. In contrast, a temporary cold snap that increased consumer demand for heating and reduced wind power, as well as expected restrictions on russian gas supplies, kept prices from falling



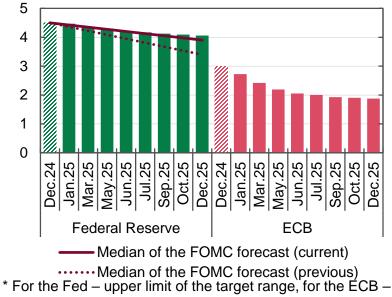
Global prices for commodities prevailing in Ukraine's exports stabilized in December



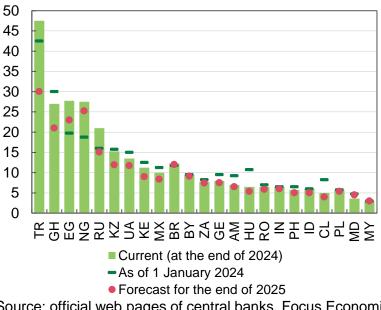
- Steel and iron ore prices remained almost unchanged in December. On the one hand, demand weakened seasonally, primarily in the construction sector. On the other hand, optimism amid a series of government support measures in China and a gradual decline in global steel production kept prices from falling
- Grain prices fluctuated within a relatively narrow range: the current level of supply from major exporting countries (despite a poor harvest in the EU and further expectations of restrictions from russia) was sufficient to meet demand in December
- Sunflower oil prices stabilized at a fairly high level due to limited supply, primarily from Ukraine. The slight decline in prices from peak levels was driven by increased production of related oils, primarily soybean oil, driven by high harvests in the US and Brazil National Bank 6 of Ukraine

Major CBs completed the year with synchronized rate cuts, while the policies of EM CBs had some idiosyncratic features

Market expectations (according to OIS) of key policy rates* on the respective meeting dates, %



deposit rate; December 2024 – actual data. Source: Bloomberg, official web pages of Fed and ECB. Key policy rates in selected EM countries, %

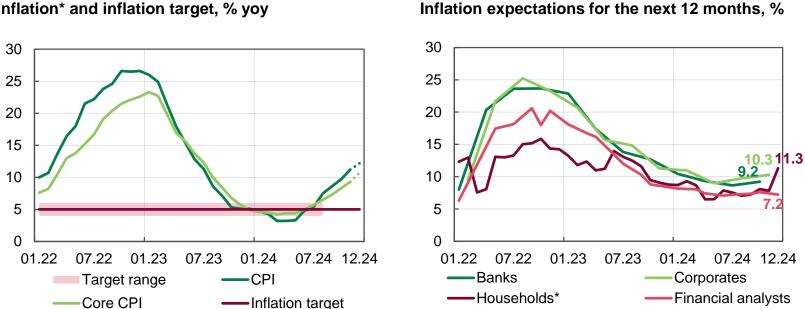


Source: official web pages of central banks, Focus Economics, Oxford Economics, as of 31.12.2024.

- In December, both the ECB and the Fed cut rates by 25 bps for the third time in a row (cumulatively by 100 bps in 2024), but sent different signals on the pace of cuts in 2025. The ECB struck a softer tone and revised its inflation and GDP forecast downwards. Instead, the Fed predicts only a moderate decline in rates, given higher inflation. Financial markets expect from the ECB over 100 bps of cuts in 2025, from the Fed less than 50 bps
- Asynchrony of policies in EM countries arose from differences in inflation dynamics and expectations. CBs of the CEE countries, where inflation was expected to temporarily accelerate, paused their ratecutting cycle. The CB of Brazil raised policy rate for the third time to anchor inflation expectations, while other CBs in the region continued a measured policy easing. The CB of Turkey lowered the interest rate for the first time in almost two years amid signs of slowing inflationary pressure

Ukraine: Inflation

Inflation continued to accelerate



Inflation* and inflation target, % yoy

Data for December reflects nowcast. The target range remained in effect until August 2024 inclusive. Source: SSSU, NBU staff estimates.

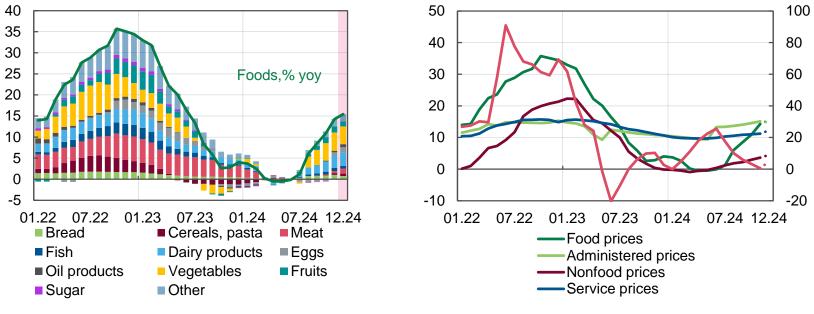
* In March 2022, the survey method was changed from face-to-face to telephone interviews. Source: NBU, Info Sapiens.

- The consumer inflation accelerated sharply to 11.2% yoy in November and exceeded the trajectory of the forecast published in the October 2024 Inflation Report. Food inflation remained the main driver of price growth. Administered inflation also continued to increase. According to the NBU's estimates, inflation continued to accelerate in December
- Underlying inflationary pressures also intensified. Core inflation rose to 9.3% yoy in November, driven by fast increases in processed food prices, further growth in business costs of power and labor, and the paththrough effects from the hryvnia depreciation in previous periods on prices

As actual inflation reached double-digit levels, the public's attention to inflationary processes increased, National Bank and households' inflation expectations deteriorated significantly in December 9 of Ukraine



Food inflation accelerated



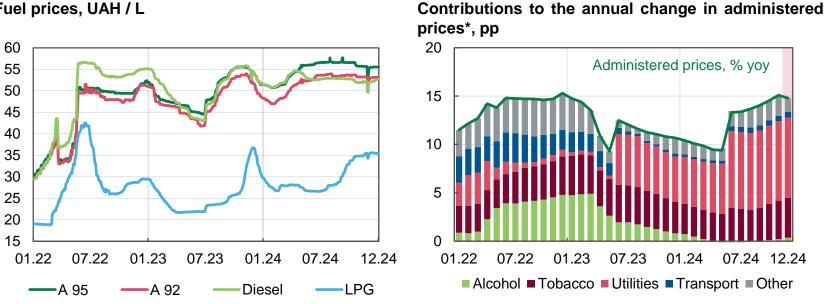
Contributions to the annual change in food prices*, pp Selected CPI components*,% yoy

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

- In November, food inflation continued to accelerate sharply due to a lower supply of certain crops and livestock products, which led to higher prices for both raw foods and, through second-round effects, for processed foods (due to higher prices for food raw materials)
- Prices for nonfood products also accelerated their growth, primarily due to the exchange rate factor. This
 likely contributed to the slowdown in the decline in prices for clothing and footwear. Prices for financial
 and communication services, education, culture and recreation, restaurants and hotels, and personal
 care grew somewhat faster due to higher production costs



The growth in fuel prices slowed down in annual terms, while administered price growth accelerated



Fuel prices, UAH / L

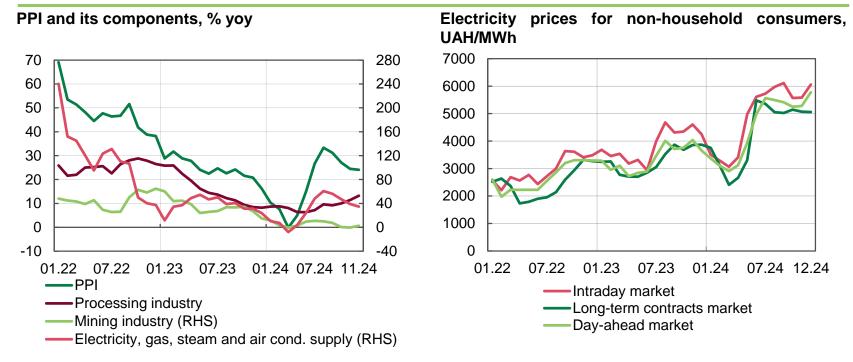
Source: minfin.com.ua.

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

- The annual growth in fuel prices slowed sharply in November. This is primarily due to downward trend in global crude oil prices and continued subdued demand
- Prices for alcoholic beverages and tobacco products increased more sharply, including due to the exchange rate effects of previous months and efforts to combat shadow-market supply. Moreover, an expected hike in excise taxes on tobacco products, effective 1 January 2025, may have also incentivized manufacturers and importers to raise prices in advance
- The growth in prices for pharmaceuticals and medical supplies and equipment accelerated
- The moratorium on raising certain utility prices for households continued to constrain the increase in administered inflation



The growth in producer prices slowed in November, but remained elevated



Source: SSSU.

Source: Ukrainian Energy Exchange, Market operator.

- PPI growth decelerated slightly (to 24.1% yoy in November), primarily due to lower price growth in the electricity, gas, and steam supply industry (34.6% yoy). Thus, due to lower marginal prices in the domestic market, <u>imports of electricity from the EU</u> to cover the deficit were low, despite the increase in consumption during the heating season and the application of power consumption limits
- Prices in the mining industry, primarily in the metal ore and hard coal mining, resumed their growth. In
 particular, pressure from global demand and prices for iron ore increased, reinforced by internal factors,
 primarily rising energy and logistics costs and a shortage of personnel

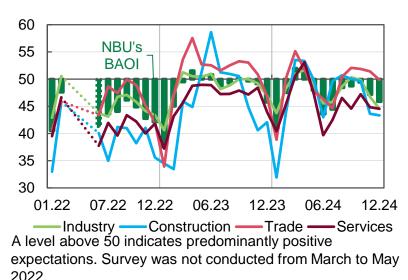
Price growth in food processing also accelerated, primarily in the dairy, flour, and meat production, due to further increases in production costs

Ukraine: Economic activity



In December, business expectations continued to deteriorate in a number of industries

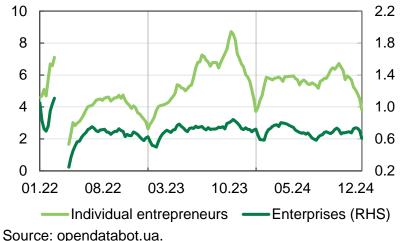
NBU's Business Activity Outlook Index, p



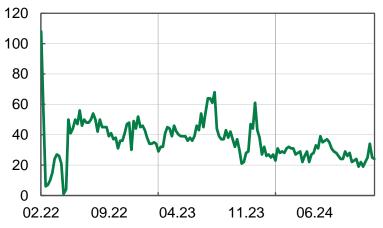
Source: NBU.

- In December, business expectations continued to weaken against the backdrop of a growing electricity deficit, an increase in the number of shelling and the duration of air raids, and a shortage of personnel and high-quality agricultural raw materials
- Economic activity in a number of sectors (primarily the coal and metallurgical industries) continued to slow down. At the same time, investments in gas and oil production supported industry, while seasonal holidays and sales supported trade and some service sectors

New business registrations (4-week moving average), thousands



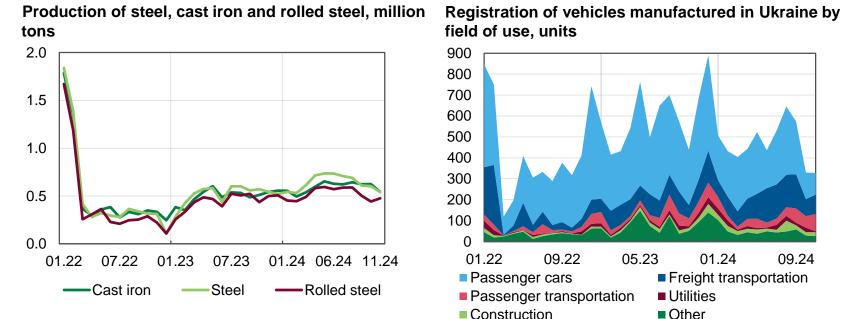
Number of train tickets sold per week, % to pre-war level



Source: opendatabot.ua.



Activity in a number of industrial sectors declined, while gas production continued to grow



Source: Ukrmetalurgprom.

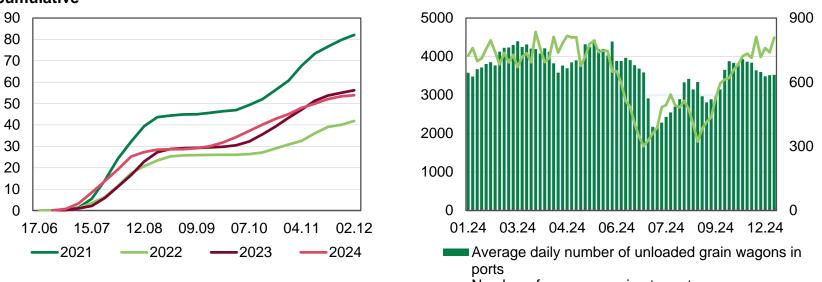
Source: Ministry of Internal Affairs.

- Metallurgical production continued to decline amid a <u>worsening energy supply situation</u> and the suspension of part of the coking coal production facility at one of the largest coal enterprises
- Accordingly, coal production decreased in December, while <u>gas production</u> enterprises introduced new capacities and <u>increased investments in oil production</u>
- <u>A lively demand for fertilizers</u> supported the load of chemical industry enterprises



The arrival of the new harvest supported transportation, but lack of agricultural raw materials hindered processing

Grain and leguminous crop volumes, million tons, cumulative



Source: MinAgro.

Number of wagons moving to ports Source: Rail.insider, UZ.

- In November-December, the food industry was held back by shortages and an increase in the cost of agricultural raw materials and <u>electricity</u> in annual terms
- In particular, there is a shortage of raw materials for the <u>flour milling and baking industries</u> and <u>sunflower</u> <u>oil production</u>; a number of edible oil refineries <u>switched to processing rapeseed and soybeans</u> (in particular, at new facilities introduced in December, which reduced margins) or stopped operations
- In December, raw material shortages and rising production costs continued to hold back <u>milk</u> <u>processing</u>; however, <u>meat processing picked up</u> amid seasonal holidays and rising demand; sugar production is expected to be at the previous year's level thanks to <u>rising raw material volumes</u>
- In December, grain rail shipments through western crossings and road exports declined due to reduced agricultural product clearance at the western border and depletion of stocks. Meanwhile, grain shipments to ports increased, but unloading and transshipment volumes declined due to uncertainty amid the introduction of new export regulations

Rail transportation of grain cargo to seaports



The revival of trade continues against the backdrop of seasonal sales and holidays

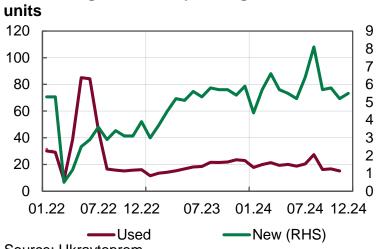
The number of online purchases of goods, % to prewar level



Source: Opendatabot (Khoroshop service).

- In December, the revival of trade continued due to seasonal sales and holidays, primarily the <u>demand for food products grew</u>
- This is confirmed in particular by the increase in the share of online orders. At the same time, the attendance of shopping malls is growing even against the background of power outages due to uninterrupted operation and provision of establishments with alternative sources of power
- <u>New car sales</u> increased by 5.7% mom in December, but decreased by 6.3% yoy

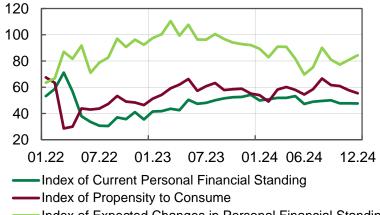
National Bank Consumer sentiment shows mixed dynamics of Ukraine



The first registration of passenger cars, thousand

Source: Ukravtoprom.

Components of the consumer sentiment index, p



Index of Expected Changes in Personal Financial Standing

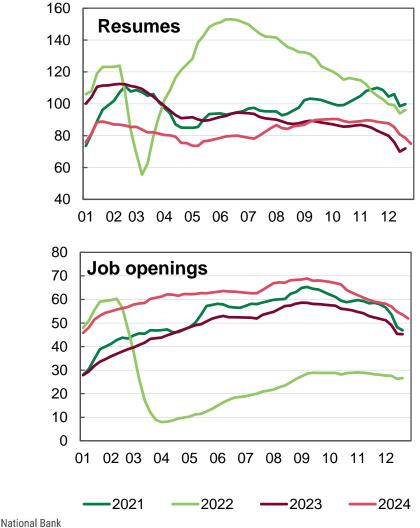
In March 2023, the survey method was changed from faceto-face to telephone interviews. Source: Info Sapiens.

Ukraine: Labor market

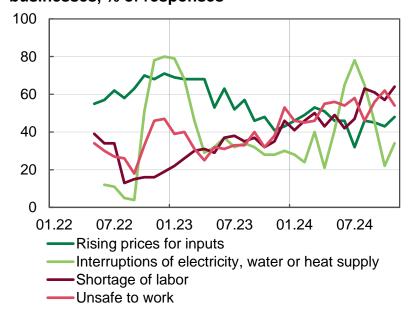


In December, the labor market weakened seasonally, but number of both job openings and resumes grew in annual terms

Number of new job openings and resumes, fourweek rolling average, thousands



The most important problems for the surveyed businesses, % of responses

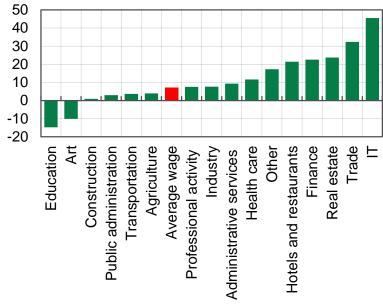


Source: IER.

- The number of new job openings and resumes decreased compared to previous months, primarily reflecting seasonal factors. At the same time, their growth accelerated yoy, indicating a further increase in both supply and demand for labor
- Despite a slight increase in labor supply, labor shortages continue to hamper businesses' operations 19

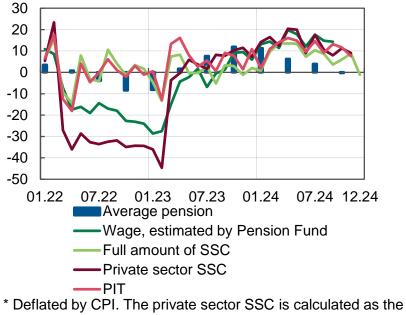
Wages continue to grow at a high rate

Changes in real wages by economic activity in Q3 2024 compared with Q3 2021, %



Source: SSSU, NBU staff calculations.

Indirect indicators for estimating real household income*, % yoy



difference between total SSC and SSC on wages from the consolidated budget.

Source: Pension Fund of Ukraine, SSSU, NBU staff calculations.

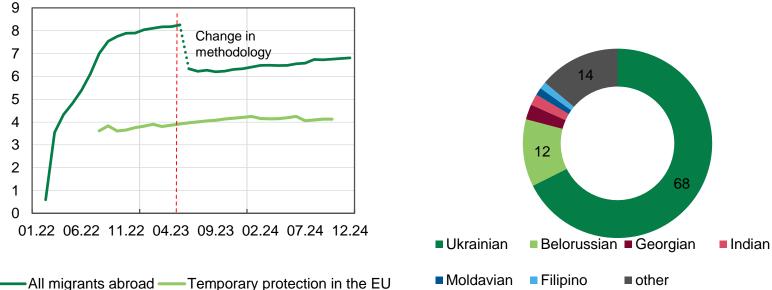
- Wages continue to grow rapidly due to a shortage of workers. According to the SSSU, in Q3 2024, nominal wages grew by 22.3% yoy, while real wages grew by 14.2% yoy (NBU's calculations based on SSSU data)
- In most economic activities (except for education and the arts), real wages are higher than in Q3 2021 (before the full-scale invasion)

According to indirect indicators, an increase in wage growth continued in Q4 2024



The number of migrants and their adaptation abroad continues to grow

Number of migrants since the beginning of the fullscale invasion, million persons



Source: UNHCR, Eurostat.

Source: Statistics Poland.

Officially employed foreigners in Poland by

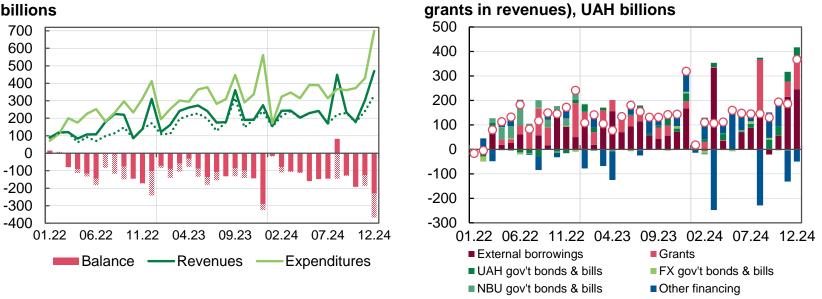
citizenship, as of the end of H1 2024, %

- According to the UNHCR, the number of migrants outside Ukraine continued to grow slightly and amounted to 6.8 million people as of 16 December 2024
- The adaptation of Ukrainian migrants abroad is growing. According to a study by the National Bank of Poland, the economic activity of migrants from Ukraine is higher than that of Poles. The highest rate is among Ukrainians who left before the full-scale invasion (93%), which is explained by both longer period for adaptation and the fact that most of them left for work.

Ukraine: Fiscal sector

In both December and entire 2024, the state budget deficit (excluding grants in revenues) reached a new record

Main state budget indicators* (monthly), UAH billions



Financing of the state budget deficit ** (excluding

• Deficit ("-" surplus)
* 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 gov`t funds) and privatization proceeds.

December – preliminary and high-frequency data from the MFU website; the data will be refined. NBU calculations based on the MFU's website data. Source: STSU, MFU, NBU staff calculations.

- In December, the state budget deficit (excluding grants in revenues) widened significantly, driven by the catch-up in expenditures. The annual deficit, according to NBU estimates, exceeded the 2023 level (UAH 1,771 bn), although it was slightly lower than the <u>UAH 1,846 bn</u> approved by the Law
- In December, Ukraine received record high amount of international aid (USD 9.4 bn, and almost USD 42 bn in 2024). Owing to such aid, not only the catch-up in financing of state budget expenditures was made possible, but also a certain liquidity buffer was created for the beginning of 2025

National Bank of Ukraine In December, the domestic debt market remained active, although at the end of the month, the volume of government debt securities placement decreased due to the received international aid



Budget revenues increased, including due to the tax rates adjustment

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

general fund in 2024, monthly*, % yoy 400 200 350 160 300 120 250 80 200 40 150 100 0 50 -40 0 -80 Rent on 01.22 06.22 11.22 04.23 09.23 02.24 07.24 12.24 Excise Domestic VAT РЦ E subsoil use Import VAT trade axes on nternational Import VAT Other revenues Domestic VAT CIT ■ PIT Grants

Growth in tax revenues of the state budget's

* December – preliminary data from the MFU website, the data will be refined. NBU calculations based on the MFU's data. Source: STSU, MFU, NBU staff calculations.

- In December, the growth in general fund revenues (excluding grants) accelerated due to both the expansion of the tax base and the consumer demand revival at the end of the year, as well as the implementation of tax initiatives – an increase in the rate of military tax on personal income to 5% effective 1 December
- For entire 2024, general fund revenues (excluding grants) increased by about 40% yoy due to the adjustment of tax rates (an increase in the rates of bank profit tax, excise tax, and military tax) coupled with the improved tax administration, as well as economic factors (in particular, high financial results of certain sectors, and wage growth)

In December, grants still remained a significant source of revenues (almost 45% of general fund National Bank 24 of Ukraine revenues), while for entire 2024 grants accounted for about 21% of general fund revenue

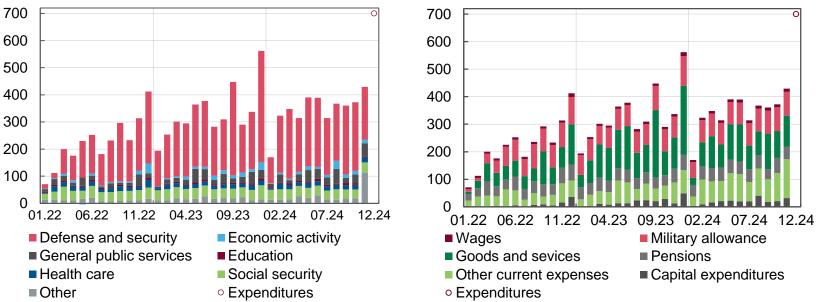


Expenditures reached record levels and were facilitated primarily by significant volumes of international aid

Expenditures* of the state budget, UAH billions

(economic classification)

Expenditures* of the state budget, UAH billions (functional classification)



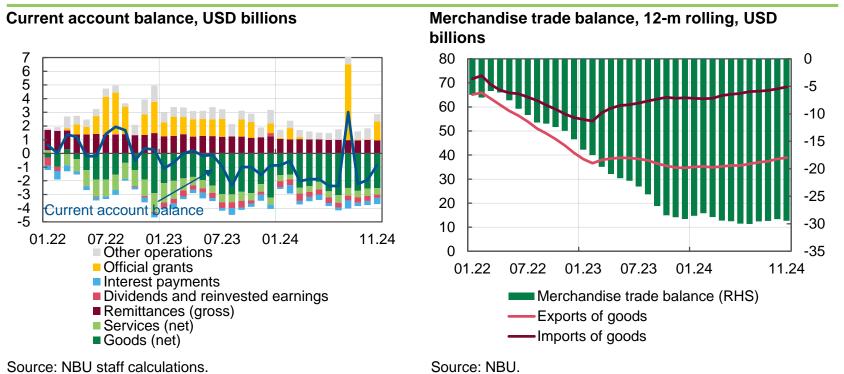
* December – preliminary data from the MFU website, the data will be refined. NBU calculations based on the MFU's data. Source: STSU, MFU, NBU staff calculations.

- In December, state budget expenditures were at the historically highest level, and their growth rate remained significant (about 25% yoy), despite the high comparison base of the previous year. However, for entire 2024, expenditures grew quite modestly (by about 12% yoy)
- Defense and security, as well as social programs, remained the priority spending areas. In December, the performance of other expenditure areas was probably caught up on
- Capital expenditures also likely continued to increase in December, driven by military needs and implementation of repair work, along with compensation to citizens for damaged property

Ukraine: Balance of Payments

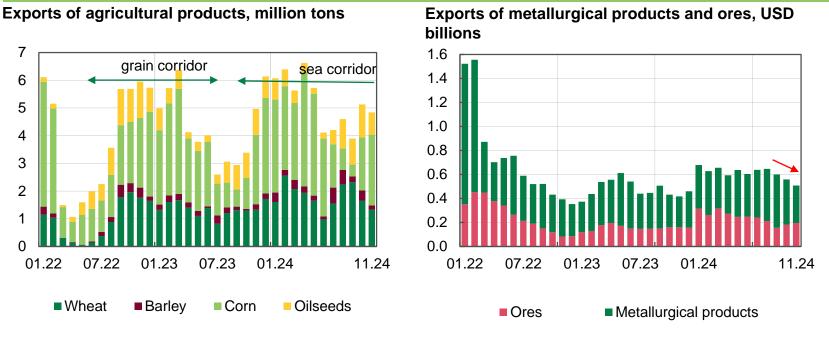


In November, the inflow of grants contributed to narrowing the current account deficit



- In November, Ukraine received a USD 1.4 bn grant from the US, which contributed to the widening of the secondary income account surplus
- Exports and imports of goods decreased by the same amount compared with October. This led to the continued significant negative merchandise trade balance, which remained the main factor behind the structural FX deficit

Goods exports decreased due to a seasonal reduction in oilseed shipments and a deterioration in the metallurgy production

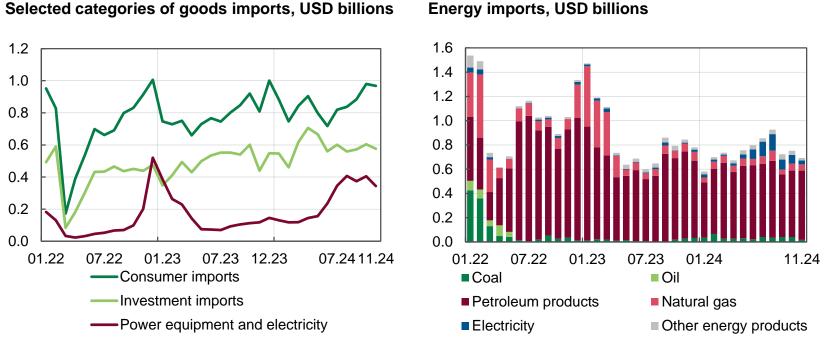


Source: SCSU.

Source: NBU.

- Amid the ramped-up shipments from Brazil and the US, Ukraine's soybean exports to the EU decreased. At the same time, grain exports rose slightly due to higher corn shipments and rising global prices
- The value of metal exports dropped due to the recurrence of power outages and falling global metal prices
- The supply of ores continued to grow thanks to the revived demand from China. However, the ore supplied to China is significantly cheaper (and of lower quality) compared with other markets, which limits the increase in FX inflows

Goods imports decreased, primarily owing to energy



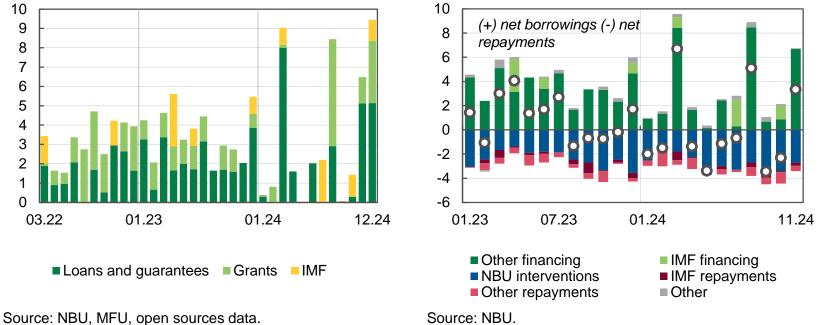
Source: NBU.

Source: NBU staff calculations.

- Despite increased consumption and the return of power outages, Ukraine reduced its power imports amid high prices in Europe. Additionally, coal purchases decreased, likely due to lower demand from the metallurgy sector
- Furthermore, the slight depreciation of the hryvnia in the previous periods led to a slight reduction in demand for some consumer and investment goods

Significant amounts of official financing led to the increase in reserves in the last months of the year

International financial assistance since the beginning Change in gross international reserves, USD billions of the full-scale war, USD billions

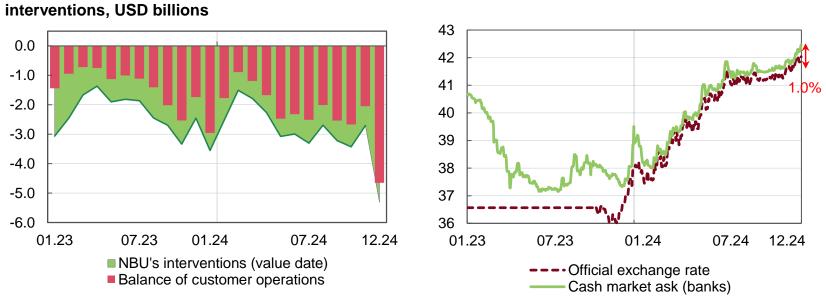


- In November, sustained high demand for FX cash from the population led to capital outflows from the private sector. Along with the negative CA balance, this generated a structural FX deficit
- Inflows of international financial aid more than compensated for the FX interventions in November, resulting in reserves increasing to USD 39.9 bn by the end of the month. Significant amounts of official financing in December (USD 9.4 bn), including a tranche from the IMF, contributed to further growth in international reserves

Ukraine: Monetary sector



In December, the amount of NBU's FX interventions increased significantly in response to the seasonal rise in FX demand



Hryvnia exchange rates, UAH per USD

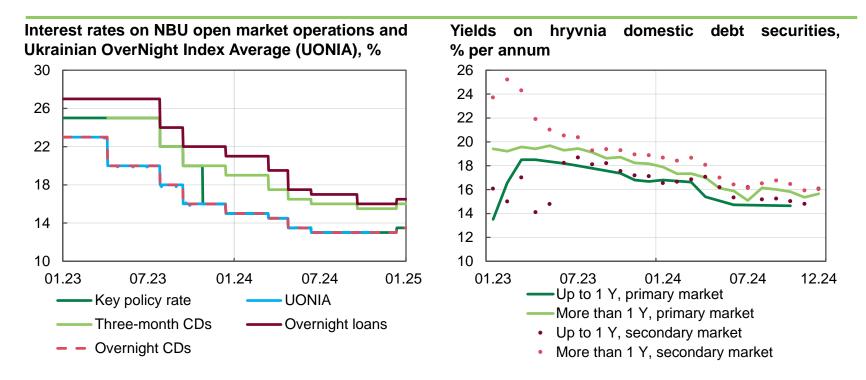
*Net sale and purchase of noncash and cash foreign currency by bank clients (Tod, Tom, Spot). Source: NBU.

Bank clients' FX transactions* and NBU FX

Source: NBU.

- In December, the net demand for non-cash foreign currency increased significantly due to the growth of budget expenditures and business operations at the end of the year. Given the need to compensate for the increased (mainly due to seasonal factors) structural deficit of the private sector, as well as to maintain the sustainability of the FX market, the NBU raised the volume of net FX sales (up to USD 5.3 billion). Meanwhile, the average monthly hryvnia exchange rate depreciated moderately in December (by 1.0%), driven by increased demand for FX
- The net demand in the cash FX market remained at the level of the previous month, and the spread between the cash and official exchange rates remained at about 1% in December

In December, the NBU raised the key policy rate to 13.5%



Source: NBU.

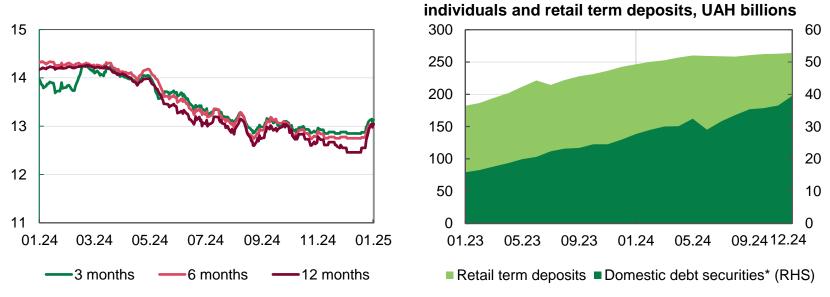
Source: NBU staff calculations.

- The NBU sees the need to tighten interest rate policy to reverse the inflation trend and bring inflation to the 5% target over the policy horizon
- A higher key policy rate will help keep inflation expectations under control and support real yields on hryvnia instruments. This will fuel interest in hryvnia term deposits, and thus help reduce pressures on the exchange rate and prices as temporary inflation drivers wear off



Tighter interest rate policy had a positive impact on demand for hryvnia assets

Ukrainian Index of Retail Deposit rates*, %



* 5-day moving average. Source: Thomson Reuters. * At outstanding nominal value. Source: NBU.

Stock of hryvnia domestic debt securities held by

- Given the rising inflation, banks' competition for depositors has increased. Moreover, banks responded to the key policy rate hike by raising nominal rates on hryvnia instruments
- This enabled the NBU to support households' interest in hryvnia savings, with both term deposits and the portfolio of hryvnia domestic government debt securities increasing in December