National Bank of Ukraine

Financial Stability Report

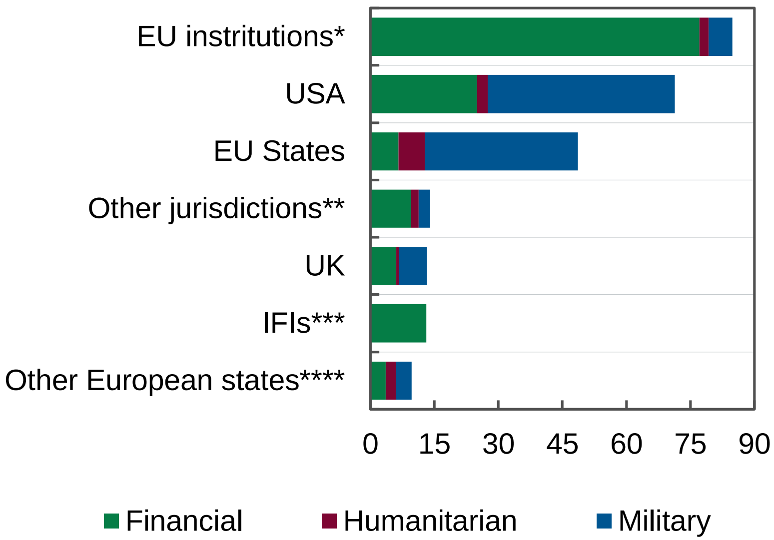
22 December 2023

Summary

- The full-scale war and related security threats remain the key systemic risk for the financial sector.
- Because of the war-related losses, the economy further depends on international financial assistance, while risk of irregularity of the latter increased.
- However, chances of successful approval of financial aid packages by partners are high. Thus, the NBU forecasts that macroeconomic conditions will remain favorable for stable operations of the financial sector.
- High sector liquidity persists, clients' deposits in hryvnia continue to flow in, thus the resilience margin is sufficient to withstand shocks, although they are currently unlikely.
- Hryvnia lending – corporate, mortgage, and unsecured consumer – resumes after a long break. This is a result of demand revival and further state support.
- The sector has passed the peak of war-related credit losses. However, higher credit risks will persist in industries that are slow to recover. In particular, financial standing of some agricultural producers deteriorated because of low domestic prices for their products.
- High interest margin promotes current bank profitability and resilience to interest rate decrease. Going forward, profitability will decline because of higher income tax.
- The resilience assessment has confirmed that banks hold sufficient capital, only a few of them will face higher capital requirements.
- Current sector capitalization rate facilitates further reimposition of capital requirements for banks, including setting capital buffer.

Risks are rising if assistance becomes irregular…

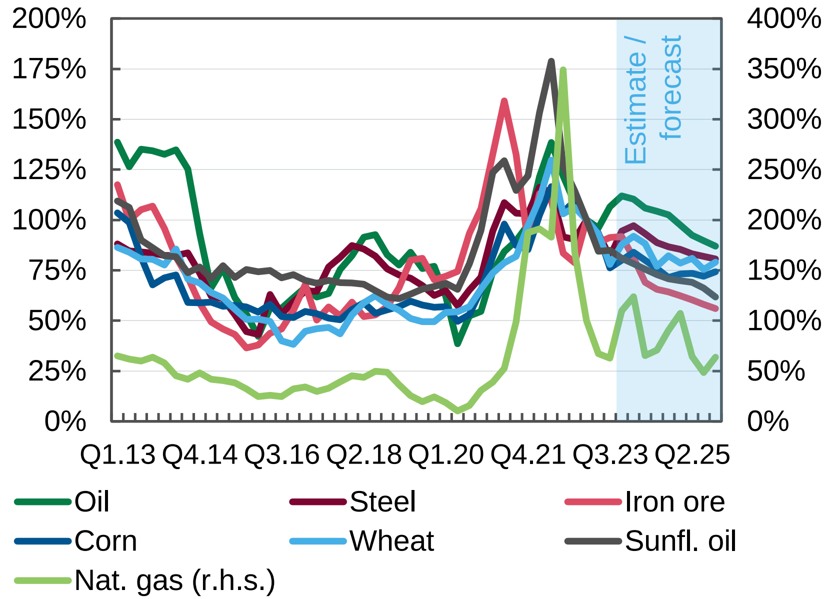
Committed official assistance for Ukraine from end-January 2022 through end-October 2023, euro billions



* European Commission, EU Council, and European Peace Facility, including announced 18 billion euro package. ** Australia, Canada, New Zealand, South Korea, Taipei, Turkiye, and Japan. *** IMF, World Bank, and EBRD. Assistance under multidonor programs is counted as assistance from individual countries. **** Iceland, Norway, and Switzerland.

Source: Kiel Institute for World Economy.

World commodity prices, Q1 2023 = 100%*



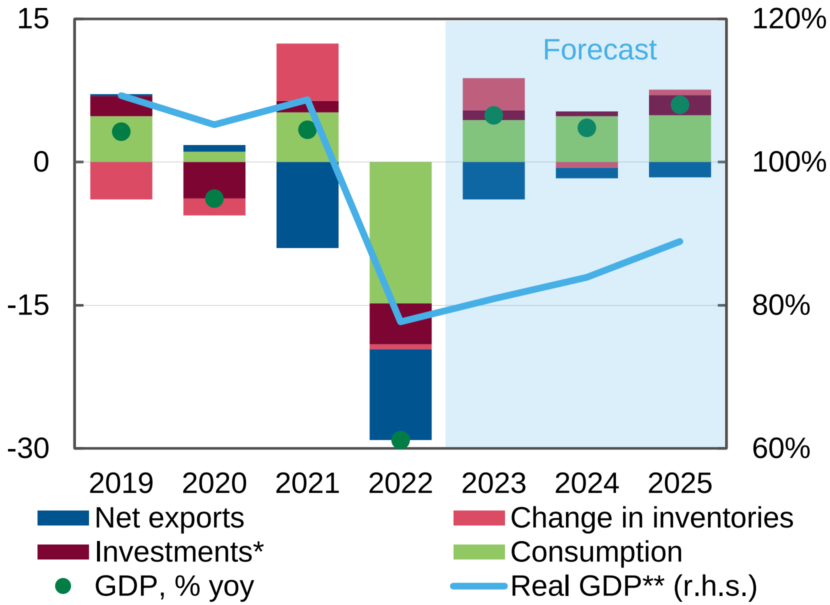
* Brent crude oil; natural gas - prices on Dutch TTF; steel billet Exp FOB Ukraine; China import Iron Ore Fines 62% FE spot; corn, sunflower oil, and wheat - average international quarterly prices.

Source: NBU, Inflation report, October 2023.

- International assistance for Ukraine remains systemic and massive, yet risks that it becomes irregular increase.
- EU's decision to open accession talks is a strategic positive signal for Ukraine.
- Prices on Ukrainian exports have decreased compared to the last year, which has an adverse impact on export revenues. However, the major problem for Ukrainian export are logistic difficulties.

…however, Ukrainian economy has a safety margin

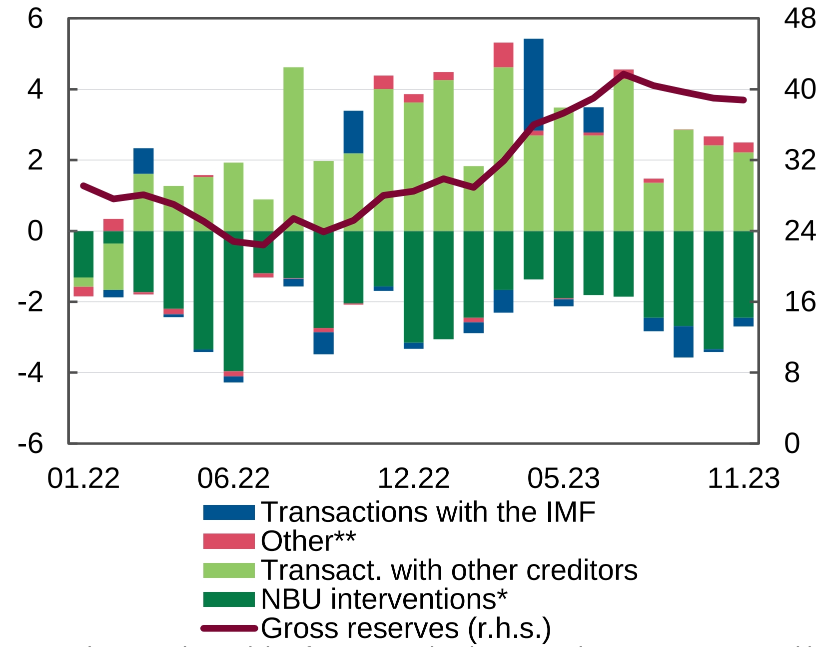
Contributions to GDP growth by final use, pp



* Gross fixed capital formation. ** Real GDP, seasonally adjusted, at constant 2016 prices, 2016 = 100%.

Source: SSSU, NBU estimates.

Change in gross international reserves, USD billions



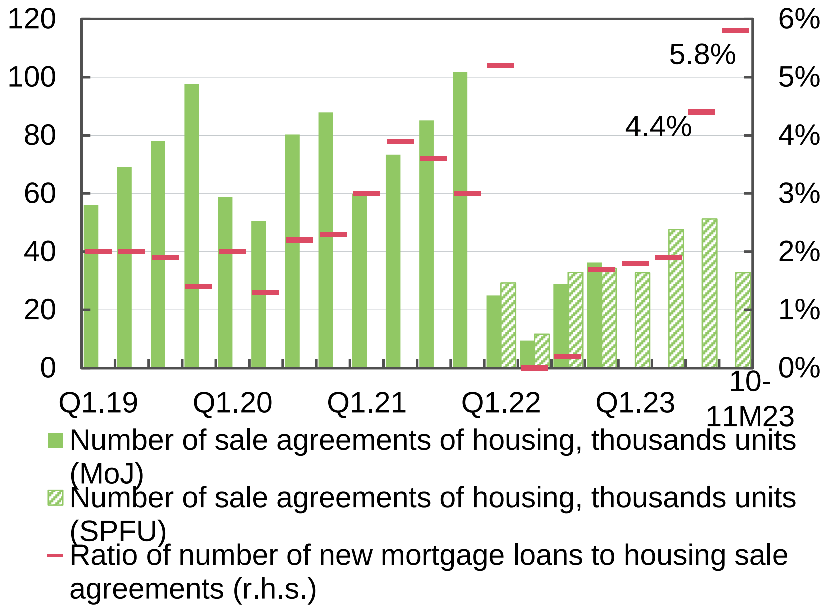
* NBU interventions: (+) refers to purchasing FX to increase reserves; (-) refers to selling FX from reserves. ** Other means the revaluation of financial instruments due to changes in their market value and exchange rate fluctuations, as well as other transactions.

Source: NBU.

- The economy is growing thanks to the recovery of domestic demand, inflation is under control, and the level of international reserves is close to an all-time high.
- Sufficient and regular inflows of international aid remain vital to maintaining macro- and financial stability.
- NBU's baseline scenario for 2024 assumes that macroeconomic prerequisites for the stable functioning of the financial sector will remain in place.

Secondary real estate market is stabilizing

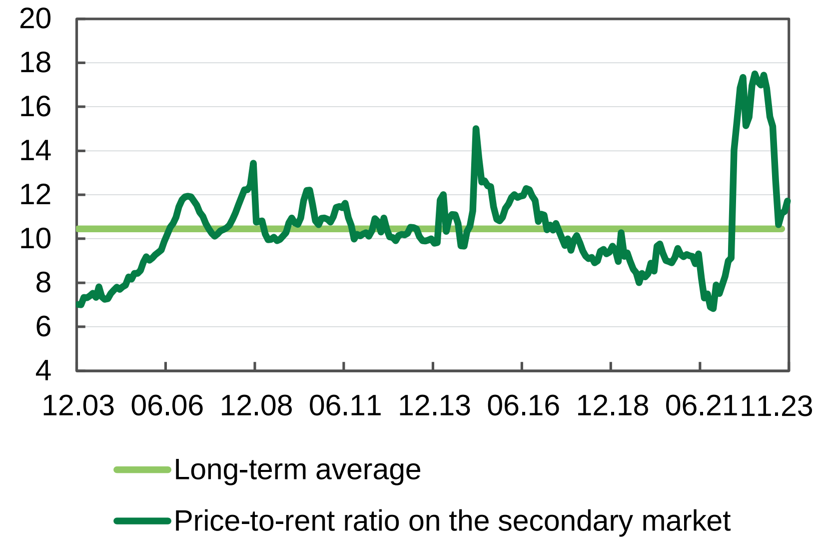
Housing market activity



* Number of new mortgage agreements are based on the bank survey. SPFU data is transactions data certified by notaries that resulted in the obligation to pay personal income tax.

Source: Ministry of Justice (MoJ), State Property Fund of Ukraine (SPFU), banks' data.

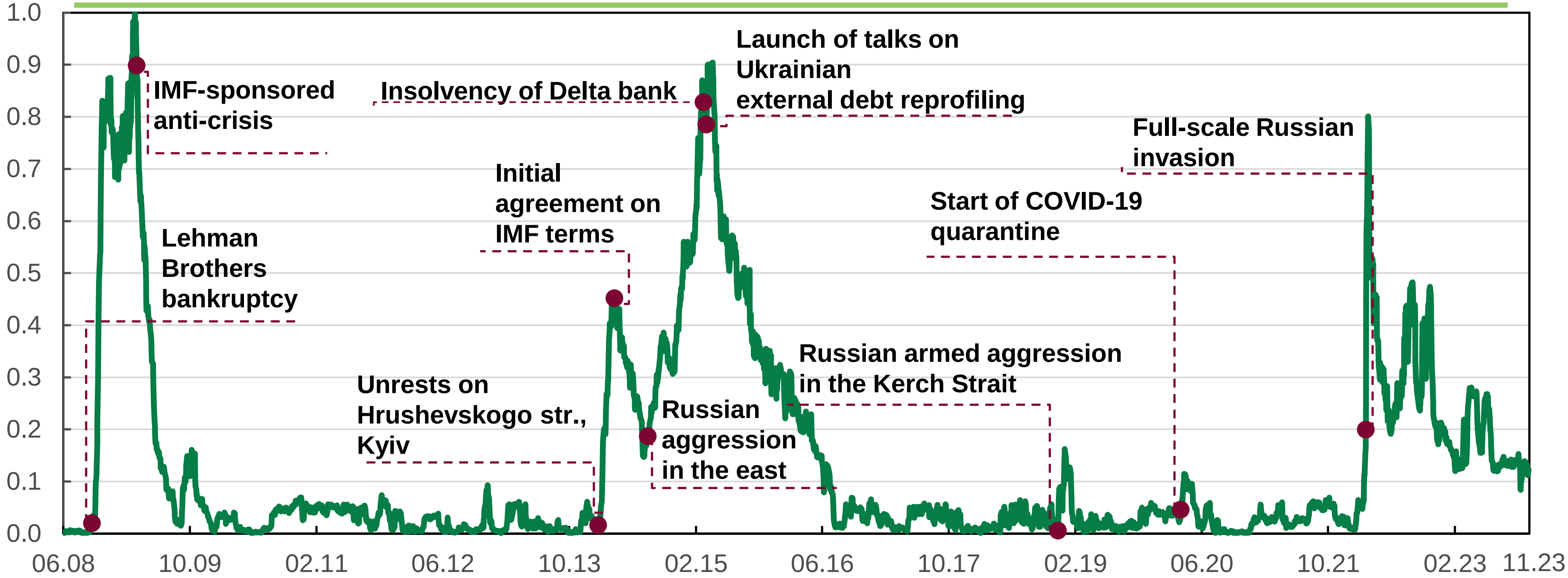
Price-to-rent ratio



Source: real estate agencies, NBU estimates.

- Demand on the real estate market is growing, mainly on the commissioned housing, though agreements number remains much lower than before the full-scale invasion.
- Secondary market prices slow down, whether rent price has grown significantly – price-to-rent ratio indicates that the secondary market is approaching the balanced state.
- New real estate is being built reluctantly; investment attractiveness is low.
- The role of the subsidized mortgage under “eOselia” increases further.

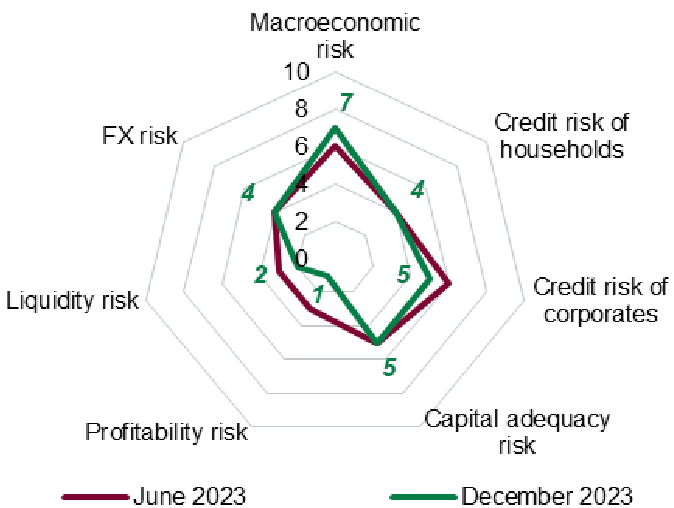
Financial Stress Index has stabilized



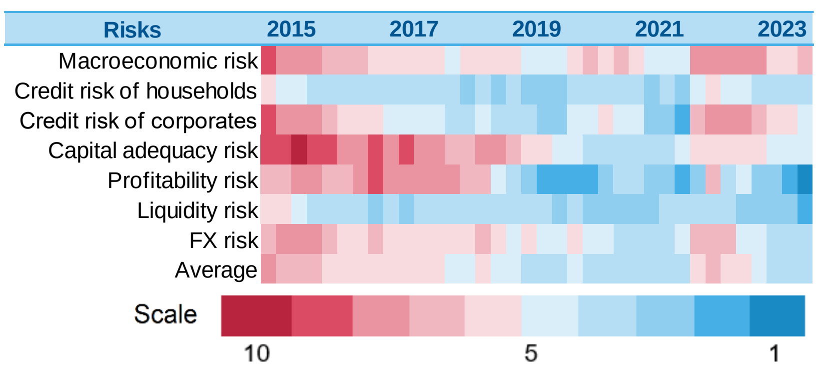
Source: NBU.

- The FSI has stabilized at a moderately high level during the H2 2023.
- The government debt sub-index made the largest contribution to the index: bond yields remain high due to the country's fiscal risks.
- The banking sub-index is currently a low and even decreased slightly during the last six months.

Financial sector risk map



Financial sector heatmap



Macroeconomic risk increased (+1) primarily due to an increase in the current account deficit. However, the risk is leveled out by international financial aid.

Credit risk of households has not changed. The portfolio's quality is gradually improving, but banks' expectations regarding loan quality are still reserved.

Credit risk of corporates has decreased (-1) due to an improvement in the financial stance of enterprises and a decrease in the default rate.

Capital adequacy risk has not changed. Capital adequacy ratios further significantly exceed minimum requirements.

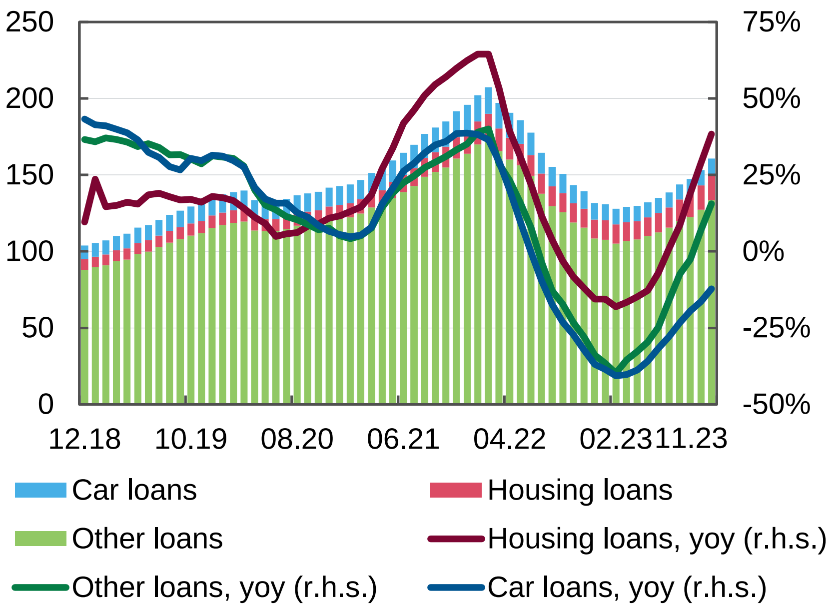
Profitability risk has declined (-2) due to higher interest income and insignificant provisioning this year.

Liquidity risk has dropped (-1), as client deposits continued to grow. The LCR significantly exceeds the requirements.

FX risk has not changed. The situation on the FX market remains stable. International reserves are at a high level.

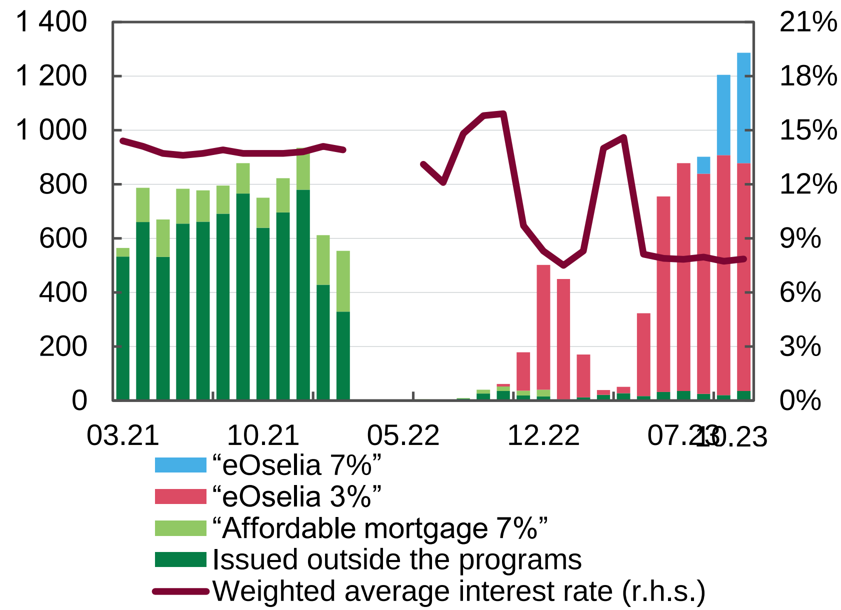
Unsecured retail and mortgage lending is speeding up

Net UAH loans to households, UAH billions



Source: NBU.

New mortgage lending, UAH millions



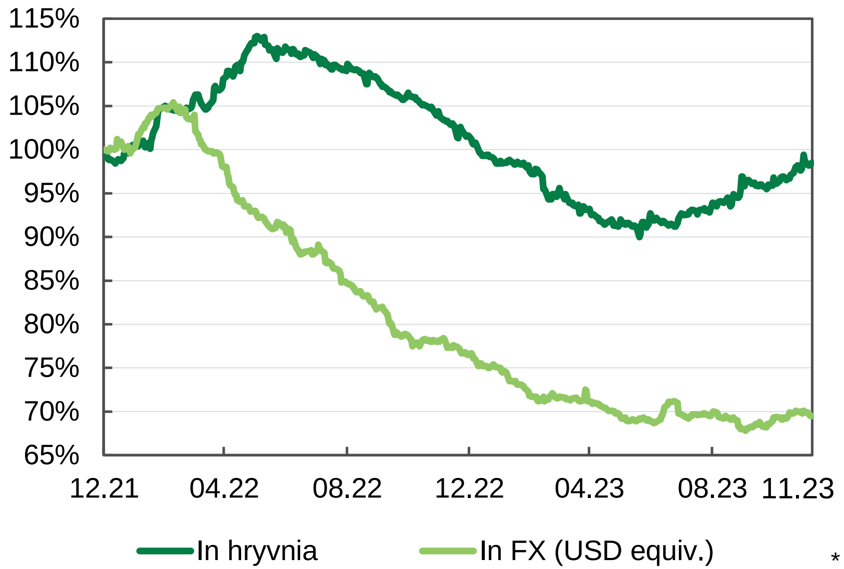
Data on loans issued outside the programs - an estimate based on the results of a bank survey.

Source: banks' data, BDF, UFHC.

- The retail portfolio is growing in two segments: mortgage and unsecured consumer loans.
- In each of the segments, only several banks actively compete, so concentration is increasing.
- The level of portfolio defaults is slowly decreasing, but banks remain conservative in portfolio quality assessments.

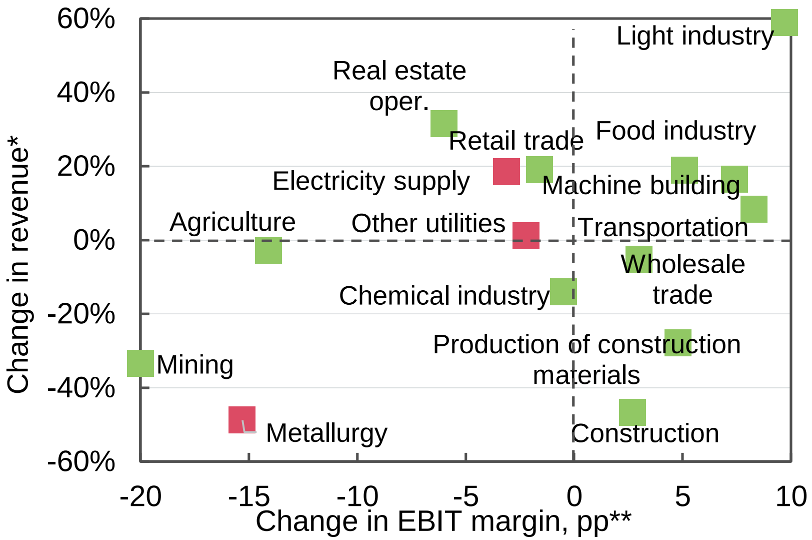
Corporate loan portfolio is slowly recovering

Net corporate loans, December 2021 = 100%



Source: NBU.

Change in revenue and EBIT margin in 2023 compared to 2021



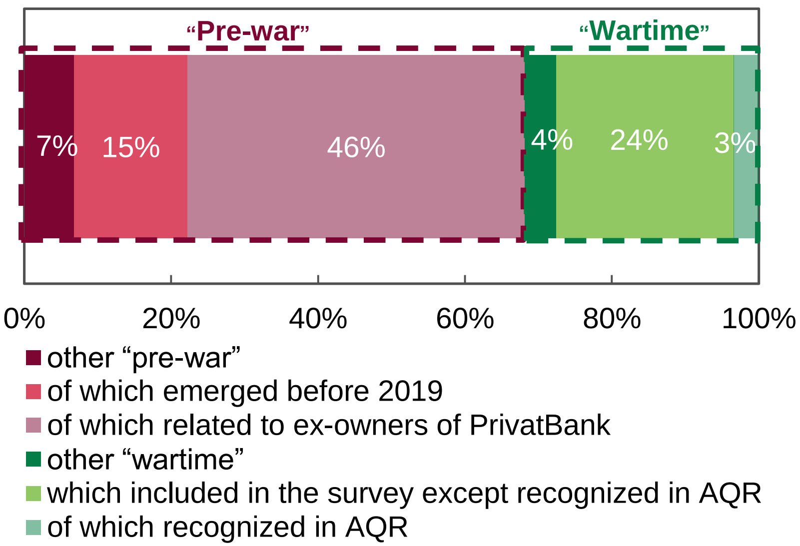
* Change in revenue for the 12 months ending September 2023 (for agriculture for 2022) to 2021 revenue.
** Change in operating margin for nine months of 2023 (for agriculture for 2022) compared to 2021 margin.
Industries that made operational losses in the first nine months of 2023 are marked red.

Source: SSSU, NBU estimates.

- Due to the revival of business activity and the improvement of the financial condition of companies, the demand for hryvnia loans has been restored, FX lending continues to stagnate.
- Lending is facilitated by state support, but banks outside state programs are also expanding their loan portfolios.
- Considering the satisfactory financial condition of the companies, the credit risks of the loan portfolio are controlled, but higher in certain segments, in particular agriculture.

“Wartime" defaults are primarily a consequence of financial difficulties

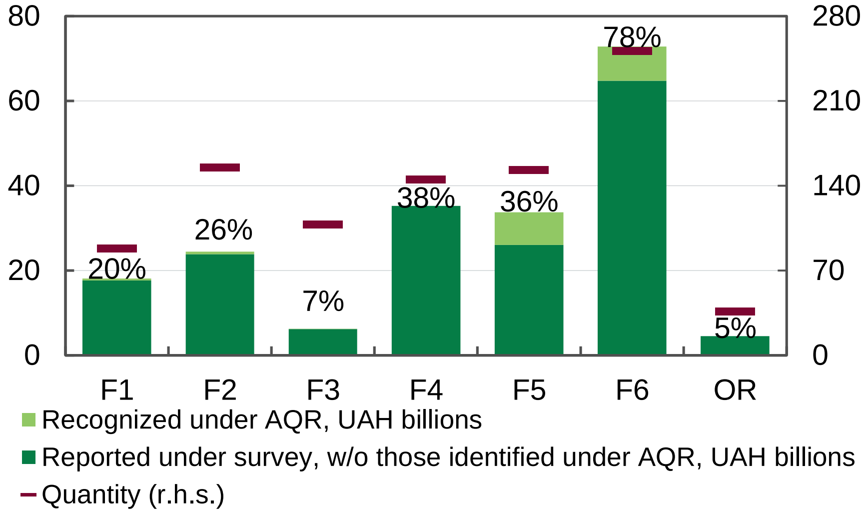
Corporate NPLs as of 1 October 2023



NPLs recognized before 1 February 2022 are called “pre-war”, those recognized afterwards are “wartime”. Loans exceeding UAH 2 million.

Source: NBU.

Default factors of debtors during martial law, gross NPLs as of 1 October 2023



If the default of the debtors was caused by several factors, the amount of the debt fell into several columns at once.

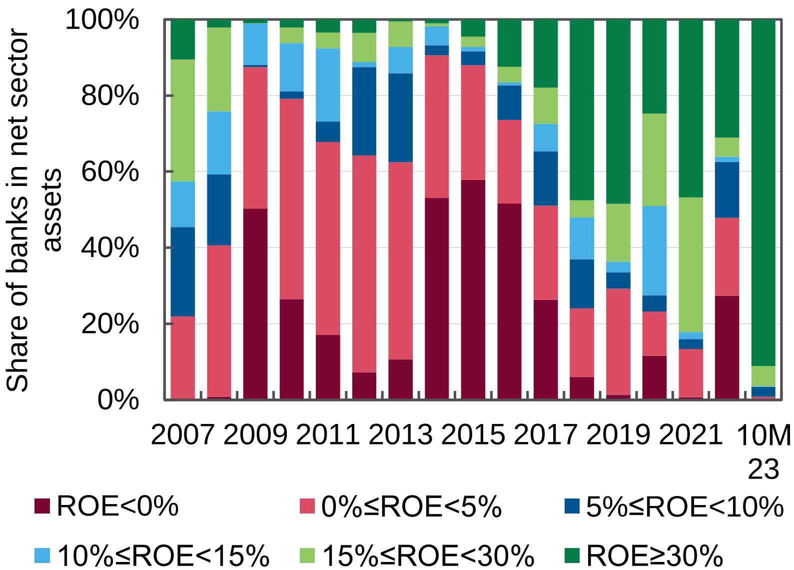
Source: NBU survey.

- About a third of "wartime" non-performing loans (NPLs) emerged due to damage or occupation. These loans are well provisioned, standard restructurings are not effective in these cases.
- More than half of NPLs recognized during the full-scale war are loans to borrowers who have experienced financial difficulties for other reasons. 71% of debtors continue to service their loans, a significant portion of which has been restructured.

** F1. Significant damage or destruction of the debtor's property. F2. All or a material part of the debtor's business is located in the territories affected by hostilities or occupation. F3. The bank lacks adequate information about the debtor or his/her business. F4. A decrease in domestic demand or a challenging situation in the domestic market. F5. The debtor lost market;. F6. Unsatisfactory financial standing of the debtor. OR. Other reasons.*

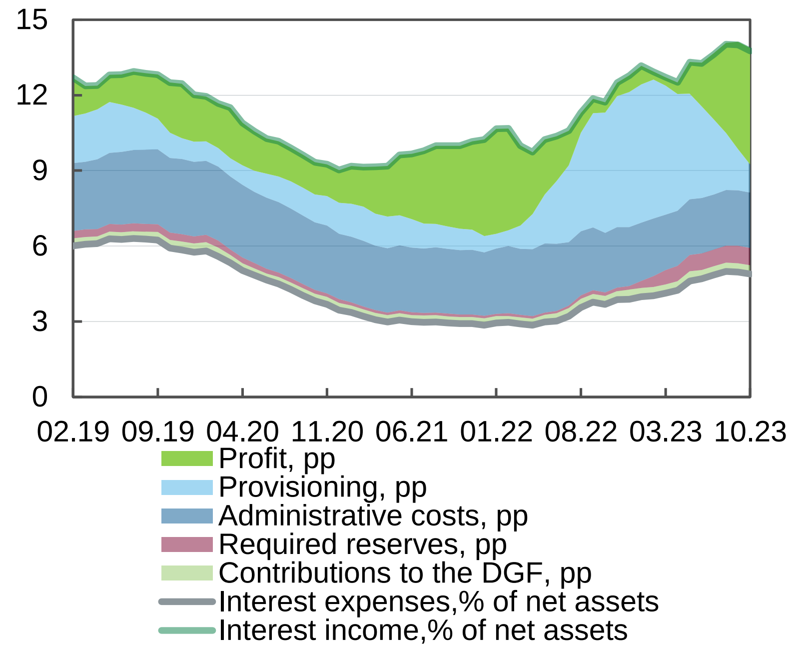
Sector is profitable thanks to high interest income

Distribution of ROE by banks' assets



Source: NBU.

Decomposition of Net Interest Margin (NIM) of Ukraine's banks, % per annum



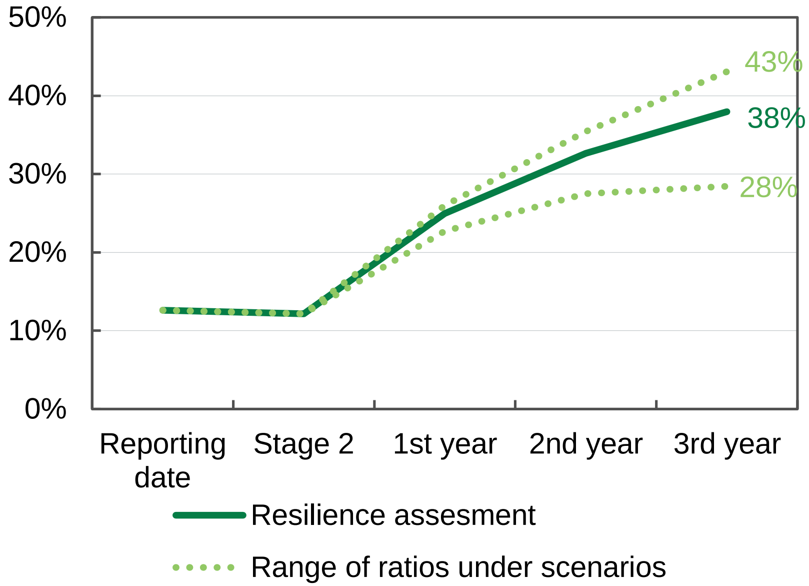
* Calculation methodology presented in Financial Stability Report, June 2023, page 33.

Source: NBU.

- Sector's ROE for the first 10 months of 2023 is 56% (annualized, before higher income tax rate takes effect).
- Considerable net interest income underlies high operating effectiveness and profitability. Net interest margin for the first 10 months this year reaches 8%.
- Lower market rates will probably squeeze the margin. However, its current high level reduces profitability risks for the banks.

Banks are resilient to risks, capital is over-sufficient

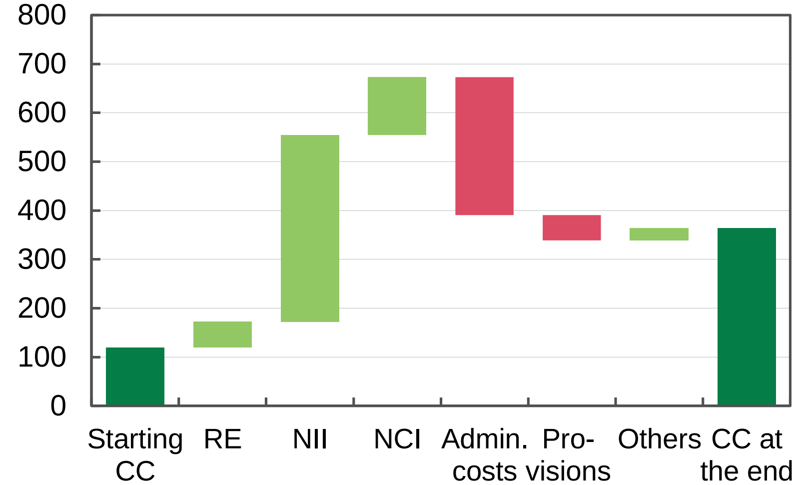
Core capital adequacy over the forecast periods under alternative scenarios*



* Two scenarios assume half lesser or twice stronger impact from macroeconomic factors on interest margin and credit migration ratios.

Source: NBU.

Drivers of core capital (CC) change based on resilience assessment results



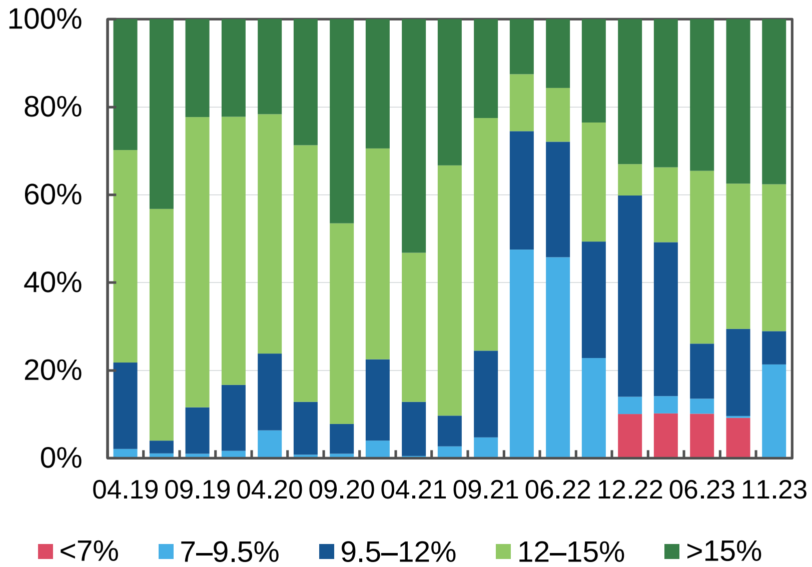
RE – retained earnings, NII - net interest income, NCI - net fee and commission income.

Source: NBU.

- This year's resilience assessment was conducted for 20 banks only under the baseline, yet conservative scenario: it assumes materialization of credit risk and narrowing interest margin.
- The NBU set required capital ratios above regulatory minimum only for five banks based on the resilience assessment. This is often a result of legacy problems of the banks.
- Even under conservative assumptions and taking into account new factors like re-imposed requirement to cover operational risks and higher tax rate, the banks will avoid the capital adequacy risk.

Capital adequacy of banks grows further

Distribution of core capital adequacy ratio by banks' assets



Source: NBU.

Priorities for using accumulated bank profits

Order of priority:	
1	Covering unexpected losses from risks that materialize in the course of the war
2	Complying with postponed requirement to cover risks with capital: ▪ operational risk in full (currently, the banks cover 50% of operational risk with capital) ▪ market risk (implementation expected after a test period); ▪ 100% of risk weights for FX domestic government debt securities (currently, the risk weight including adjusting coefficients is 50%).
3	Complying with new requirements to be introduced in 2023–2024, in particular: ▪ updated regulatory capital structure ▪ updated credit risk weights for certain assets ▪ leverage ratio.
4	Building up capital conservation buffer and systemic importance buffer.
5	Dividend distribution.

Source: NBU.

- The banks hold a significant capital stock, including core capital, the most important one. Its adequacy ratio is twice the required ratio.
- Higher income tax will have little immediate adverse affect on banks' core capital volume. However, indefinite tax rate rise to 25% will slow profit and capital generation by banks.
- Given substantial capital stock and resilience assessment results, the NBU will set a timeline for capital buffer activation. After that, the NBU may ease restrictions on capital distribution, including dividend payouts.

Recommendations of the National Bank

Recommendations to financial institutions

- For banks that need capital – to develop and implement recapitalization / restructuring plans.
- To reflect expected changes in regulatory requirements and resilience assessment results in their strategies.
- To adhere to responsible lending rules.
- For non-bank financial services providers – to adjust their activities to comply with new legislation requirements.

Recommendations to state authorities

- To keep implementation of IMF program dynamic and to meet commitments to other donors and partners, also in order to speed up EU accession.
- To draft a concept note on *Affordable Loans 5-7-9%* program and make it more focused.
- To adopt necessary laws, including that on DGF regulations.

NBU plans

- To implement postponed and new regulatory requirements to capital.
- To introduce further EU standards and regulatory requirements for banks.
- To improve regulation and supervision in non-bank financial sector, to implement EU directives for non-banks.
- To focus more on third-party risks.