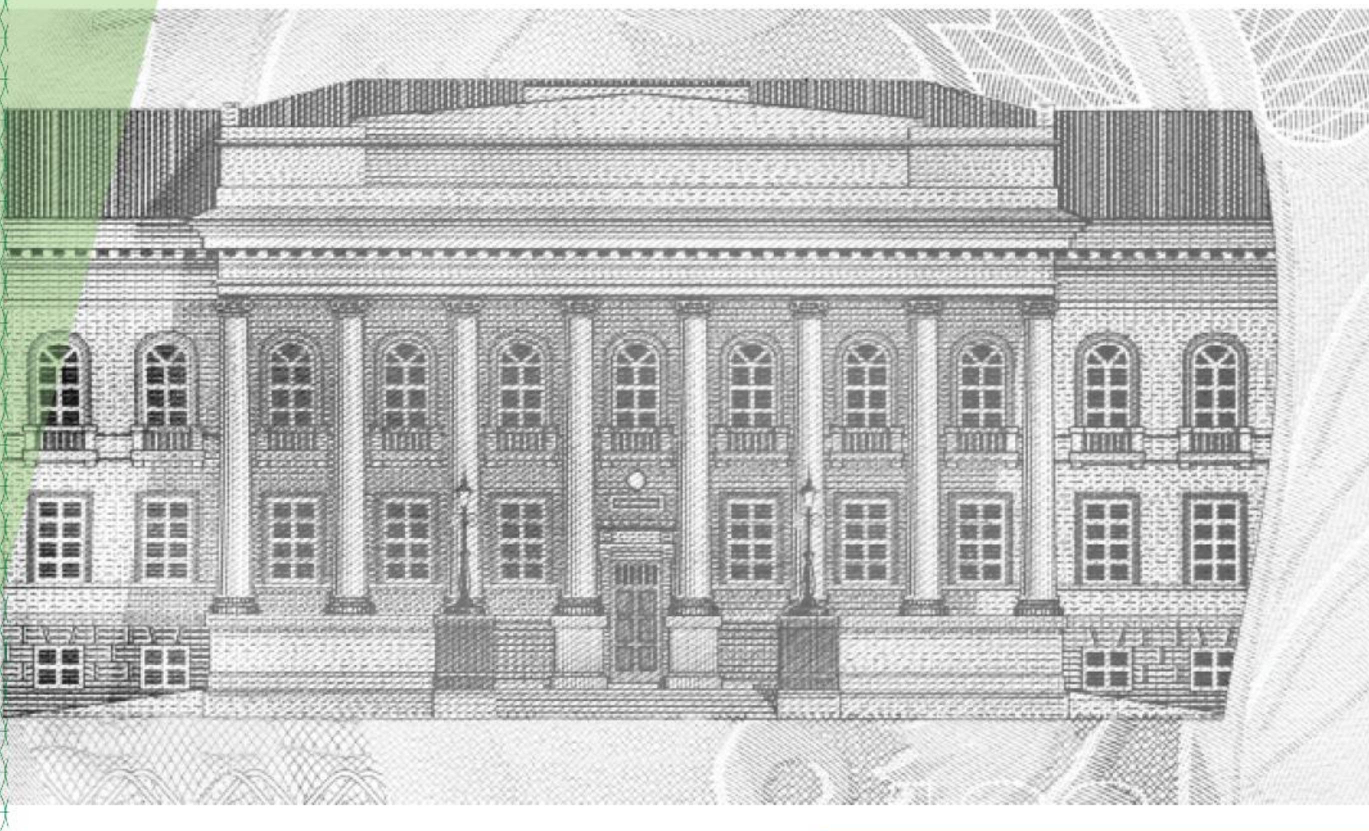
National Bank of Ukraine

Financial Stability Report

December 2023



The Financial Stability Report (hereinafter the report) is a key publication of the National Bank of Ukraine (the NBU). It aims to inform about existing and potential risks that can undermine stability of Ukraine's financial system. This report further focuses on risks that Ukrainian financial sector and economy face under protracted full-scale war. The report also offers authorities and financial institutions recommendations that aim to mitigate wartime risks and enhance financial system's resilience to these risks.

The report is primarily aimed at financial market participants, and all those interested in financial stability issues. Publication of the report promotes higher transparency and certainty of macroprudential policy, helps to boost public confidence in the policy, and thus facilitates National Bank's management of systemic risks.

The Financial Stability Committee of the NBU approved this report on 19 December 2023.

Content

Summary

The financial sector continues to operate without interruption, with clients' confidence in the banks remaining high and the banks increasing lending to businesses and households. Despite the persistence of war risks, the financial sector is playing an increasingly important role in economic recovery.

This year, the financial sector operated in a generally favorable macroeconomic environment. GDP growth significantly exceeded expectations, and inflation decelerated rapidly. The key policy rate has been declining since the mid-2023. However, its current level ensures that hryvnia savings instruments remain sufficiently attractive given the improvement in inflation expectations. The key event of the second half of the year was the transition to a regime of managed exchange rate flexibility. The NBU is still present on the interbank FX market, but it only intervenes now in a way that allows for moderate fluctuations in the hryvnia exchange rate in both directions, depending on changes in the balance of supply and demand in the market. Risks to the stability of the FX market and the financial sector have not materialized.

The full-scale war and related security threats are the key systemic risks to the economy and the financial sector. The economy will remain highly dependent on international financial assistance due to significant war-related spending. In recent months, the risks have risen that this assistance might become irregular and decrease in volume, and this is now the main threat to macroeconomic stability. However, the chances of the successful approval of financial assistance packages by Ukraine's partners currently seem high. Therefore, the NBU's baseline scenario for 2024 assumes that the macroeconomic preconditions for the stable operation of the financial sector will remain in place: further economic growth, single-digit inflation, manageable FX market, and the sustained attractiveness of hryvnia assets.

The inflow of client deposits to the banks continues, albeit at a slower pace than during the first half of the year. The banks are relying on almost no other sources of funding. Regular inflows of funds are supporting the banks' liquidity positions. High-quality liquid assets make just under half of the banks' assets. With such a resilience margin, financial institutions will be able to cope even with strong liquidity shocks, which are now highly unlikely.

After a long pause, hryvnia lending has resumed. Hryvnia corporate loans have been growing for six consecutive months. The improved financial standing of companies and a pickup in business activity have increased the demand for and supply of loans. Hryvnia corporate lending continues to be fueled primarily by the *Affordable Loans 5-7-9%* state program. The program needs to be fundamentally revised to refocus on supporting small- and medium-sized enterprises, and to ensure the efficient use of budget funds. Subsidized lending will be phased out for those businesses that have recovered from the crisis. At the same time, not only preferential lending is in demand – the banks that are outside of the state support programs are building up their loan portfolios as well. Credit-risk-sharing mechanisms, either through the government's portfolio guarantee program or through instruments of international financial organizations, will be an essential component of lending support.

Unsecured retail consumer loans and mortgages are also growing. Unsecured consumer lending is dominated by two banks, which have already restored their portfolios to the levels they were at before the full-scale invasion. Other key players are taking much longer to recover lost ground, so the segment's concentration is growing. Mortgages are currently granted almost exclusively by the state-owned banks under the *eOselia* state program. Preferential-term mortgage lending is gaining pace and reaching more and more households. Currently, it is difficult to assess the quality and risks of these mortgages, as they were granted on average only a few months ago. Therefore, this portfolio will be closely watched going forward.

The sector has passed the peak of credit losses from the full-scale war. The results of the NBU's resilience assessment confirmed this. Adjustments to prudential provisions were generally minor. As of today, out of the total amount of non-performing corporate loans, around a third emerged during the full-scale war. Many borrowers defaulted due to the loss of markets or a drop in domestic demand. So some of them have a chance to resume servicing their loans as economic conditions improve. The average default rate is declining in both the corporate and retail segments. For retail loans, it has come close to the pre-crisis level. However, high credit risks persist for a number of industries that are slow to recover. Moreover, a number of agricultural producers are experiencing significant financial difficulties this year because of low domestic prices for their products. However, they are maintaining a constructive dialog with the banks to resolve their liquidity problems. In general, the realities of almost two years of war have confirmed that the banks have a sufficient appetite for lending and are ready to assume moderate credit risks, and to effectively manage impaired assets should these risks materialize.

The banks incurred almost no provisioning expenses this year. Losses from defaults were offset by the release of provisions for performing asset portfolios, thanks to improved macroeconomic expectations. However, this situation is unique, so a repeat of this scenario should not be expected next year: the level of credit risk losses in all segments will normalize further on. However, the banks will continue to cover credit losses easily with current operating profits.

A considerable cut to the NBU's key policy rate altered the returns on the main groups of the banks' interest-bearing assets. The share of income from certificates of deposit in the banks' interest income is declining, as the rates on these instruments fell the most sharply. On the other hand, the average yield on the banks' domestic government debt securities portfolios has slightly increased in recent months, as older issues are being replaced in the banks' portfolios by new ones with higher coupons. Currently, the pricing conditions for placing domestic government debt securities are attractive, as the banks receive an appropriate premium for the maturity of their investments compared to the key policy rate. The weight of lending income in interest income is increasing: although corporate loan rates declined slightly, the portfolio of such loans grew. At the same time, the banks cut deposit rates, especially for businesses. The time of peak interest margins for the banks is likely to be over, but margins will remain high and their narrowing does not pose a significant risk to the banks.

A permanent increase in the income tax rate to 25% starting from 2024 will have a considerable impact on the banks' profitability. The rate increase will lower returns from the banking business and slow down the accumulation of capital by the banks. In the November Systemic Risk Survey, for the first time in a long while, the banks said the quality of legislation and the tax system were among the main risks.

The banks' high profitability drove up capital adequacy ratios. Currently, the capital cushion is more than sufficient not only to cover the risks already incorporated in the regulations, but also to meet the new planned requirements. The most important of the new requirements is the full coverage of operational and market risks with capital. In addition, next year a new regulatory capital structure will be introduced, along with new minimum capital adequacy requirements.

This year's resilience assessment has confirmed that the banking sector has a strong resilience margin. The assessment was based on a baseline macroeconomic scenario, which however assumed the materialization of a number of risks – primarily a narrowing of interest margins and credit losses. Twenty large banks underwent the assessment. Higher required capital adequacy ratios were set only for five of them, primarily due to longstanding problems with their portfolio quality and business models. Based on the results of the resilience assessment, the NBU early next year will analyze the expediency and possible timing of the introduction of the capital conservation buffer and the systemic importance buffer. Afterwards, the NBU might ease the restrictions on capital distribution and dividend payments for the banks that build up these buffers in full.

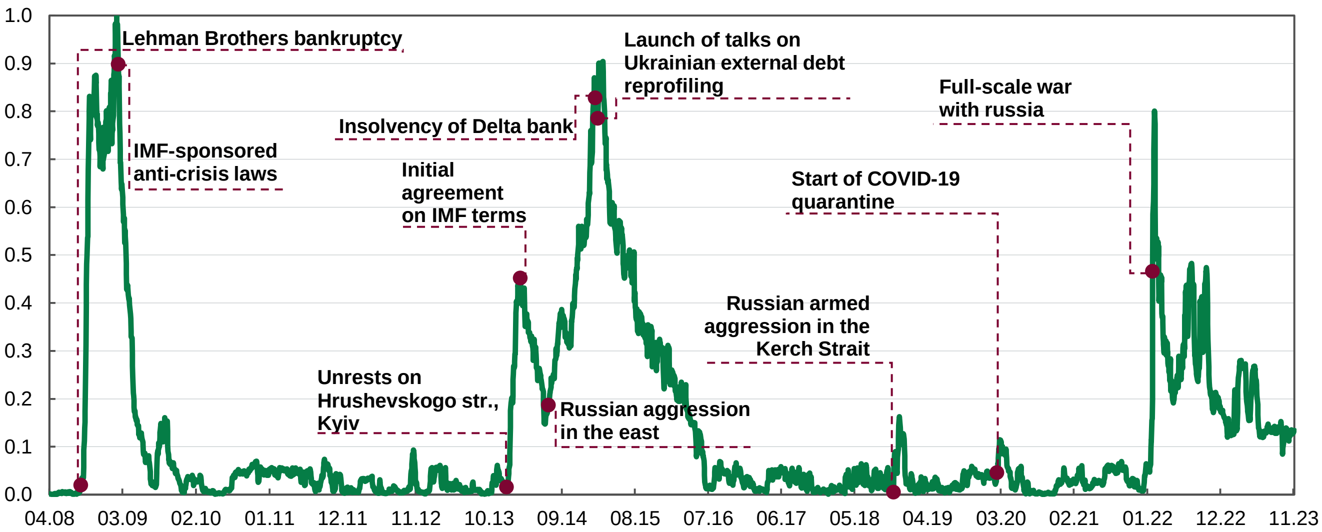
The non-banking financial sector is transforming. New laws on insurance, credit unions, financial services, and finance companies will apply from early January. The insurance market has probably evolved the most in recent years due to the gradual tightening of solvency and asset quality requirements. Insurers that could not or did not want to comply with the new requirements left the market. At the same time, this has made the sector more resilient to challenges. The payments market is also developing dynamically, driven by the opportunities provided by the new legislation. So far, the transaction volumes of non-bank payment service providers are insignificant, so the segment carries no systemic risks.

Financial Stress Index

The Financial Stress Index[1] (FSI) has stabilized in recent months. However, its level remains moderately high even after a significant decline compared to the previous year. The largest contributor to the index is the government securities sub-index. Bond yields remain high due to the country's high fiscal risks and expectations of a sovereign Eurobond restructuring that is planned for next year. The FX sub-index has risen slightly recently, driven by the growth in currency interventions. The sub-index of household behavior has also increased over the last six months, propelled by fluctuations in FX deposits. Conversely, the banking sub-index is at a low level, and has even declined slightly over the last six months because of higher prices for Ukrainian bank bonds. Stable yields on corporate bonds are helping maintain the corporate securities sub-index at a low level.

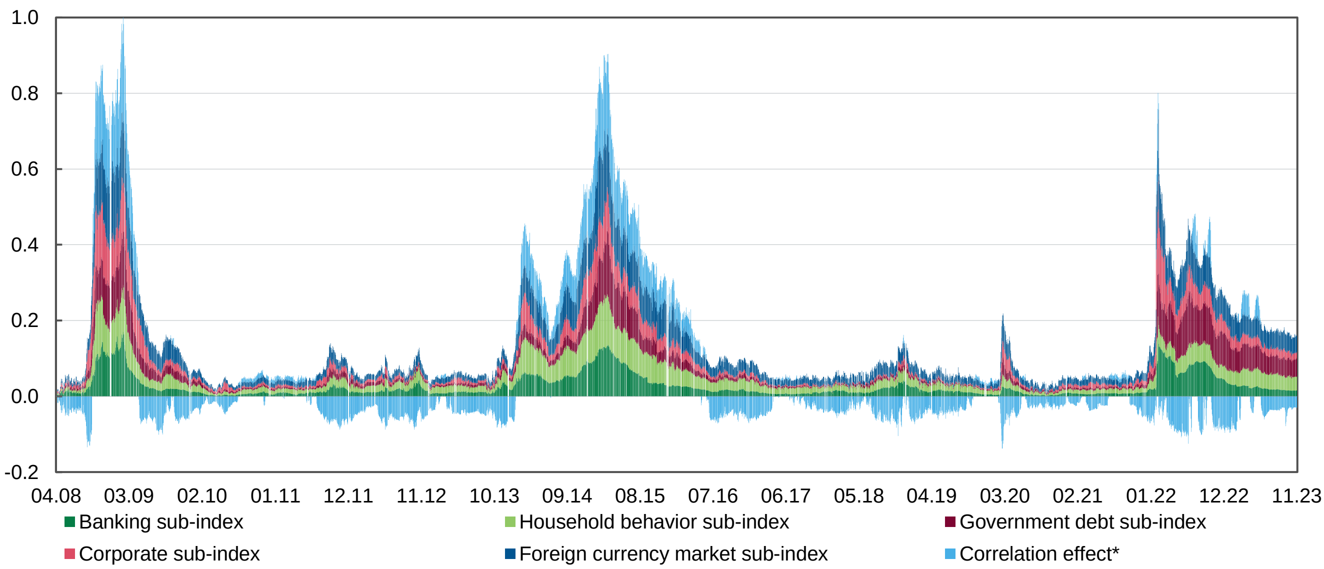
The FSI reflects only the current condition of the financial sector and does not signal future risks that may arise over the short or long term.

Figure FSI1. **Financial Stress Index**



Source: NBU.

Figure FSI2. **Financial Stress Index decomposition**



* The correlation effect is the contribution of the current correlation between sub-indexes compared to its average over the entire observation period.
Source: NBU.

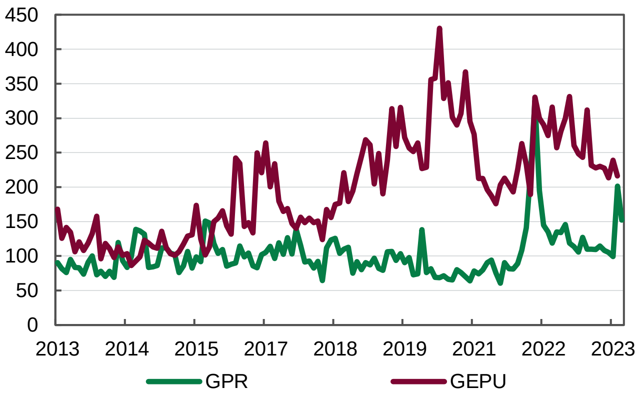
[1] Filatov, V. (2021). A New Financial Stress Index for Ukraine. Visnyk of the National Bank of Ukraine, 251, 37–54.

Part 1. External Conditions and Risks

1.1. External Developments

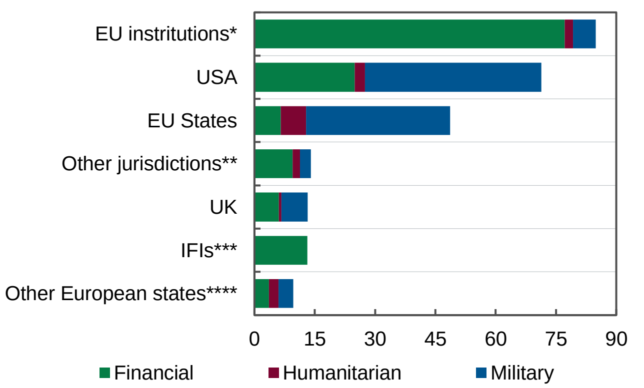
The risks of the war turning into a positional war of attrition are growing. International financial and military assistance to Ukraine remains systematic and substantial, but the threats of it arriving irregularly are rising. The list of facilities for the external financing of Ukraine's economic recovery is expanding, its volumes are growing, but still remain moderate. Ways to transfer frozen russian assets to Ukraine have not yet been devised. Prices for Ukraine's main exports have plunged compared to last year's levels, which has a negative impact on export earnings. However, logistical hurdles remain the main problem for Ukrainian exports.

Figure 1.1.1. Geopolitical Risk (GPR)* Index and Global Economic Policy Uncertainty (GEPU) Index**



* https://www.matteoiacoviello.com/gpr.htm
** https://www.policyuncertainty.com/global_monthly.html
Source: Dario Caldara and Matteo Iacoviello. Davis, Steven J.

Figure 1.1.2. Committed official assistance for Ukraine from end-January 2022 to end-October 2023, EUR billions



* The European Commission, the EU Council and the European Peace Facility; including the announced package of EUR 50 billion. ** Australia, Canada, New Zealand, South Korea, Taipei, Turkey and Japan. *** The IMF, World Bank, and the EBRD. Assistance from countries provided as part of the IFIs' donor projects is counted as assistance from these countries and excluded from IFI assistance. **** Iceland, Norway, Switzerland.

Source: Kiel Institute for the World Economy (Germany).

The war is grinding on

Despite fierce fighting, the frontline has hardly moved this year. The more powerful weapons Ukraine received from its partners are enhancing the effectiveness of the defense forces, but the pace of their arrival is still rather slow. In view of this, hostilities will last longer than expected, and significant security risks will persist. At the same time, the production of weapons for Ukraine is being established both in the country and abroad. Although the Peace Formula proposed by Ukraine is gaining supporters around the world, only general talks regarding the gradual implementation of the formula are currently underway. Taking into account this proposal, the G7 countries plan to enter into bilateral agreements on security guarantees with Ukraine. Negotiations to that effect have already begun with Italy. The EU's draft security guarantees for Ukraine envisage long-term support with weapons and military training programs.

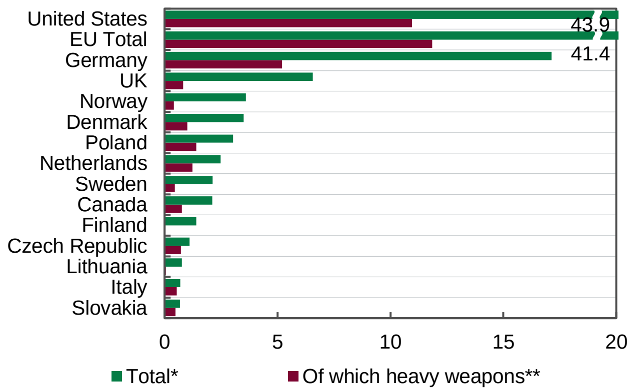
Last summer and autumn, russian terrorist air attacks focused on export infrastructure, primarily grain transshipment facilities. During the winter, russia is highly likely to launch more massive attacks on civilian infrastructure, in particular energy infrastructure. However, the strengthening of air defenses partially reduces the threat of significant destruction and prolonged power outages.

At the same time, the global security situation, especially in the Middle East, is deteriorating. This is forcing several partner countries to strengthen their own defense capabilities, while donors are having to find additional funds to support all partners and allies. Any escalation of these conflicts threatens to reduce attention to Ukraine's needs.

International financial support is systemic, but the risks of its irregularity are growing

Today, the leading global powers and international organizations declare their unwavering intentions to continue supporting Ukraine in its struggle for as long as needed. Ukraine has successfully completed the next review of its IMF loan, which is an important indicator for other donors. The EU has agreed to provide Ukraine with a EUR 50 billion aid package until 2027, but Hungary is currently blocking this funding. The U.S. President has requested congressional approval of a package that includes over USD 60 billion for Ukraine's needs in the 2024 fiscal year. However, this package has not yet been approved. The risk of delays in the approval and the provision of separate aid packages is increasing. This is due to election cycles in several partner countries, and the rise to power of those forces in some of

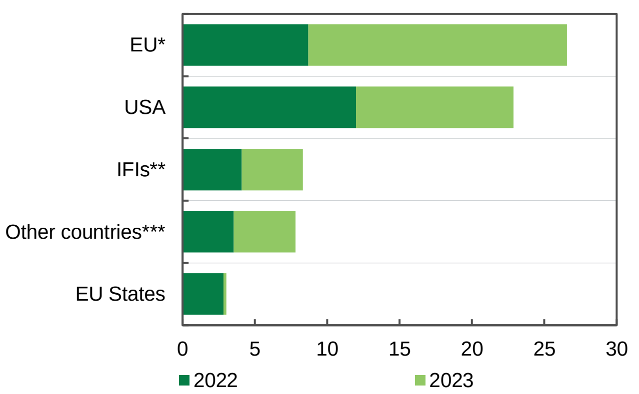
Figure 1.1.3. Committed official military assistance for Ukraine from end-January 2022 to end-October 2023, EUR billions



Value estimates based on publicly available information. * Including financing for military supplies. ** Armored vehicles, tanks, 152/155 mm artillery, and MLRSs.

Source: Kiel Institute for the World Economy (Germany).

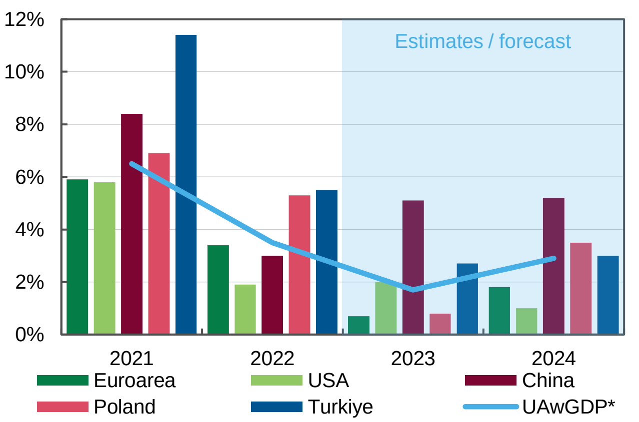
Figure 1.1.4. External financing of the State budget as of 7 December 2023, USD billions



* EU institutions including the EIB. ** The IMF and the World Bank. *** Canada, the United Kingdom, Japan, Switzerland, Norway, Iceland, and Albania.

Source: Ministry of Finance of Ukraine.

Figure 1.1.5. Change in real GDP of Ukraine's main trading partners, % yoy



* The weighted average of economic growth in Ukraine's main trading partners.

Source: NBU, October 2023 Inflation Report.

these countries that are less friendly to Ukraine. At the same time, Ukraine remains critically dependent on support from its partners, in particular in order to finance its current budgetary needs. According to the budget approved for next year, the required amount of external financial support totals about USD 40 billion in the equivalent. However, there is still uncertainty about the amount and timing of the aid.

An important step in political support and the recognition of the country's progress with implementing reforms was the EU's decision to start accession talks with Ukraine. It showed that Ukraine had moved closer to full EU membership and its benefits. Ukraine can start technical discussions on harmonizing its legislation with the EU acquis across its 35 chapters. Ukraine has much to do: according to the results of the European Commission's 2022 assessment of the compliance of domestic regulations with European ones, the average score was about 2 out of 5.

The search for funding to rebuild Ukraine continues

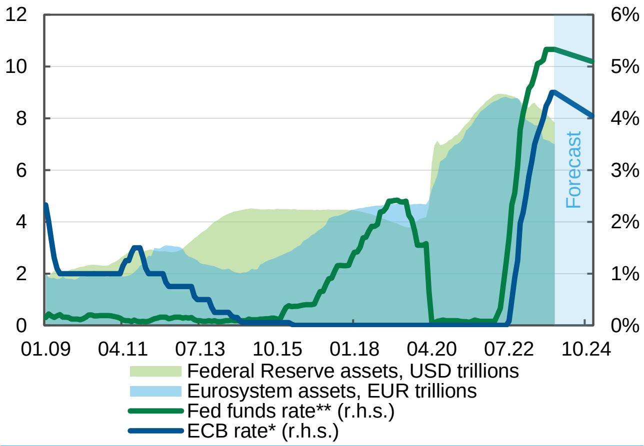
The protracted war is fueling debate about the urgent need to find funds to rebuild Ukraine. An important step was the agreement in principle reached in October by the Group of Seven (G7) to channel the proceeds of frozen russian government assets to Ukraine. For example, Belgium, which has frozen about USD 200 billion of russian assets, including those at the global depository Euroclear, plans to transfer to Ukraine the taxes on the income generated by these assets. However, there are still no legal mechanisms in place in any jurisdiction for transferring the frozen funds to Ukraine. Estonia has prepared a bill to compensate Ukraine for its losses using frozen russian assets.

Meanwhile, international financial institutions are expanding their lending support programs for Ukraine. The EBRD, the World Bank, and the EIB are providing Ukrainian financial institutions with access to guarantees, and the real sector – primarily agriculture, transportation and infrastructure – to loans and grants. The EBRD is increasing its paid-in capital by EUR 4 billion to expand its projects in Ukraine. The World Bank and KfW are supporting the Business Development Fund financially to enable it to compensate in time interest on loans issued under the *5-7-9%* program. The Partial Guarantee Fund for Agricultural Loans, which was established with support from the World Bank, will become operational from 2024. The MIGA has insured first private investors against military and political risks. Currently, work is underway to expand access to this insurance. As the economy and loan demand recover further, the demand for developing credit support mechanisms will become stronger.

Economic growth in partner countries is mostly weak

The NBU estimates that the economies of Ukraine's partner countries, especially the advanced economies, will grow at a slow pace next year. More specifically, real GDP in the United States will grow by only 1%, while real GDP growth in the euro area will be below 2%. Growth will remain restrained in Turkiye and China by historic standards. China's development will be significantly hampered by problems in the construction and real estate sectors. Overall, the global economy will grow somewhat slower than this year.

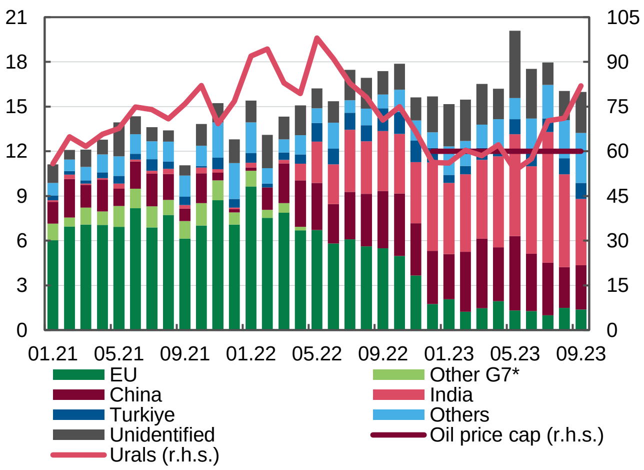
Figure 1.1.6. Assets and rates of the ECB and the Fed



* Fed staff projections, September. ** ECB Survey, July.

Source: ECB, Fed, Fred.

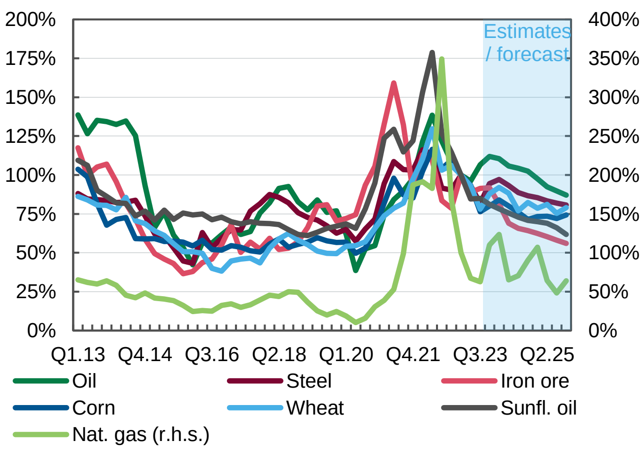
Figure 1.1.7. Monthly landings of russian seaborne crude oil, million tons, and price of Urals, USD per barrel



* United States, Canada, United Kingdom, and Japan.

Source: Breugel, Russian crude oil tracker, Investing.com.

Figure 1.1.8. Global commodity prices*, Q1 2023 = 100%



* Brent crude oil; natural gas in Dutch TTF; steel billets Exp FOB Ukraine; China import Iron Ore Fines 62% FE spot; average global prices for sunflower oil, wheat, and corn.

Source: NBU, October 2023 Inflation Report.

Conversely, under the IMF's baseline scenario, global trade growth will accelerate next year – to 3.5%, compared to this year's historic low of less than 1%. That said, rising geopolitical risks could prevent this from happening.

Global inflation has decelerated, but remains relatively high. As a result, the leading central banks will maintain reasonably high rates for an extended period. While this will have no direct impact on the domestic financial system as Ukraine currently has practically no access to the international capital markets, it will dampen global economic growth.

Russia's economy is adapting to the war and sanctions

russia's adaptation to the war and sanctions and the gradual recovery of the russian economy pose a threat. The IMF expects russia's real GDP will grow by 2.2% this year, and by another 1.1% next year. This will allow the aggressor country to continue financing the long war. What is more, there is a lot of evidence that moscow is circumventing sanctions, despite the U.S. and EU's efforts to thwart these attempts. Although exports of sanctioned oil to Europe have fallen sharply, moscow is managing to supply significant volumes to the Asian market, and to gradually expand its export earnings. Therefore, it is necessary to further increase sanction pressures on russia, and to prevent its attempts to circumvent sanctions.

Low commodity prices will persist

Global food prices have declined due to an ample supply of grain. Looking ahead, prices will drop more slowly amid poorer wheat harvests in Canada and Australia, and a lower corn harvest in Brazil next year. However, food prices will not rise in the medium term, due to supply growing more quickly than demand.

Current oil prices will be supported by OPEC-agreed production cuts until the end of 2024, as well as by conflicts near production regions and oil supply routes. Natural gas prices are likely to rise during the heating season, but will decline from spring, in part thanks to increases in the production of liquefied gas in the United States and Africa. Iron ore and steel prices will also decline, dragged down by the expected increase in ore supply from Africa and China.

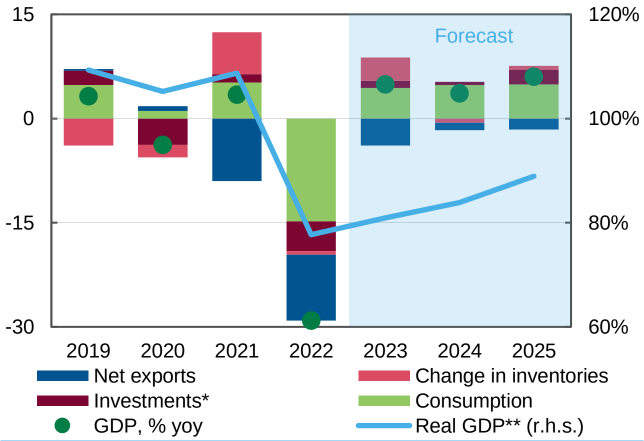
Overall, lower global commodity prices are having an adverse effect on revenues from Ukrainian exports, primarily from agricultural products. At the same time, logistical constraints remain the main problem for Ukrainian exporters. After Russia halted the operation of the "grain corridor," Ukraine and its partners were able to organize a transportation route across the Black Sea. However, Ukrainian sea and Danube infrastructure are under constant terrorist air strikes. Another deterrent lies in the restrictions imposed on exports of certain agricultural products to neighboring countries. Ukraine reserves the right to apply to the World Trade Organization to resolve trade disputes. The blockade of truck transit from Ukraine by protesters in Poland and Slovakia poses yet another problem.

Part 2. Domestic Conditions and Risks

2.1. Macroeconomic and Fiscal Risks

Prolonged hostilities are increasing risks to Ukraine's economy and slowing its growth. Domestic demand is currently the main driver of economic recovery. Faster economic growth requires higher investment. Inflation will be about 5% this year, but because it is expected to accelerate in future and given plans for further steps on currency liberalization, the key policy rate will remain relatively high. Sufficient and regular inflows of international aid remain vital to maintaining price and financial stability. At the same time, there is still potential for more funds to be raised in the domestic market, if necessary.

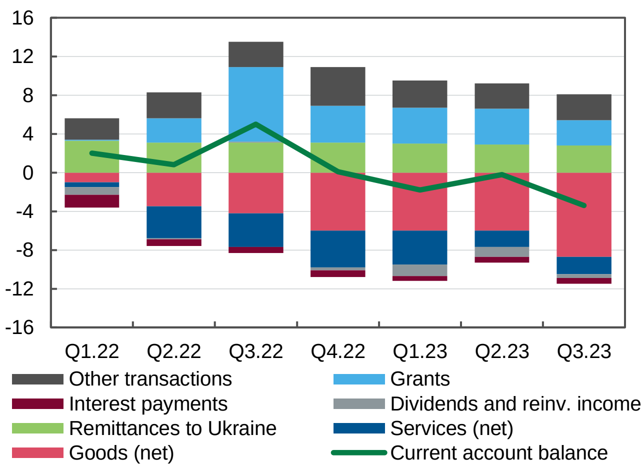
Figure 2.1.1. Contributions to GDP growth by final use, pp



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

Source: SSSU, NBU estimates.

Figure 2.1.2. Current account balance, USD billions



Source: NBU.

Consumption fuels economic growth

The protracted war and related challenges continue to pose key risks to Ukraine. Active hostilities are likely to drag on throughout 2024. This will hold back economic recovery and require there to be significant spending on defense. Ukraine will therefore continue to be critically dependent on international aid.

In the meantime, businesses and households have been adapting to wartime conditions. First of all, private consumption is reviving. This is facilitated by the growth in incomes, in part due to a significant volume of military allowances and households' improved expectations. Businesses' expectations are also improving: the business outlook index exceeded 100% in Q2–Q4 2023 for the first time since Q4 2021. This means that the share of companies expecting the situation to improve over the next 12 months surpassed the percentage of those that anticipated a deterioration. The revival of consumer demand is fueling retail lending. The uptick in business activity ensures that demand for loans is recovering, at least to support working capital.

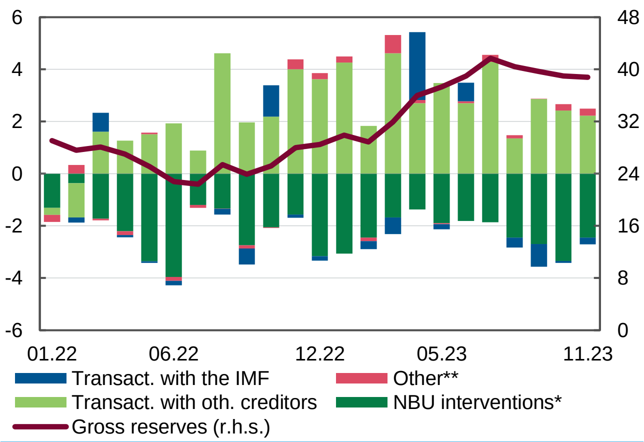
Private sector investments are mainly being directed to developing logistics. A stable situation in the energy sector is bolstering economic activity. On the supply side, this year's high harvests made a key contribution to faster GDP growth. The NBU recently upgraded its real GDP growth forecast for 2023 by 2 pp, to 4.9%.

The economy will gradually grow over the next few years. In 2024, the NBU expects GDP growth of 3.6%. This increase will primarily be ensured by the further recovery of consumption. However, persistently high security risks will weigh down private investment and slow the return of forced migrants home. A shortage of personnel and the slow increase in production capacity will therefore restrain production. If active hostilities continue and no significant investment is made, the recovery of the Ukrainian economy to the pre-full-scale war level will be significantly delayed.

Supply chain disruptions are widening the trade deficit

The current account deficit has risen during 2023. This happened primarily due to the further expansion of the negative balance of trade in goods: imports surged, while exports fell because of logistical hurdles, destroyed production facilities, and low global prices. Grant support from partners also shrank in H2 2023. In January–September, the current account deficit was USD 5.4 billion, down from a surplus of USD 7.9 billion in the same period last

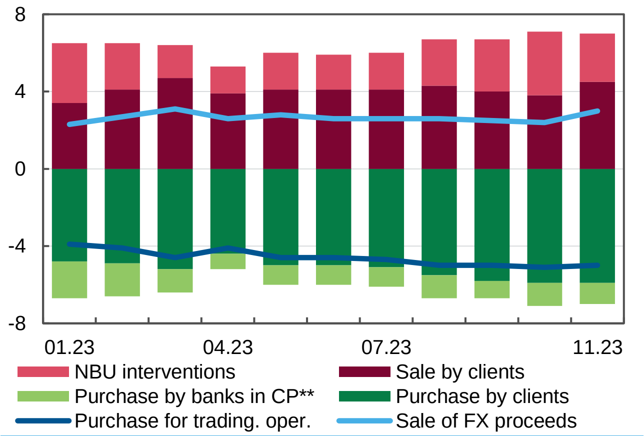
Figure 2.1.3. Change in gross international reserves, USD billions



* The NBU's net 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.

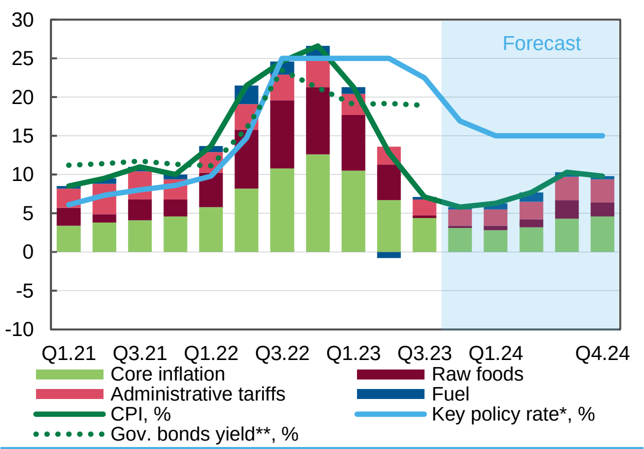
Figure 2.1.4. Structure of demand and supply of cashless foreign exchange, USD billion equiv.*



* The volume of transactions by bank clients to purchase/sell cashless foreign currency on TOD, TOM, and spot terms. ** Buying into the FX position.

Source: NBU.

Figure 2.1.5. Contributions to the annual change in CPI by components, pp, and the key policy rate, %



Contributions from Q4 2023: NBU forecast as of October 2023. * Average for the period. Over the forecast horizon, it is the midpoint of the confidence interval. ** Weighted average yield of government bonds denominated in hryvnias placed on the primary market.

Source: SSSU, NBU estimates.

year. A significant deficit in the goods trade will persist in 2024. In addition, risks of export disruptions remain high, although they are being offset in the financial account by international aid inflows.

The NBU switched to managed flexibility of the exchange rate

Thanks to financial support from partners, Ukraine has accumulated a significant amount of international reserves. At the beginning of December, they stood at USD 38.8 billion, covering 5.2 months of future imports. The comfortable level of reserves, combined with the sustained attractiveness of hryvnia instruments and steady progress in curbing inflation, contributed to the abandonment of the fixed exchange rate regime. The NBU switched to managed flexibility in October. Under the new regime, the exchange rate fluctuates on a daily basis in both directions within a narrow corridor, depending on market conditions.

Given the significant foreign trade deficit, FX demand will continue to surpass FX supply by a wide margin. The NBU will therefore make FX interventions to compensate for the structural deficit of foreign currency.

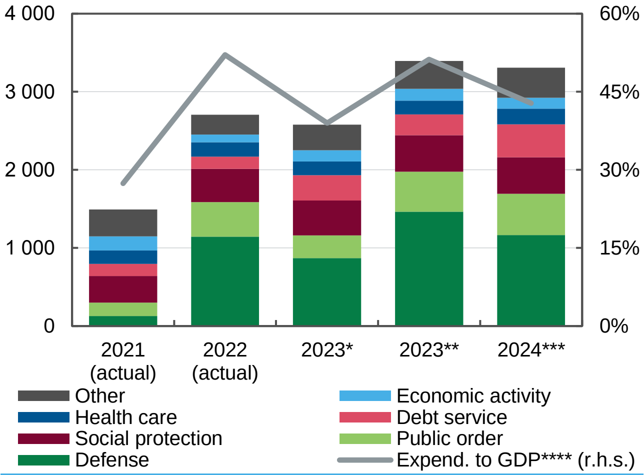
According to NBU forecasts, international reserves will continue to grow next year, provided that Ukraine receives the planned amount of aid. The level of reserves will facilitate the further implementation of the managed flexibility regime and FX liberalization measures. The fairly high return on hryvnia investments helps make them attractive and dampens FX demand from businesses and households, despite certain fluctuations in the exchange rate. The FX market adapted to the new exchange rate regime rather quickly. Heightened FX demand existed only for a few days into the new regime. At the same time, FX risk hedging instruments are again making their way into the market. Since November, the banks have been able to make currency swap transactions with the hryvnia, dollar, and euro as underlying assets.

The expected acceleration of inflation will suspend further interest rate changes

In November, consumer inflation slowed to 5.1% yoy. The plunge in inflation in recent months is attributable to higher harvests and thus more food supply. Inflation was restrained by the freeze of some utility tariffs. At the same time, the sustainable exchange rate inhibited price increases for imported goods and contributed to more upbeat expectations for inflation and the exchange rate.

However, inflation will start accelerating next year. The main reasons are the growth in business costs (specifically because of more expensive energy and the shortage of workers), the further revival of demand for consumer goods and services, and this year's low base of comparison for food prices. Due to the effect of pro-inflationary factors next year, the NBU will suspend the reduction of the key policy rate. Under the baseline forecast, it will remain at the current level of 15% until the end of 2024.

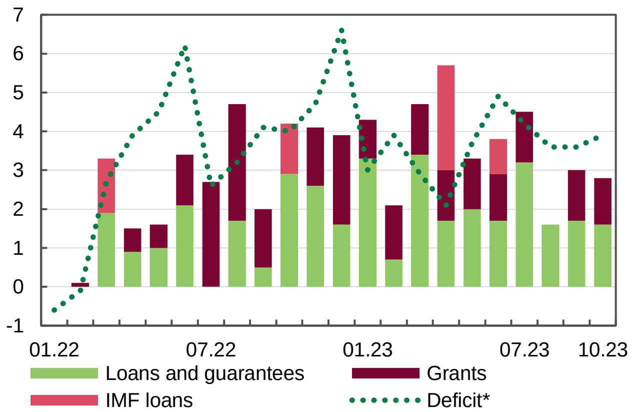
Figure 2.1.6. Expenditure components of the state budget in 2021–2024, UAH billions



* The Law of Ukraine *On the State Budget of Ukraine for 2023*, approved in November 2022 (before amendments). ** Approved for the reporting year, after amendments. *** The Law of Ukraine *On the State Budget of Ukraine for 2024*, approved in November 2023. **** GDP in 2023–2024 is the NBU forecast, published in the Inflation Report for October 2023.

Source: STSU, Ministry of Finance of Ukraine, NBU estimates.

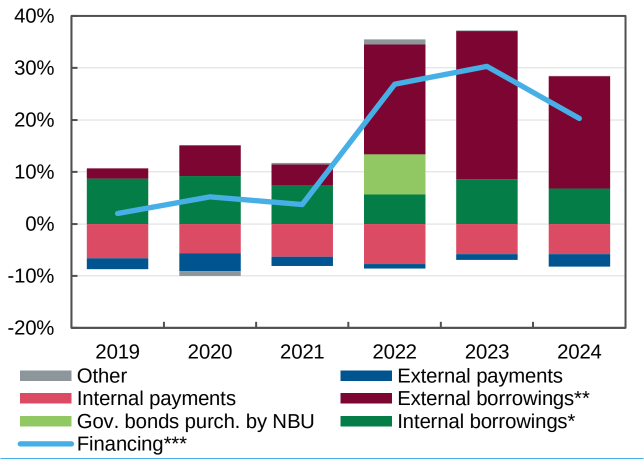
Figure 2.1.7. International financial assistance and the state budget deficit, excluding grants, USD billion equiv.



* Negative values mean a surplus.

Source: STSU, Ministry of Finance of Ukraine, NBU.

Figure 2.1.8. State budget financing in 2019–2024, % of GDP



* Excluding the NBU. ** In 2019–2022, borrowing was increased by the amount of grants received. *** 2023 – the Law of Ukraine *On the State Budget of Ukraine for 2023* after amendments. 2024 – the Law of Ukraine *On the State Budget of Ukraine for 2024*.

Source: STSU, Ministry of Finance of Ukraine, NBU estimates.

The risk of irregularity of international aid is rising

In 2023, the planned state budget deficit is higher than last year's record. Excluding grants, it makes up about 30% of GDP, according to NBU forecasts. The main driver remains the same: significant spending on security and defense. As hostilities continue, the budget deficit will remain significant next year as well. Under the Law of Ukraine *On the State Budget of Ukraine for 2024*, the deficit will stand at UAH 1.6 trillion, i.e. about 20% of GDP. At the same time, military needs are highly likely to rise.

International financial aid will continue to play a key role in meeting budget needs. The NBU estimates that next year the volume of financial assistance will be about USD 40 billion, which is commensurate with the aid in 2023. However, the risks of international aid becoming irregular are also increasing. A significant portion of the funding slated for 2024 has yet to meet with partners' approval. To receive aid on time, Ukraine continues to meet the commitments it made under cooperation programs with the IMF and other donors.

Domestic financing needs will remain substantial

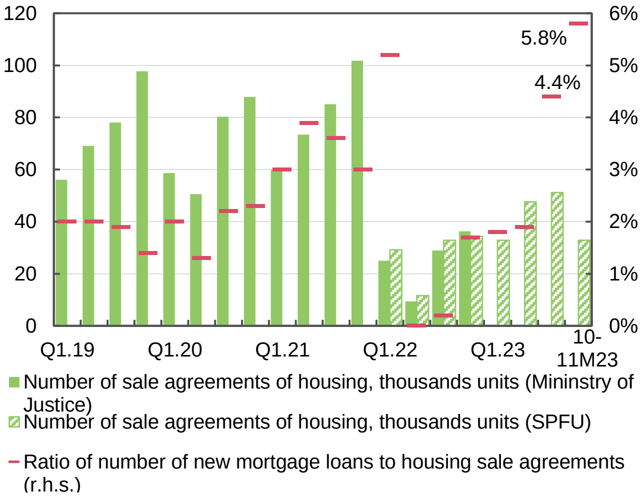
The volume of net borrowings in the domestic market is anticipated to be relatively small next year compared to the size of the budget deficit. However, the role of the domestic market will increase should international aid disbursements run into delays.

Placements of domestic government debt securities in 2023 were quite lively: in January–November, the rollover was 171% for investments in hryvnia domestic government debt securities, and 109% for investments in FX ones. This indicates that the government is not currently prioritizing domestic FX borrowing and is using it only to repay old loans. The attractiveness of domestic government debt securities is currently driven by their market yield, which includes a notable term premium. Rates on domestic government debt securities will remain attractive going forward, meaning the banks and other economic entities will have enough market incentives to invest available funds.

2.2. Real Estate Market and Mortgage Lending

Demand in the real estate market is strengthening, but the number of transactions is significantly lower than before the full-scale invasion. The amount of residential property offered for sale has increased slightly due to the completion of pre-war projects. However, due to the slow start of new projects, supply will be limited in the long run. Housing prices on the primary market have stopped growing, while on the secondary market price growth has slowed. At the same time, the cost of rents has increased. As a result, the price-to-rent ratio has approached its long-term average for the first time in a year-and-a-half. Mortgage lending under the *eOselia* program is playing an increasingly important role in the market, but there are no unsubsidized mortgages available at the moment.

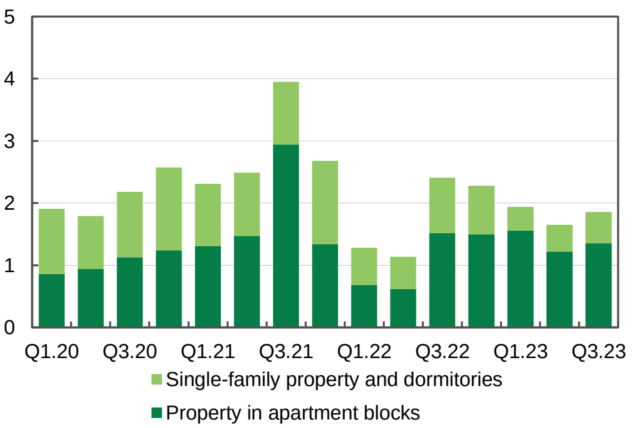
Figure 2.2.1. Housing market activity



The number of new mortgages comes from a survey of banks with 95% of the sector's gross mortgage portfolio as of the end of 2021. Data of the State Property Fund of Ukraine comprises data on notarized transactions under which the obligation to pay the personal income tax arises.

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

Figure 2.2.2. Commissioned housing in Ukraine, sq. m millions



Data for Q1–Q3 2023 is derived from an assessment based on the number of apartments commissioned over the period.

Source: SSSU.

Demand for residential real estate is growing, albeit slower than before the full-scale invasion

In 2023, the number of housing purchase and sale transactions was on the rise. The average number of contracts concluded in Q2 and Q3 2023 exceeded the average for H2 2022 by almost a half. However, purchasing activity remained almost at a half of the 2019–2021 average. Demand is mainly concentrated in the secondary market, with people more willing to buy finished housing in safer regions. Investment in new buildings is discouraged by both long terms of construction and the risk that constructions may not be finished, and this is exacerbated by the difficult situation in the industry.

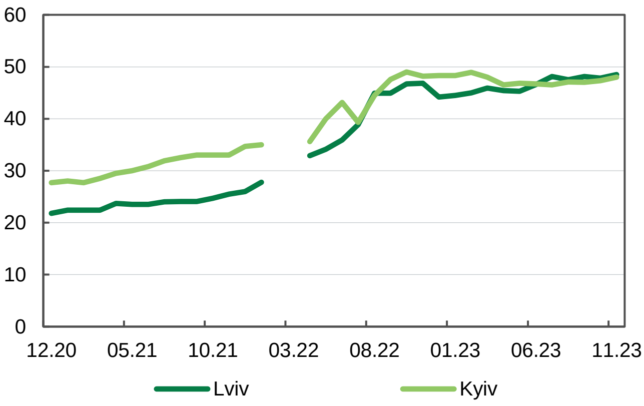
The share of housing purchase transactions financed by mortgages has increased significantly. This is almost exclusively due to subsidized lending under the *eOselia* program. In October–November 2023, the share of housing purchased with borrowed funds reached 5.8%, its highest level in many years. Most loans are granted for the purchase of housing on the secondary market. Given the restrictions on the range of properties eligible for purchase under the program, demand under the program is concentrated on finished buildings no older than three years. Accordingly, the role of mortgage lending in this narrow segment is quite important.

The recovery in housing demand will continue to be fueled by rising household incomes. At the same time, it will be constrained by persistently high security risks and the slow return of forced migrants. As long as the real estate market is out of balance and demand is only recovering, real estate investments will remain unattractive.

Supply is fueled by the completion of construction started before the war; new construction is rare

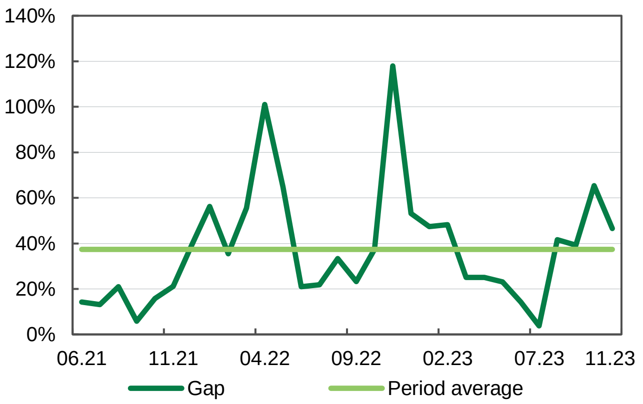
Housing construction continues at an uneven pace. Although work has formally resumed on a large number of projects, it is sometimes slow. Few new construction projects have been started in the last 18 months, except for some rare cases in the western regions. Developers are mostly completing construction started before the outbreak of the full-scale war, and finishing new sections of previously started housing estates. Newly commissioned housing continues to come onto the market, although sales are often closed long before the process is formalized. The pace of commissioning is much slower than before the full-scale invasion. Overall, volumes of housing for sale in the primary market are around 15% lower than before the full-scale invasion.

Figure 2.2.3. Prices quoted for newly built housing, UAH thousands per sq. m



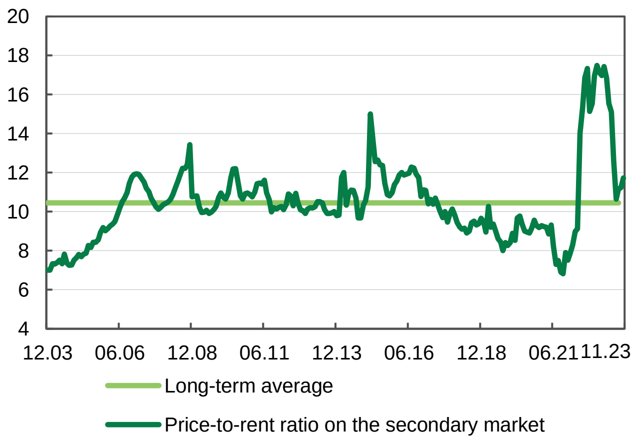
Source: lun.ua.

Figure 2.2.4. Percentage gap between average quoted prices of all advertisements and advertisements for sold apartments, two-room apartments in Kyiv



Source: Rieltor.

Figure 2.2.5. Price-to-rent ratio



Source: real estate agencies, NBU estimates.

In the long run, the supply of new housing remains under threat. Low demand and high construction costs, driven by rising prices for construction materials and a shortage of skilled workers, are worsening developers' financial standings. Due to the reluctance to start new construction projects and the difficult situation in the industry, the replenishment of the housing stock will continue to slow.

The further development of the residential real estate market depends on its transparency and proper guarantees of investors' rights. The law on guaranteeing property rights to future real estate, which came into force in 2022, establishes new rules to secure these principles. It primarily creates a mechanism for reducing risks for investors in construction, which should make the primary market more attractive. The effectiveness of this mechanism has yet to be tested in practice. In addition, the Memorandum with the IMF envisages improving mortgage market infrastructure: bringing property appraisal legislation into line with European standards, and introducing a publicly available database of real estate transaction prices and price indices for residential and commercial real estate.

Real estate price growth has almost stopped

Growth in housing prices in the primary market has been slowing since the start of 2023, and prices remained almost unchanged in H2. Some weak price growth is continuing only in Ukraine's western regions. The state of the market has altered sellers' expectations.

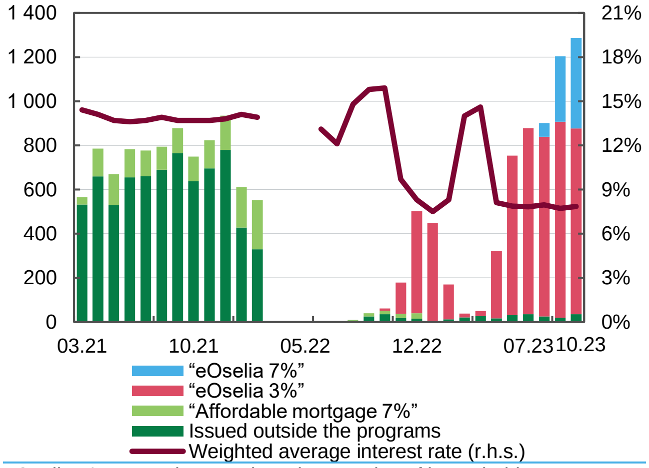
In contrast, prices in the secondary market are volatile, with prices rising in most regions compared to June 2023 – primarily in safer areas farther from the hostilities zone. At the same time, most deals were still being struck for apartments with declared prices below average. According to Rieltor, in November, the average price in the advertisements for apartments sold was more than 40% below the average price for all advertised properties. In general, buyers prefer cheaper housing, sometimes outside of major cities.

Rental prices went up in H2. Business activity is picking up, with employees returning to big cities, so demand for rented property is growing. For the first time since mid-2022, the price-to-rent ratio has approached its long-term average. This is due to the faster growth in rental prices compared to the price of buying a home. It is too early to talk about market stabilization, as purchase and rental prices are still quite volatile. However, the price adjustments indicate a gradual search for a new equilibrium.

Volumes of preferential mortgages increased significantly

There are almost no unsubsidized mortgages at the moment, with loans for housing purchases being provided only under the *eOselia* program. Ukrfinzhytlo, the program's operator, received loans from banks in H2, which boosted lending. Ukrfinzhytlo provides concessional funding to the banks, which in turn use it for mortgage lending. In November, the volume of loans issued under the program was almost twice as high as the volume of all mortgages for the whole of 2021. In total, the *eOselia* portfolio already contains over 5,500

Figure 2.2.6. **New mortgage lending, UAH millions**



eOselia 7% covers loans to broad categories of households.

Source: banks' data, BDF, Ukrfinzhytlo.

loans worth more than UAH 8 billion. This is already more than half of the banks' total mortgage portfolio.

In the regional context, the leader in mortgage lending is Kyiv Oblast, where a little over a quarter of the total volume of preferential loans has been issued since the start of the year. The city of Kyiv ranks second. Since August, the program has been available to all household categories for the purchase of a first home. The number of participating banks remains small: currently, it includes all state-owned banks and two small private banks.

Almost all of the loans are granted for the purchase of finished housing: two-thirds are for purchasing housing on the secondary market, and one-third for purchasing finished housing from a developer. Loans for housing under construction can be obtained only at accredited housing estates that meet all legal requirements. The number of accredited housing estates is slowly growing, with the 21 such developments already meeting the requirements as of early December. However, loans for housing under construction account for less than 1% of the mortgages issued under *eOselia*. There are currently no signs of a recovery in unsubsidized mortgages. Low demand, high interest rates, and high housing costs are limiting the development of this segment.

Office real estate market is stagnating, while market of retail premises is picking up

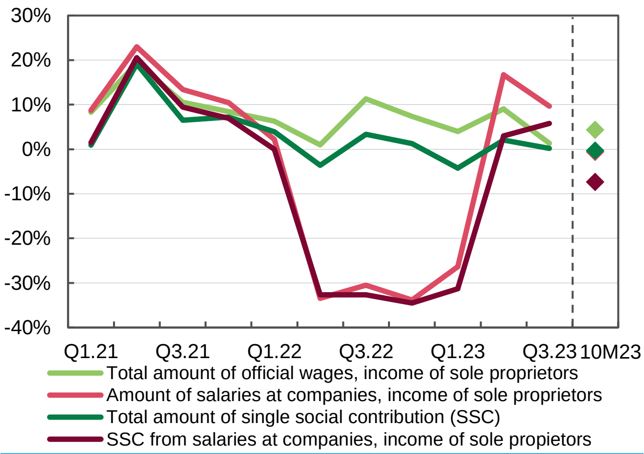
A more stable security situation, the lack of interruptions to power supplies, and the recovery in consumer demand have contributed to the further development of the retail real estate segment. The best performance was recorded in shopping centers located in big cities, particularly in western Ukraine and in the capital, and in those close to densely populated neighborhoods. Their visitor numbers are sometimes higher than before the war. The largest malls still have higher vacancy rates, as some big foreign chains have not yet resumed operations in Ukraine. However, the largest of them are gradually returning to Ukraine. Higher turnovers are driving higher incomes for renters. But despite the active recovery of the segment, it remains unattractive for investment due to the need for significant investments and the current security risks.

The market of office premises is stagnating. The revival of business activity has not increased occupancy in business centers. A number of previously concluded rent agreements will not be renewed upon expiry, as the premises are often not used. Demand for rent remains very low, so vacancy will not decrease. Renters often provide preferential rental terms only to compensate for their current operating expenses. Due to concessions made by renters, rents in premium properties sometimes do not differ much from those in lower quality properties. Due to high repair and maintenance costs and low rental rates, there is practically no investment in office space.

2.3. Households and Related Risks

Household income is rising, and its rise will be fueled further by the economic recovery. In recent months, the private sector has also seen a rapid increase in income. Although real income is still considerably lower than before the full-scale invasion, it is being offset by military pay. The labor market is slowly recovering, but significant imbalances remain. Overall, improved household sentiment is driving higher consumption and, consequently, more active borrowing. Lenders should strengthen controls over the risks that could arise from their clients' excessive debt burdens.

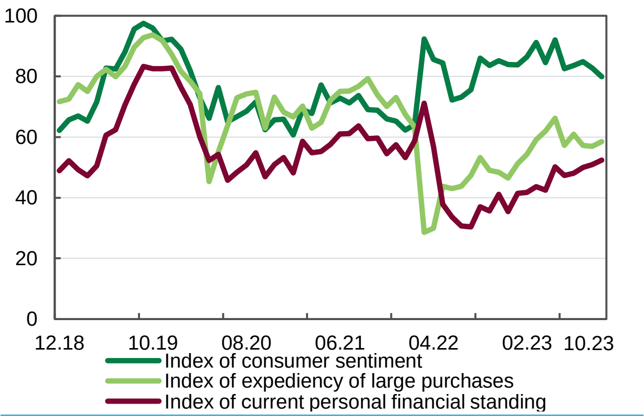
Figure 2.3.1. Estimates of real quarterly household income*, change yoy



* The amounts of wages and incomes of sole proprietors come from bank reports. Privatbank's data was adjusted to include only wage payments.

Source: Pension Fund of Ukraine, State Treasury Service of Ukraine, bank data, NBU estimates.

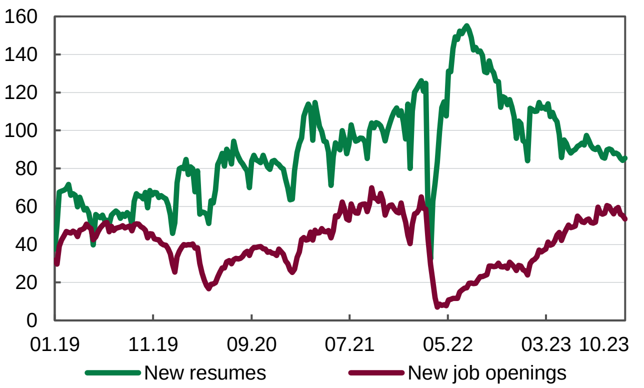
Figure 2.3.2. Households' consumer sentiment*, points



* Index readings below 100 indicate that society mostly considers the situation to be negative.

Source: NBU, Info Sapiens, monthly surveys of households (respondents aged 16+).

Figure 2.3.3. Labor supply and demand, thousands



Source: Work.ua.

Income is continuing to recover in the private sector

Real wages at companies and sole proprietors' income have been higher in recent months compared to the crisis figures seen a year ago. This was facilitated by businesses' adaptation to wartime conditions, along with the revival of economic activity and the labor market. According to the EBA's quarterly survey "Business during War", in October, almost all employers surveyed were paying salaries in full. The gradual recovery of real income contributed to an improvement in households' assessment of their financial standings. That said, military pay plays a crucial role in maintaining household income as a whole. This pay compensated for a significant drop in wages in the private sector last year.

Looking ahead, income growth will be propped up by the increase in the minimum wage planned for next year, and by the indexation of social benefits. In addition, the imbalances on the labor market and the shortages of skilled workers that businesses face will push wages up. The NBU's Q3 survey of companies shows that they expect labor costs to rise. Low inflation will contribute to the growth in real income, even though it is expected to accelerate moderately next year.

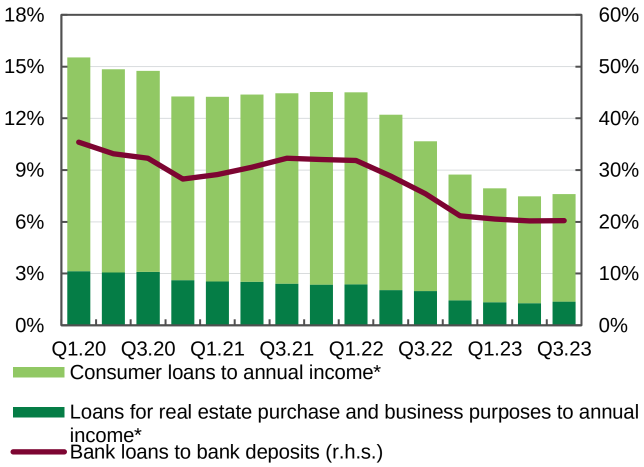
The labor market is recovering, but slowly

The labor market recovery is continuing, but still remains sluggish. The revival of business activity is boosting demand for labor. The number of vacancies on job search sites has almost reached the level seen at the end of 2021. Meanwhile, the number of CV's has declined. However, this may be due not only to growing employment by businesses, but also due to the limited supply of labor because of migration and mobilization. According to an October survey by the Institute for Economic Research and Policy Consulting, a lack of labor is ranked 4th among the obstacles business are facing during the war. At the same time, the human capital quality risk in the financial sector has risen sharply, and was ranked among the 10 largest systemic risks (read more in the Systemic Risk Survey). Labor market imbalances will persist in the coming years, as the economic sectors are recovering at different paces, and the return of migrants to Ukraine is still slow due to high security risks.

Consumer demand is driving retail lending

Although the consumer sentiment index remains below its neutral level, it is comparable with its value before the full-scale invasion. High household sentiment, by historical standards, is fueling consumption, which is now the main engine of economic growth. This propels demand for short-term unsecured loans, primarily those that are issued through card products. Therefore, the fastest growing loans are at banks that are most active in the card segment. At the same

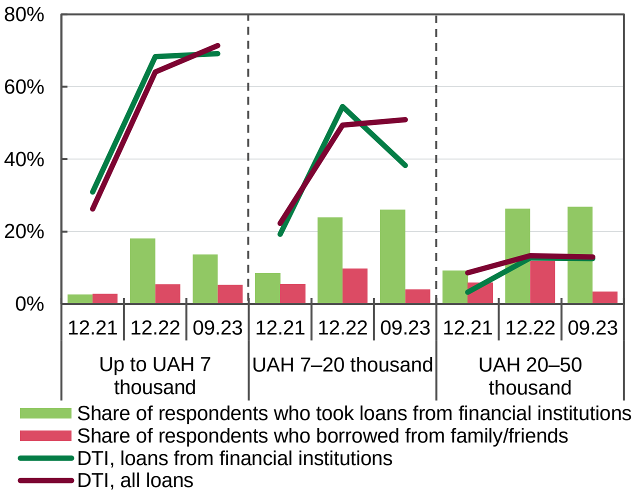
Figure 2.3.4. Household debt burden



* The amounts of wages and incomes of sole proprietors come from bank reports and of pensions - from State Pension Fund of Ukraine data.

Source: Pension Fund of Ukraine, bank data, NBU estimates.

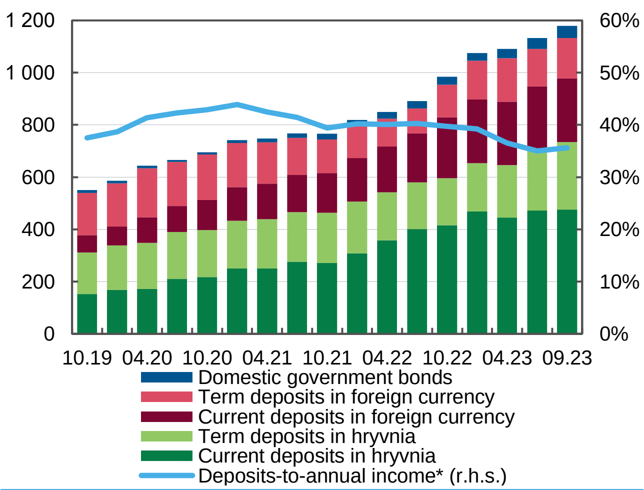
Figure 2.3.5. The ratio of debt to annual income of households that took out loans, grouping by monthly income



DTI (Debt to income ratio) is the ratio of debts to households' annual income.

Source: Info Sapiens, quarterly surveys of households (respondents aged 16+).

Figure 2.3.6. Major types of financial savings, UAH billions



* The amounts of wages and incomes of sole proprietors come from bank reports and of pensions – from State Pension Fund of Ukraine data.

Source: Pension Fund of Ukraine, bank data, NBU estimates.

time, despite growing steadily, loans from non-bank financial institutions remain 1.5 times below their average in 2021.

As the loan portfolio is growing in line with households' nominal income, the debt burden of households generally remains low and stable. The ratio of loans from banks and non-banks to income is close to 8% on average.

According to Info Sapiens studies, about a quarter of households have loans, compared to about 10% in December 2021. The share of borrowers in the lowest income group is somewhat smaller. The household's ratio of debt to financial institutions to their annual income is acceptable. The debt burden of some borrowers is excessive, primarily due to loans from informal lenders, such as relatives and friends.

Lenders should critically assess the debt burden of households

The total debt of borrowers is one of the key factors in assessing the risk of loan default. Therefore, starting in 2024, the NBU will require non-bank financial institutions to provide information to the credit register. The threshold for submitting information to the credit register will be gradually reduced from the current level of 100 minimum wages. From mid-2024, information will be provided if the total debt exceeds 10 minimum wages. Thus, assessment of client debt burden will be more accurate. In addition, a limit on the maximum daily interest rate (up to 1%) on microloans will soon apply. More prudent lending improves not only the quality of the portfolio, but also the financial health of borrowers.

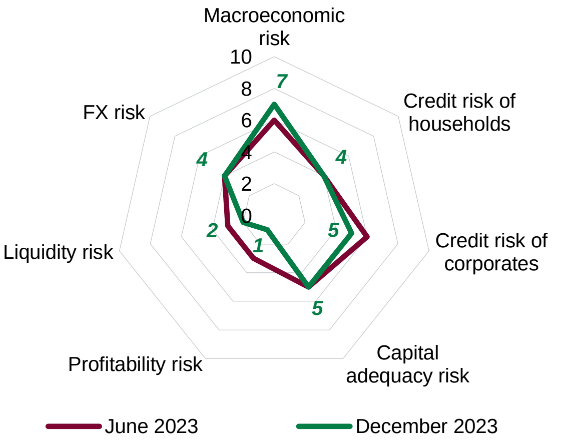
Savings are growing in line with income

Households mainly receive their income to bank accounts. Thus, growth in nominal income brings about growth in bank deposits. The key trend of the past year was the growing attractiveness of hryvnia term deposits, and a corresponding increase in the share of these deposits in savings. Despite growing markedly, households' investment in government bonds remains only a tiny component of their total savings. Savings will continue to grow thanks to higher income. At the same time, the propensity to save could decline somewhat due to the further revival of consumer demand.

Part 3. Banking Sector Conditions and Risks

3.1. Financial Sector Risk Map[2]

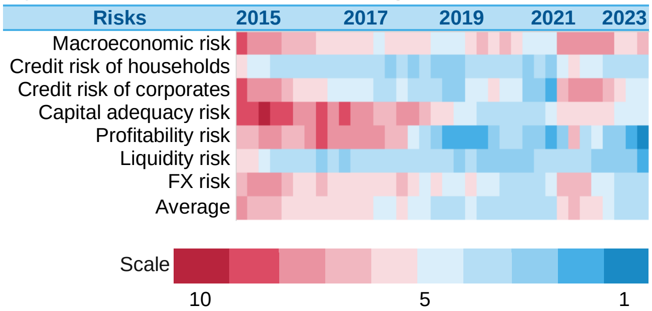
Figure 3.1.1. Financial sector risk map



The NBU assesses risks on a scale from 1 to 10, with 1 being the lowest level of risk, and 10 the highest. The assessment reflects the outlook for the next 12 months. The methodology for building this risk map has been adjusted to factor in data availability.

Source: NBU estimates.

Figure 3.1.2. Financial sector risk heatmap



Source: NBU estimates.

Description:

- Macroeconomic risk indicates the level of threats arising in the real economy, the external sector, and/or the fiscal area.
- Credit risks of households and of corporates reflect expected changes in the share of non-performing loans in bank loan portfolios and the need for extra provisions for those loans.
- Capital adequacy risk measures the ability of banks to maintain an adequate level of capital.
- Profitability risk measures the ability of banks to generate net profit.
- Liquidity risk is a measure of the ability of banks to meet their liabilities to depositors and creditors in full and on time.
- FX risk is the risk that foreign exchange market trends will affect the resilience of banks.

Macroeconomic risk: increased

Macroeconomic risk has risen again. The state budget deficit and public and external debt are high relative to GDP. Furthermore, the current account deficit has increased over the year. International financial assistance offsets these risks. GDP is growing, but according to forecast, its growth will slow next year.

Credit risk of households: unchanged

The credit risk of the retail portfolio is moderate. The portfolio's quality is gradually improving – the share of loans that are past due for over 30 days is contracting. However, the banks still have reserved expectations about loan quality.

Credit risk of corporates: decreased

The ongoing recovery of economic activity in H2 2023 helped improve the financial standings of companies across most industries. At the same time, companies' debt burden has decreased. The default rate has dropped noticeably of the corporate loan portfolio. Corporates further maintain positive, albeit restrained, expectations of future changes in business activity.

Capital adequacy risk: unchanged

Capital adequacy was rising, driven by the banks' profits. The capital adequacy ratios of the banks holding over half of the sector's assets are more than twice the minimum requirements. That said, the ratio of the banks' core capital to their assets – the equivalent of the leverage ratio – has decreased slightly. The banks invested more actively in instruments for which credit risk is not assessed, but that carry other risks, primarily interest rate risk.

Profitability risk: declined

Profitability risk has dropped to its lowest level. The banks' profits continued to grow thanks to higher interest income, primarily from high quality liquid assets, and insignificant provisioning this year. The banks' operational efficiency remained high. Looking ahead, a higher tax rate will increase the profitability risk.

Liquidity risk: dropped

Liquidity risk has weakened to a low level. The sector's liquidity is high. Client deposits were growing, albeit slightly slower than in H1. The LCR is well above the required minimum. However, the banks had restrained expectations about this risk in future.

FX risk: unchanged

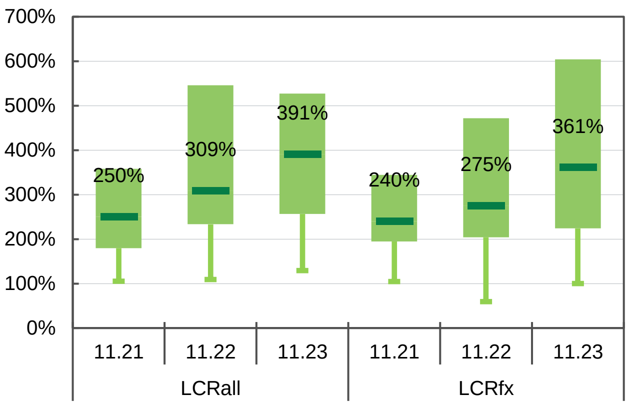
FX risk is moderate. The situation on the FX market remains under control. International reserves are high. Banks' assessment of the FX risk level has improved.

[2] A full description of the methodology for building the financial sector risk map is provided in Geršl, A., Dadashova, P., Bazhenova, Y., Filatov, V., Hlazunov, A., Soltysiak, R. (2022). A Heatmap for Monitoring Systemic Financial Stability Risks in Ukraine. Visnyk of the National Bank of Ukraine, 253, 27-46. https://doi.org/10.26531/vnbu2022.253.02.

3.2. Liquidity and Funding Risk

The liquidity of the banking system does not raise any concerns: retail and corporate deposits continue to flow into financial institutions, liquidity ratios are well above their minimum requirements, and the structure of high quality liquid assets is diversified. The share of household term deposits continues to grow, while the share of FX deposits continues to decline.

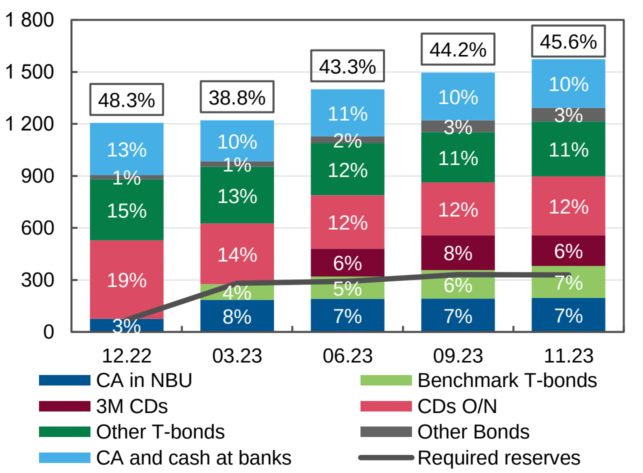
Figure 3.2.1. Liquidity coverage ratios in all currencies (LCRall) and in FX (LCRfx)



At banks that were solvent at each reporting date. The upper and lower faces of the rectangle represent the first and third quartiles of the distribution. The dashes inside the rectangles show the median. The lines extending below the rectangles indicate minimum values. The regulatory required ratio is 100%.

Source: NBU.

Figure 3.2.2. High quality liquid assets in all currencies and their share in net assets



At banks that were solvent at each reporting date. The percentage indicates the share in net assets. Benchmark government debt securities (T-bonds) indicate the nominal value. CA – current accounts. O/N – overnight.

Source: NBU.

The banking sector remains highly liquid

The banks maintain high liquidity. The LCRs, which have been rising over the past two years, are many times higher than their required minimums. The share of high quality liquid assets (HQLAs) accounts for almost 46% of net assets. The structure of these assets remains practically unchanged: hryvnia HQLAs consist mostly of certificates of deposit and domestic government debt securities, while FX HQLAs mainly comprise funds in correspondent accounts with foreign banks. The share of the latter is gradually decreasing as domestic requirements for the structure of FX HQLAs are gradually aligned with European requirements: correspondent accounts with banks as eligible HQLA are being phased out. Although liquidity risks could materialize during the war, the banks have a sufficient margin of safety to withstand these risks.

Customer deposits account for a record large share of funding thanks to stable deposit inflows

Rapid inflows of customer – both households and businesses – deposits to banks are continuing. These are mostly hryvnia deposits. Therefore, the banks are comfortably funded almost exclusively by these funds – by the end of the year the share of these deposits in liabilities had risen to over 92.5%, a historic high. Customer deposits are on the rise in the banks of all groups. As the banks did not need any additional funding, they continued to repay the NBU's refinancing loans – with the share of these loans in liabilities now at a record low. Since the start of the year, liabilities to international organizations have decreased further, by more than 18% (as of November), primarily due to repayments by foreign and state-owned banks.

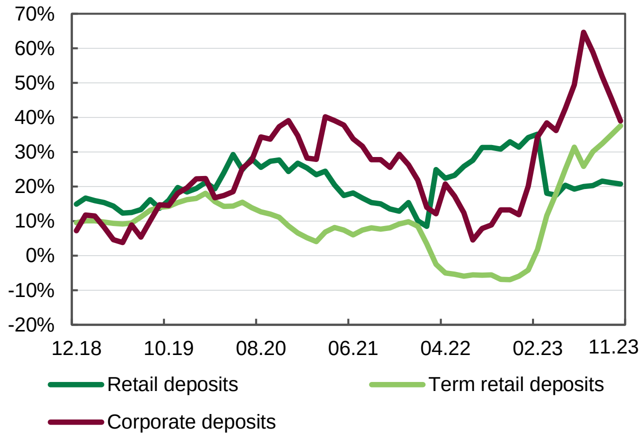
The banks are increasing funding, thanks primarily to corporate deposits

Corporate hryvnia deposits with banks are continuing to surge – by almost 48% yoy. The share of these deposits in total liabilities has almost made a half. That said, in early September, the growth in these deposits slowed. FX deposits have been slowly declining since the middle of the year, but still remained larger than their amount at the start of the year. As practically all deposits are, as usual, demand deposits, their amounts could fluctuate considerably. This does not pose any significant problems for the banks, as they have enough high quality liquid assets to manage their liquidity without any problems.

The amounts, maturities and sizes of household deposits are continuing to grow

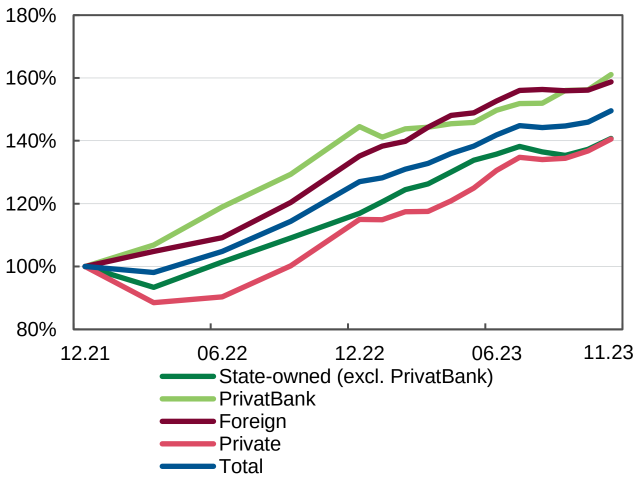
Households retain their confidence in financial institutions and actively use their services. In H2, the banks continued to raise hryvnia deposits from households. In November, these deposits were 22% larger than last year. Inflows of hryvnia funds to the banks are mainly generated by social benefits

Figure 3.2.3. **Growth in customer hryvnia deposits, yoy**



Household deposits include certificates of deposit.
Source: NBU.

Figure 3.2.4. **Growth in customer deposits in all currencies across groups of banks, 31 Dec. 2021 = 100%**



Household deposits include certificates of deposit.
Source: NBU.

Figure 3.2.5. **The dollarization rate of retail and corporate deposits**

Source: NBU.

and payroll payments. These, however, grew slowly in H2. The average size of a hryvnia deposit has increased by over 20% yoy in October. More specifically, the number of deposits of over UAH 600,000 has risen by more than one-and-a-half times.

Growth in household deposits varies across banks – deposits with private banks grew most rapidly, while those with foreign banks increased much more slowly. Two groups of banks are enjoying most active inflows into current accounts: those that have large payroll and social benefit projects, and those that attract customers through convenient mobile applications. Instead, competition for term deposits is based on interest rates. The cut in the NBU key policy rate gradually reduced deposit yields, as a result of which the growth of new term deposits slowed month-on-month. That said, the share of these deposits continued to grow slowly, reaching 35% in November. This indicator takes into account the reclassification of term deposits redeemable at short notice into demand deposits, which better reflects their economic nature.

The transition to the managed flexible exchange rate regime and the easing of some FX restrictions somewhat revived household demand for FX deposits. Overall, the growth in FX deposits, both term and demand deposits, is rather moderate.

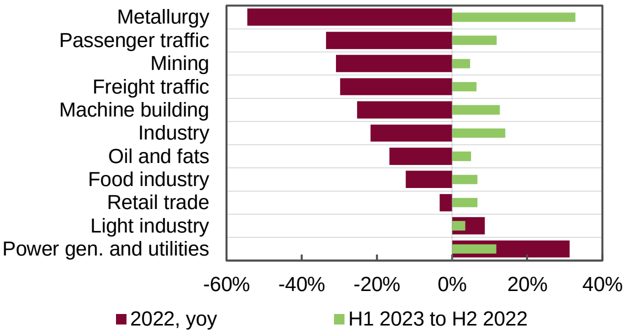
The share of FX deposits has hit a low not seen in two decades

The dollarization rate of customer deposits is steadily declining. In November, it was 31.9%, which is comparable to the figure seen before the full-scale invasion. After the start of the full-scale war, the share of FX deposits increased just once, due to the exchange rate adjustment in July 2022. The long-lasting trend toward a decrease in the role of FX funding is market-driven. FX deposits remain less attractive to households, as yields on hryvnia deposits are significantly higher and compensate for depreciation risks. The banks' opportunities for investing FX funds are also extremely limited, given the weak demand for FX loans and the government's low need to borrow FX from the domestic market. Therefore, in the absence of significant shocks, moderate exchange rate fluctuations will not stop the dedollarization trend.

3.3. Corporate Lending Risk

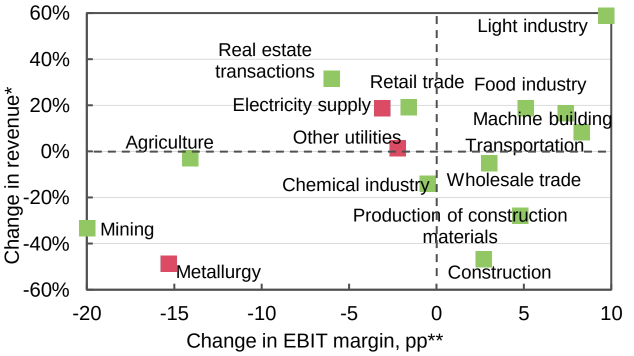
In 2023, the revenues and profitability of companies in the real sector rose, and producers' expectations improved. Almost all key industries have increased their outputs and volumes of sales. Businesses' debt burden have also been normalizing. Together these factors are pushing up demand for loans, thus driving an increase in the banks' hryvnia loan portfolios. Foreign currency lending remains subdued. The asset quality review confirmed that most banks are properly assessing their credit risks. Due to favorable economic conditions, the ratio of non-performing loans has hardly increased, and the banks did not have to recognize additional credit losses. Provided there are no new shocks, lending will stay active, and portfolio quality will remain acceptable.

Figure 3.3.1. Volume of sales of goods and services by key industries



Source: SSSU, NBU estimates.

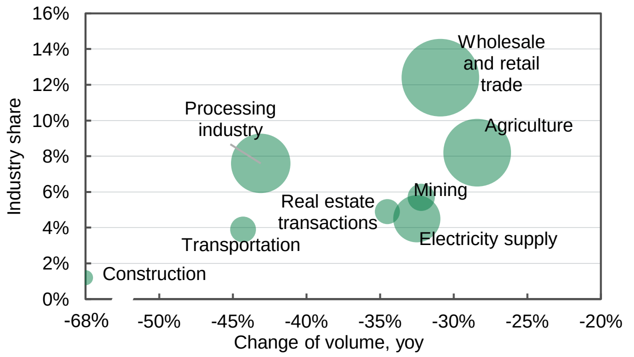
Figure 3.3.2. Change in revenue and EBIT margin in 2023 compared to 2021



* Change in revenue for the 12 months ending September 2023 (for agriculture for 2022) compared to the 2021 revenue.
** Change in operating margin for the first nine months of 2023 (for agriculture in 2022) compared to the 2021 margin.
Operationally unprofitable industries in the first nine months of 2023 are marked in red.

Source: SSSU, NBU estimates.

Figure 3.3.3. Structure and change in value added by industry in 2022 and volume of net corporate loans



The sizes of the circles correspond to the amount of performing net loans as of 1 October 2023.

Source: NBU, SSSU.

Business is recovering, and sentiment is mostly positive

In 2023, businesses have been generating bigger incomes and maintaining good performance indicators. Revenues[3] for the first three quarters of 2023 were slightly higher than in the same period of 2021. However, price growth was the main driver of higher income, while the output of most industries was still much below pre-war levels, despite some growth. Companies remain optimistic to a certain degree in their forecasts of further economic growth: the business outlook index has been above the neutral level of 100% since spring (read more in the Business Outlook Survey).

Industries that are largely focused on the domestic market, such as the wholesale and retail trade, light industry, and the food industry, are doing the best. Their incomes are fueled by households' consumer demand, and – for some industries – by orders from the defense sector. Meanwhile, exporting industries are suffering from complicated logistics and lower prices.

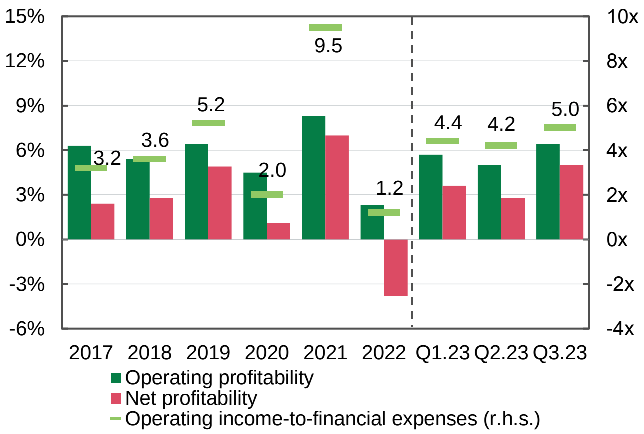
The situation is difficult in agriculture this year, although harvests of the main agricultural crops grew markedly thanks to favorable weather. However, global prices for agricultural products are lower than last year. Ukrainian farmers are facing an additional problem: prices for their products are now much below the global prices. The destruction of the Danube transport infrastructure, the shutdown of the grain corridor, and transit restrictions at the border with the EU countries slowed down agricultural exports and necessitated additional logistics costs. On top of that, production costs are rising. Low margins have weakened the financial sustainability of agricultural producers and made it difficult to prepare for the next season. In view of this, farmers will continue to need concessional loans, in particular through government support programs.

The availability and low cost of raw materials fueled growth in food production. Vegetable oil production made a noticeable contribution to the improvement in performance. In the 2022–2023 marketing year, oil exports were close to record levels.

Retailers are increasing their revenues thanks to a pickup in consumer demand. The business expectations of trading companies have been the most optimistic among all sectors for the second quarter in a row. The expected further increase in trade turnover will contribute to the growth in the sector's

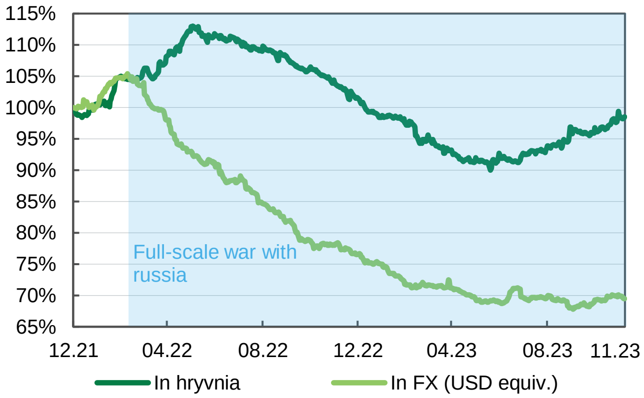
[3] Here and below, the data do not capture small companies for the calculation of financial performance indicators of real sector companies.

Figure 3.3.4. Profitability and debt burden of the real sector



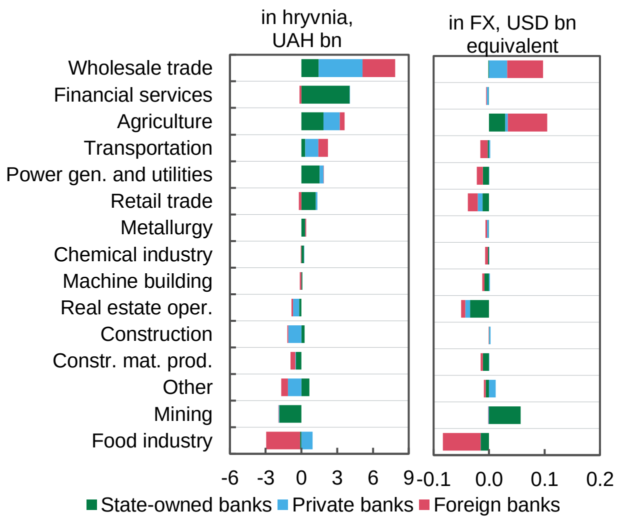
Source: SSSU, NBU estimates.

Figure 3.3.5. Net corporate loans, December 2021 = 100%



Source: NBU.

Figure 3.3.6. Change in net corporate loans by industry, from 1 June 2023 through 1 November 2023



Loans exceeding UAH 2 million.

Source: NBU.

revenues and stimulate companies' demand for loans – primarily for working capital loans.

Metals companies that have retained their production capacity and continued working are increasing production volumes. The main reasons for the positive dynamics are production optimization, sustained energy supplies, and improved logistics, including by sea. However, in the first three quarters of the year metals companies again made losses – although the losses were several times lower than last year. Mining production volumes are slowly growing. However, the retained capacities are underutilized. Exports of iron ore and potentially metals through the Black Sea ports are gradually being restored, despite there still being significant security risks.

Companies' profitability and debt burden normalized

In the first nine months of 2023, companies generally remained profitable: their operational profitability was 5.7%, and net profitability was 3.8%. These indicators remained below the record-high values of 2021, but were still commensurate with average pre-pandemic levels. The share of companies with operating losses has been declining gradually. The average ratio of operating profit to financial expenses was 4.5x, compared to 0.9x for the same period of last year. An improvement in debt burden was driven by an almost threefold increase in operating profit, as well as by a decrease in financial expenses thanks to programs offering cheaper loans.

Higher loan demand from businesses drove portfolio growth

The sustained revival of economic activity is fueling businesses' demand for loans. Higher demand is contributing to the growth of the hryvnia loan portfolio. From June to November, net hryvnia corporate loans grew by 7.6%. However, the portfolio is still below last year's levels.

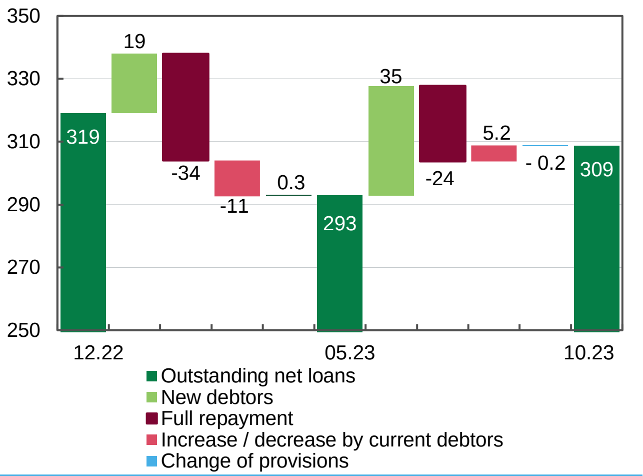
Loans are growing primarily on account of loans to trading and agricultural companies. The key recipients of the new loans are those sectors that are key to the economy. Loans to finance companies also grew rapidly, driven by the banks' collateralized financing of Ukrfinzhytlo.

Unlike hryvnia lending, FX one is stagnating. Since the full-scale invasion, the FX loan portfolio has fallen by one third in U.S. dollar terms. Demand for FX loans from companies engaged in foreign economic activity remains depressed. Both banks and borrowers are realistically assessing the significant risks of lending to borrowers that do not have FX revenues.

State programs are supporting lending; portfolio are becoming more diversified

For a long time after the start of the full-scale invasion, almost all new loans were provided with the support of state programs. At the same time, unsubsidized lending started to recover in recent months. In particular, the banks that are not current participants in state programs have been increasing their hryvnia loan portfolios.

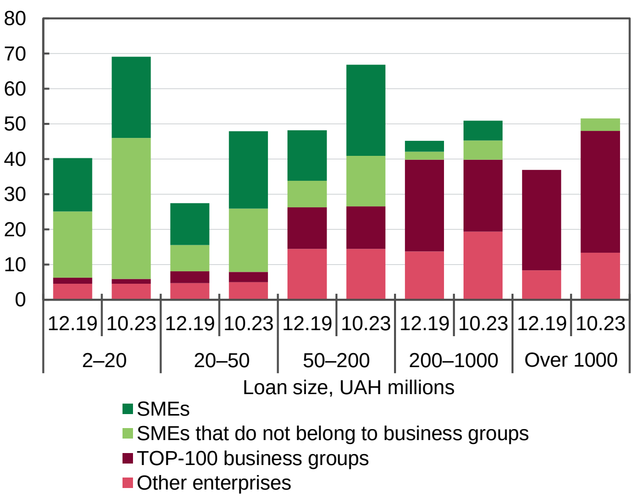
Figure 3.3.7. Factors of change in gross hryvnia loans, UAH billions



Loans exceeding UAH 2 million.

Source: NBU.

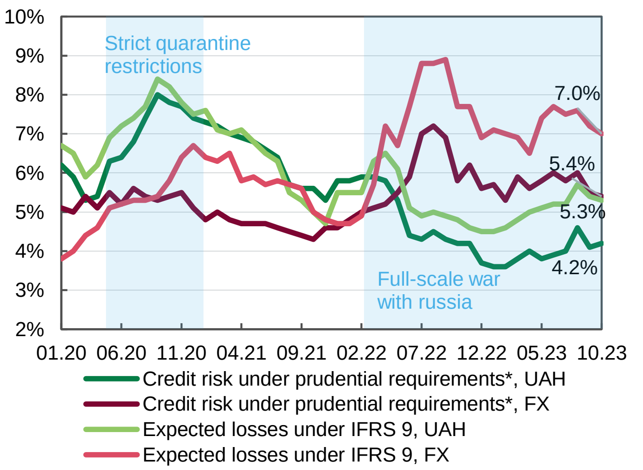
Figure 3.3.8. Net hryvnia corporate loans by debtors group and loan amount, UAH billions



Loans exceeding UAH 2 million.

Source: NBU.

Figure 3.3.9. Provision coverage of performing corporate loans



* Credit risk according to Regulation No. 351.

Source: NBU.

The focus of state programs on lending to small- and medium-sized enterprises has contributed to the growing role of this segment, which now accounts for more than 56% of the net hryvnia corporate loan portfolio, a quarter of which does not belong to business groups. Active lending to small businesses reduces the concentration of bank balance sheets and lowers risks. Over the past four years, the share of loans under UAH 50 million has increased from 34% to 41%.

However, another revision of the design of the *Affordable Loans 5-7-9%* program in September slowed its expansion (read more in Affordable Loans 5-7-9% Program Will Become More Focused). The program now allows higher rates for working capital loans, while rates remain low for investment loans and for companies in the zones of high war risk. Demand for these loans is weaker. Large companies are to be excluded from the program in the near future.

Loan Rates are Gradually Declining

Lower cost of loans is fueling businesses' interest in borrowing. Since the start of the year, weighted average interest rates on hryvnia loans to corporations have decreased by 1.3 pp, to 18.9% per annum. According to Bank Lending Survey, the change in interest rates is one of the key factors behind the revival in demand. Given businesses' optimistic performance indicators, demand for loans will continue to grow. Lenders' confidence is reinforced by the satisfactory financial position and debt metrics of most industries.

Credit risk decreased; provisions did not grow

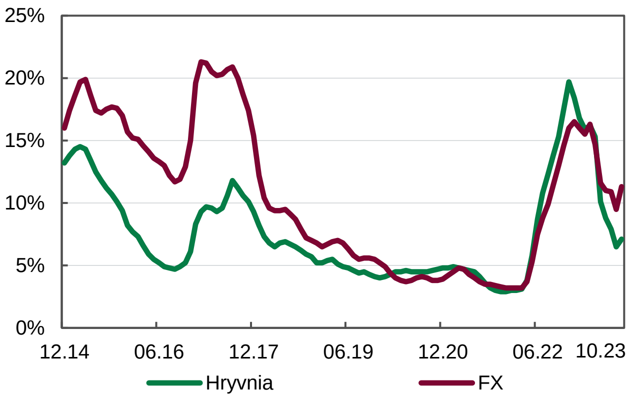
The ratio of non-performing corporate loans has stabilized at around 45%, almost one-and-a-half times higher than in February 2022 (read more in Box 1. Causes of Business Defaults during the Full-Scale War). Since the start of the full-scale invasion, out of the loans existing at the start of the invasion, 19% of debtors defaulted, and default has been declared for around 25% of corporate loans by amount. Most of the loans became non-performing in 2022. At the same time, only around 5% of debtors defaulted in the first ten months of 2023, which is commensurate with periods of macroeconomic stability.

The share of restructured loans among performing net loans remains significant, at 19%. Of these, 2%, or UAH 7 billion, are large loans from state-owned banks, which were settled in accordance with the Law of Ukraine *On Financial Restructuring*. Due to the significant loss of value for banks (significant extension of the term and reduction of the interest rate) as a result of the restructuring, these loans were recognized as purchased or originated credit-impaired (POCI). These loans are currently being serviced, but the risks of insolvency of the debtors for which the banks had to make concessions and restructure the debt are higher than for the portfolio as a whole.

In general, banks are assessing credit risks adequately

The NBU has completed an asset quality review (AQR) of the twenty largest banks, which account for 94% of the corporate

Figure 3.3.10. Default rate of borrowers over 12 months, smoothed data



Loans exceeding UAH 2 million.

Source: NBU.

loan portfolio. Its results show that the banks are assessing risks adequately. Adjustments to prudential provisions, which are assessed in accordance with Regulation No. 351, amounted to only 2%. During the review, around 8% of debtors in the sample were declared to be in default. Most of them were small clients. Significant reclassifications took place only at four banks. Amid regulatory easing, the banks sometimes did not assess critically enough the financial standing of their clients and their ability to service at least the interest on their loans from operating profit. In October, the NBU amended the rules for credit risk assessment by the banks, taking into account the detected shortcomings. The NBU also verified the value of large loan collaterals as part of the resilience assessment. Even before the AQR, the banks barely took into account collateral located in areas of high security risk.

The increase in financial provisions (under the IFRS) for individual impaired loans was offset by a decrease in provisions for loans assessed on a portfolio basis, due to improved economic expectations. Thus, in 2023, the banks recorded almost no additional provisioning costs. The level of prudential provisions for corporate loans remains below the level of financial provisions. As the banks take a prudent approach when issuing new loans, and as work continues to resolve non-performing loans, the level of credit risk will remain acceptable and provisioning costs moderate in the absence of macroeconomic shocks.

Table 1. State of the corporate loan portfolio as of 1 November 2023

No.	Industry	Gross performing loans				Loans migrating* to NPLs in 12 months		NPL ratio**	Breakdown of loan volumes by the location of debtors' actual operating activity***				Distribution of loans, *5-7-9%* (out of UAH 128 bn total)
		total, UAH bn	of which SMEs, UAH bn	provision coverage under IFRS	credit risk coverage	by number	by debt amount		temporarily occupied by russia	intensive hostilities	possible hostilities	other	
1	Agriculture	99	82	5.8%	4.0%	6.9%	6.9%	15.3%	0.2%	1.3%	8.3%	90%	51.1%
2	Mining	2	1	4.0%	7.2%	7.9%	25.5%	51.0%	0.0%	0.0%	0.0%	100%	0.0%
3	Food industry	45	20	6.8%	4.1%	5.3%	9.2%	23.7%	0.4%	0.2%	8.6%	91%	8.2%
4	Light industry	2	2	2.7%	4.8%	5.8%	4.1%	14.9%	0.0%	1.6%	0.1%	98%	0.5%
5	Chemical industry	6	5	5.6%	2.6%	3.7%	18.4%	22.7%	0.0%	0.0%	15.5%	85%	2.6%
6	Production of construction materials	3	1	4.4%	4.7%	10.1%	24.1%	30.3%	2.3%	0.0%	1.9%	96%	0.6%
7	Metals industry	6	5	5.3%	3.5%	7.0%	25.3%	55.5%	0.0%	0.6%	8.1%	91%	1.7%
8	Machinery production	6	4	8.5%	4.0%	9.1%	5.9%	47.4%	0.0%	0.2%	11.5%	88%	1.4%
9	Electricity supply and public utilities	8	6	4.6%	6.4%	13.0%	23.5%	25.4%	0.0%	0.4%	1.2%	98%	0.3%
10	Green energy	14	9	5.1%	3.7%	10.1%	21.5%	55.7%	0.6%	0.0%	13.2%	86%	0.7%
11	Construction	4	2	2.7%	4.7%	17.1%	19.6%	71.9%	1.2%	2.8%	4.4%	92%	1.2%
12	Trade in vehicles	4	3	5.4%	2.5%	2.5%	1.3%	14.0%	2.6%	0.6%	9.6%	87%	1.9%
13	Wholesale trade	84	53	6.8%	5.9%	6.8%	14.9%	25.3%	0.3%	0.6%	4.8%	94%	17.4%
14	Retail trade	24	6	8.0%	7.3%	2.1%	0.3%	14.6%	1.6%	3.2%	5.7%	90%	5.0%
15	Transportation	12	8	5.7%	3.7%	7.7%	11.0%	24.6%	0.8%	0.3%	3.1%	96%	2.7%
16	Hotels	5	5	42.3%	15.2%	40.0%	9.2%	13.3%	0.0%	0.0%	0.0%	100%	0.0%
17	Real estate transactions	6	5	19.9%	17.0%	20.4%	46.2%	69.1%	0.0%	10.5%	3.8%	86%	0.1%
18	Commercial real estate	7	6	8.7%	4.6%	22.1%	46.7%	85.7%	0.0%	0.2%	3.1%	97%	0.3%
19	Financial services	4	3	3.3%	4.6%	19.0%	28.5%	31.8%	0.1%	0.1%	0.1%	100%	0.1%
20	Other	17	10	4.2%	4.6%	7.4%	10.0%	23.5%	4.0%	3.9%	6.7%	85%	4.1%
21	State-owned companies	70	6	2.0%	3.5%	9.9%	6.9%	10.1%	14.9%	3.2%	10.4%	72%	0.0%
	Total	**431**	**243**	**6.1%**	**4.9%**	**7.5%**	**12.6%**	**31.1%**	**2.9%**	**1.5%**	**7.4%**	**88%**	**100%**

* Default rate of borrowers within the 12 months prior to the respective date, in accordance with Regulation No. 351. ** The calculation of the NPL ratio does not include Privatbank loans granted to companies related to former shareholders and their related parties (taking into account such loans, the total NPL ratio is 45%). *** Distribution of territories in accordance with the order of the Ministry of Reintegration No. 309 *The List of Territories where Military Operations Are (Were) Conducted or that are Temporarily Occupied by the Russian Federation* dated 22 December 2022 (as amended by order of the Ministry of Integration No. 164 dated 31 May 2023) on the basis of the bank survey as of 1 July 2023.

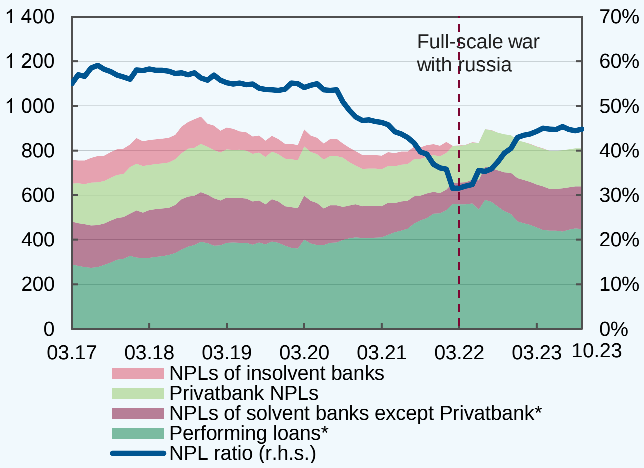
Source: NBU.

Box 1. Causes of Business Defaults during Full-Scale War

The experience of past crises has improved banks' credit risk management practices. Financial institutions have tightened their lending standards, assess credit losses on time, report them properly, and are proactive in restructuring borrower debts. All of this has contributed to the proper assessment of loan performance during the full-scale war. The ratio of non-performing loans in the corporate portfolio has increased by 13 pp, primarily due to the financial difficulties of those borrowers who had already been running high credit risks prior to russia's full-scale invasion. A third of the new NPLs emerged due to physical destruction or occupation. The banks have offered their clients effective debt restructurings and are continuing to receive at least partial repayments.

In Ukraine, the NPL ratio has remained high for a decade. The ratio surged during the 2014–2016 crisis, highlighting long-standing problems resulting from the sector's poor credit standards: lending to borrowers with a poor financial standing and banks' related parties, and high portfolio concentration (see Box 2. Non-Performing Loans: A Result of the Crisis and Low Lending Standards, June 2019 FSR). The new, enhanced regulatory requirements for risk assessment and a stress testing prompted the banks to recognize the true quality of their loans. In 2017, the corporate NPL ratio peaked at almost 59%. State-owned banks held a large portion of the NPLs.

Figure B.1.1. Gross corporate loans, UAH billions



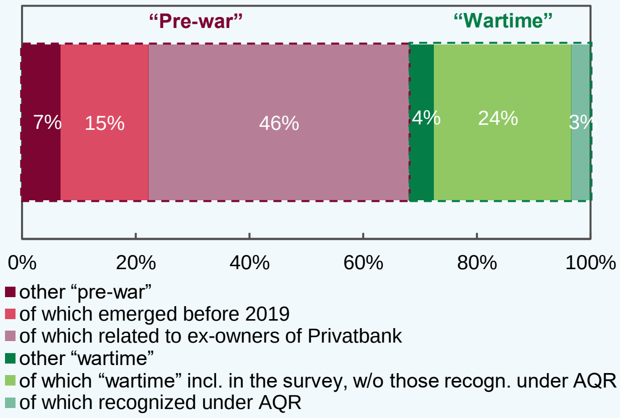
* At banks solvent as of 1 November 2023.

Source: NBU.

Resolving the NPL problem required systemic solutions. The NBU set requirements for the system of impaired assets management in banks and expanded the list of NPL resolution tools. Coupled with the tightening of lending standards, this produced tangible results. By March 2022, the corporate NPL ratio in solvent banks had shrunk to 31%. Almost two-thirds of these loans had been made to companies related to the former owners of Privatbank.

The full-scale war triggered a new wave of client defaults. In early October, the banking sector's ratio of corporate NPLs was already 44%, and their volume was UAH 359 billion. Corporate loans that turned non-performing during the full-scale war ("wartime" NPLs) make up about one-third of the total NPL portfolio.

Figure B.1.2. Corporate NPL breakdown by volume as of 1 October 2023



NPLs recognized before 1 February 2022 are referred to as "pre-war", and those afterwards as "wartime". Loans exceeding UAH 2 million.

Source: NBU.

To identify the drivers of credit losses in the corporate portfolio, the NBU surveyed 20 banks that have undergone a resilience assessment this year. Combined, they hold 94% of corporate loans. The survey aimed to single out the reasons for the defaults of the largest borrowers whose loans went non-performing after the start of the full-scale invasion. The survey also drew on data on loans that were recognized as defaulted on the basis of the NBU's asset quality review (AQR). A total of 408 borrowers with UAH 93 billion in loans – 87% of all "wartime" NPLs – were analyzed.

The factors driving default during the full-scale war can be categorized as follows:

F 1. significant damage or destruction of the property the borrower needs to do business

F 2. all or a significant part of the borrower's business is located in the battle zone or temporarily occupied areas

F 3. the bank lacks data on the borrower or the borrower's business to assess debtor solvency

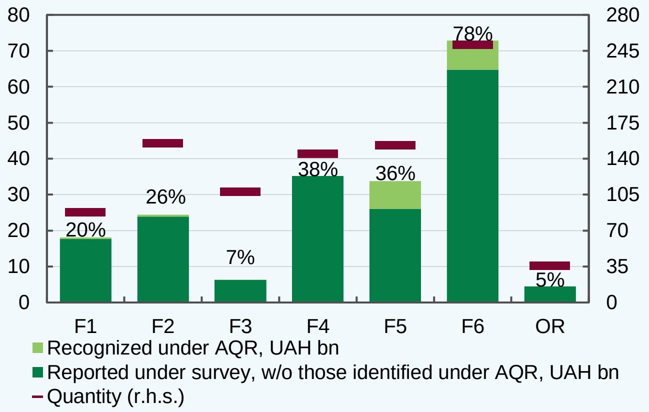
F 4. declining domestic demand or a difficult situation in the domestic market

F 5. the borrower's loss of their market

F 6. the borrower's unsatisfactory financial standing.

Debtors' defaults may have been driven by a combination of factors. Borrowers that defaulted for reasons other than those specified above are denoted as ORs.

Figure B.1.3. Borrower default factors while under martial law, gross NPLs as of 1 October 2023



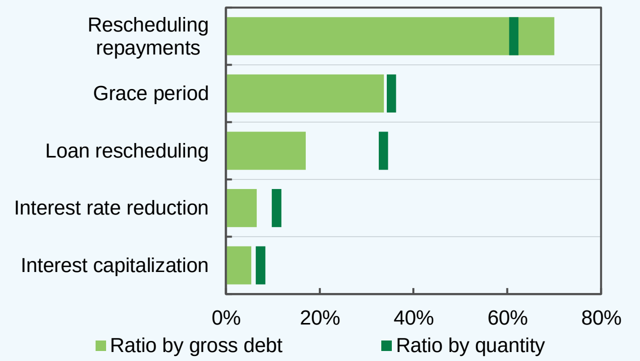
If the borrower's default was caused by multiple factors, the amount of debt fell into several columns at once. Therefore, the debt due to the totality of the factors exceeds UAH 93 billion. The share of the loans that were defaulted on because of a specific factor is given as a percentage.

Source: bank survey.

The loans of the borrowers affected by damage to, destruction, or occupation of production facilities make up 33% of the total volume of new "wartime" NPLs. In addition, 1% of the loans are held by clients for which *loss of contact with the borrower* was the only factor in the default. Finally, 60% are the loans to clients that faced financial trouble that was not a direct consequence of occupation or the destruction of property. It was this factor of default that came up most often during the AQR. Clients that defaulted only because of a generally unsatisfactory financial standing hold 15% of "wartime" NPLs (F6). A significant portion of clients with financial problems showed signs of high credit risk prior to the full-scale invasion. Such clients hold half of the "wartime" NPLs. The high-quality and timely assessment of credit risk by banks is evidenced by the fact that 55% of reviewed loans were recognized as defaulted before the debt was more than 90 days past due.

The banks are actively working to resolve new non-performing exposures, primarily through restructuring. The banks have restructured UAH 73 billion, or more than 89% of loans included into the survey, except those recognized in the course of the AQR. "Wartime" restructurings most often involve granting the borrower a loan repayment holiday of 6–9 months, extending the loan, and changing the repayment schedule. Clients that have defaulted due to financial difficulties or market conditions have the highest chance of recovery among all client categories.

Figure B.1.4. Tools to restructure "wartime" NPLs, as of 1 October 2023

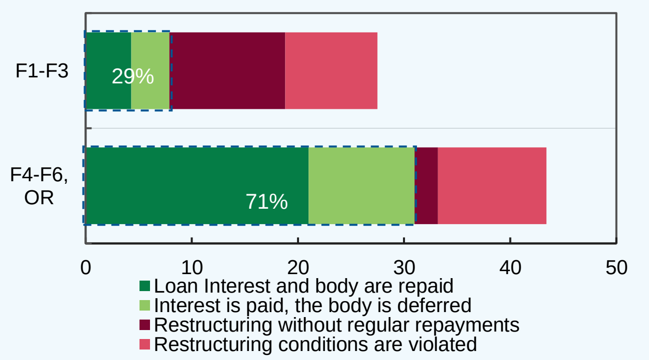


The banks can use several restructuring instruments at the same time. The amount of a borrower's debt was therefore calculated for several instruments at once. The sum of debt shares for all instruments thus exceeds 100%.

Source: bank survey.

Financial institutions are pessimistic when assessing the prospects of restoring the solvency of debtors whose core assets are lost or located in the occupied territories or the battle zone (F1–F2). More than 77% of such loans have been provisioned for. Their depreciated net book value is UAH 7 billion. Standard restructuring or resolution tools for such borrowers are currently not very effective. Partial debt servicing in this borrower cohort is done by companies in the borrower's group that have been spared the pain of occupation or destruction. Such cases are rare, however, and the banks generally receive no income from such loans. In contrast, more than three-quarters of borrowers whose production facilities have not been affected by hostilities continue to service their debt after restructuring their NPLs, and are often able to repay the principal.

Figure B.1.5. Compliance with NPL restructuring terms depending on debtor default factors, as of 1 October 2023, UAH billions



The first group includes borrowers for which at least one of the listed factors led to default. The second group comprises other debtors. The percentage shows the share of loans that are being serviced.

Source: bank survey.

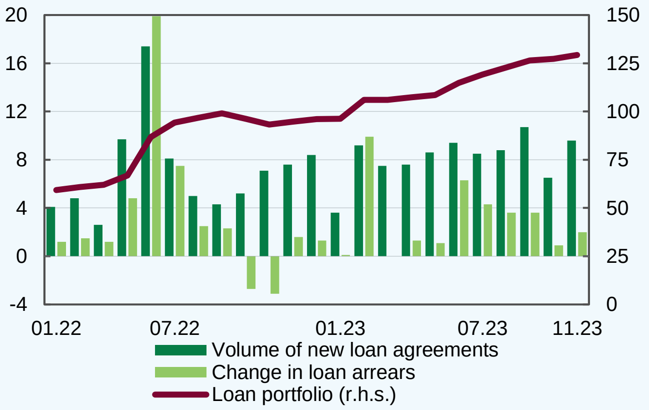
The experience of recent years shows that timely identification and work to resolve non-performing loans reduce banks' losses. Going forward, financial institutions therefore need to identify default-inducing events in a timely manner, and should be guided by more than just formal signs. To draw attention to the assessment of borrowers' financial standing, this autumn the NBU expanded the list of signs of default. At the same time, based on the results of the AQR and the state of credit risk management, the application of these criteria will not lead to a significant increase in the NPL ratio.

Box 2. Affordable Loans 5-7-9% Program will Become more Focused

The state program *Affordable Loans 5-7-9%* remains the main driver of business lending. Currently, the program's loan portfolio is of high quality and well diversified. The synergy of the program and portfolio guarantees has significantly widened customers' access to loans. However, over time, the program's structure became much more complicated, and the original focus of the program was lost. Economic recovery, the improved financial performance of businesses, and severe budgetary constraints necessitate narrowing the program's focus once again to support small- and medium-sized businesses and companies that are vulnerable to security risks. So the program will be transformed in the future.

During the full-scale war, the *Affordable Loans 5-7-9%* Program (the program) became the main driver of lending. Loans issued under the program already account for about 40% of the net hryvnia corporate portfolio. From 24 February 2022 through December 2023, the banks entered about 42,000 agreements worth over UAH 167 billion under the program.

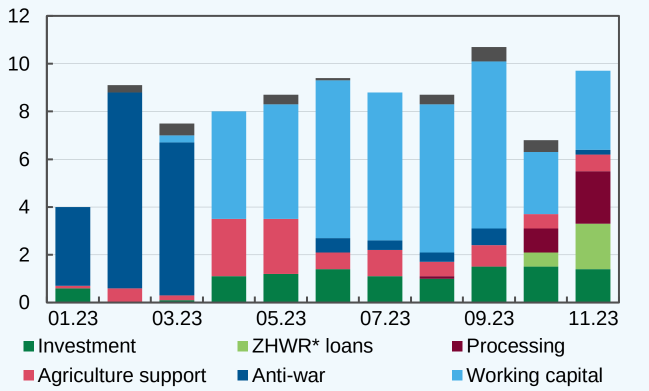
Figure B.2.1. Loans issued under the Affordable Loans 5-7-9% Program, UAH billions



Source: Business Development Fund, Ministry of Finance of Ukraine, NBU estimates.

In 2022, the program was repeatedly expanded to support war-affected sectors (read [Box1 Affordable Loans 5-7-9% Program Is the Driver of Corporate Lending](#), December 2022 FSR). This markedly increased the number of lending areas, and as a result the program lost its focus on supporting small and medium-sized businesses. This year, the government changed the design of the program several times. Initially, in March, all loans were broken down into two groups, depending on their purpose: investment and working capital loans. Interest rates on investment loans remained unchanged, while those on working capital loans increased. At the same time, better lending conditions – lower interest rates and larger loan amounts – persisted for loans in the priority areas of support: loans to agricultural producers and certain segments of the manufacturing industry; loans to rebuild destroyed production facilities; working capital financing for companies that are located in the war-affected territories; and support for trading companies. In September, the list of priority areas changed again, for example, all manufacturing companies could benefit from additional support. Conversely, interest rates on new working capital loans grew again, from 9% to 13%. The program has also stopped issuing new loans to large trading companies, a practice that started in 2022.

Figure B.2.2. Increase in lending agreements by areas of support, UAH billions

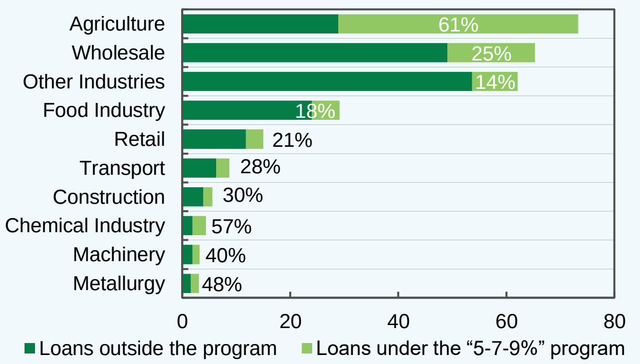


* ZHWR – zones of high war risk. ** Debt refinancing, anti-COVID loans, reconstruction, energy services, support for sole proprietors.

Source: Business Development Fund, Ministry of Finance, NBU estimates.

The scope of the program has grown beyond its planned amount. Therefore, the UAH 16 billion budgeted for interest rate compensation this year will not be sufficient. As a result, at the end of the year, the debt of the Business Development Fund, which manages the program, to banks will reach about UAH 5 billion. In 2024, the budgeted expenditures on the program will total UAH 18 billion. Since room for expanding the program is very limited, the program needs to become more focused.

Figure B.2.3. Gross performing hryvnia corporate loans as of 1 October 2023, UAH billions



Loans exceeding UAH 2 million. The share of *5-7-9%* loans issued to each industry is indicated as a percentage.

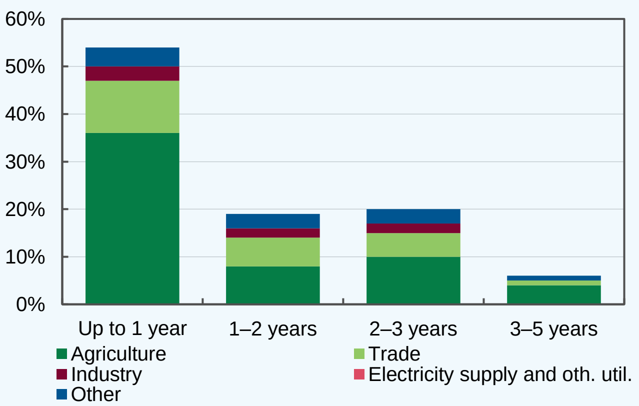
Source: Business Development Fund, NBU estimates.

Despite many changes made to the program's terms and conditions, its sectoral structure has changed little over the past year. Agricultural companies (49% of the program's portfolio at the beginning of December), trading companies (26%), and industrial companies (15%) have remained the main beneficiaries of the program. In the agricultural sector, the share of concessional loans has already hit 61% of all performing hryvnia loans. At the same time, the bulk of the loans was issued to small and micro agricultural companies. Agricultural producers that took concessional loans generated over a third of the sector's revenues in 2022. This figure, which is the highest across all industries, shows the sector's dependence on the program.

The most active ten banks participating in the program made 85% of approved loans under the program. At five banks, shares of concessional loans exceed one-third of their portfolios, while at one large state-owned bank it reached about 60%. At the same time, several large banks lost access to the program during the year. Although these banks are expanding their portfolios through other means, the loss of access to the program is creating market imbalances and is significantly distorting competition.

Most loans issued under the program are short-term, as they are provided to replenish working capital. Loans with maturities of up to one year account for over half of the portfolio. Therefore, changes in the program's terms and conditions rather quickly affect both the amount of spending and the terms and conditions of future borrowing. At the same time, some borrowers, such as agricultural companies, often extend their loans and use the funds for several years.

Figure B.2.4. Breakdown of program loans by residual maturity



Borrowers according to microdata as of 1 July 2023.

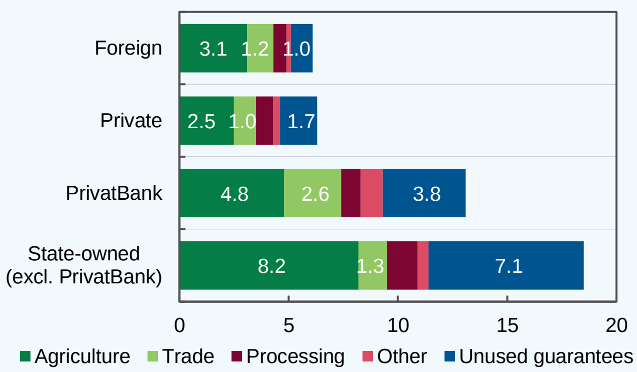
Source: Business Development Fund, NBU estimates.

The quality of program portfolio remains high. In 2022, the share of non-performing loans under the program rose from 1% to 8%. However, this had share dropped to 7% by October 2023, primarily thanks to an increase in the performing portfolio, and a low level of new defaults.

The program played a key role in supporting corporate lending during the most difficult period of the full-scale invasion. Access to the program was made as wide as possible. However, as the economy gradually recovers and the financial performance of businesses improves, the program's scope will gradually change. In particular, a memorandum with the IMF provides for a revision of the program. The focus should shift to supporting small- and medium-sized companies and those businesses that find it difficult to take out loans due to security risks. What is more, starting in 2024, borrowers under the program will have to meet environmental, social and governance (ESG) standards.

The effectiveness of the program can be improved by combining various instruments. Participants in the *5-7-9%* program can combine interest rate compensation with portfolio-based government guarantees. Some 29 banks have quotas for government portfolio guarantees. Soon, borrowers will also be able to receive guarantees from the Partial Credit Guarantee Fund in Agriculture.

Figure B.2.5. Used portfolio guarantees across groups of banks and sectors as of 1 November 2023, UAH billions



Source: Ukreximbank, Ministry of Finance of Ukraine, NBU estimates.

Portfolio guarantees mainly compensate for borrowers' lack of high-quality collateral. Thus, they allow more businesses to take out loans and speed up the processing of loan applications. Two thirds of loans (by number) that are secured with government portfolio guarantees are loans of up to UAH 2 million. The guarantees cover approximately half of the loan amounts for which they were provided.

In early November, borrowers were benefiting from guarantees worth UAH 30 billion, which covered loans of UAH 63 billion. About UAH 20 billion of guarantees have been combined with the *5-7-9%* program. The state-owned banks take the lead in using these guarantees. The banks still have unused volumes of guarantees, so they can continue to use this instrument if there is demand.

The level of servicing the loans underpinned by guarantees is rather high. Since the guarantees were launched, the banks have sought compensation of UAH 300 million from the state, which is about 1% of the current amount of guarantees.

In addition to government guarantees, the banks can also benefit from other lending support programs, including guarantees and risk sharing programs offered by international financial institutions. Although moderate, the volume of these programs is rising.

Box 3. Banks Lend to More Financially Resilient Borrowers after the Sector Reform

The banking reform of 2014–2016 tightened the requirements for assessing risks, primarily credit risk, and was accompanied by the withdrawal from the market of banks that were not ready for new practices. This affected corporate lending conditions. The study found that the banks reduced the average loan amount, refocused toward more financially resilient clients, and offered them cheaper loans, which eventually made lending more affordable for the latter.

Banking crises often trigger deep economic downturns. To avoid their reoccurrence, regulators are tightening prudential requirements for market participants, taking into account the lessons learned. In Ukraine, the deepest banking crisis occurred in 2014–2016 due to problems accumulated in previous decades. To overcome its consequences and make the sector more resilient to potential future shocks, the NBU conducted a reform of bank regulation and supervision, and cleaned up the sector (hereinafter the reform). In particular, the NBU significantly tightened requirements for credit risk management by the banks. The new rules required a thorough risk assessment taking into account the clients' financial standing. Therefore, the banks' lending culture has changed.

Below are presented the results of a study of the reform's effect on corporate lending conditions in Ukraine. The study[4] comprised two stages: first, it determined how lending conditions and the banks' requirements for borrowers have changed; then it analyzed how quickly and on what terms companies that had loans from bankrupt banks were able to obtain new loans from other financial institutions. The study specifies Q1 2017 as the time when the reform was completed: by then, most of the new requirements were introduced and the withdrawal from the market of most banks that had failed to comply with them was completed.

The reform made lending more affordable for financially resilient clients

In the first part of the study, the average causal effects of the reform on loan characteristics and financial standing of borrowers (lending conditions) were estimated (the average treatment effect on the treated). It compared interest rates and spreads (the difference between the lending rate and the average interbank rate), the amount and maturity of loans, as well as the financial indicators of debtors (debt burden, return on assets and capital) for loans issued by the banks before and after the reform. In order to determine the impact of the reform itself on lending conditions, the loans in the sample were selected using matching methods: the sample includes loans issued before and after the reform, with the loans being similar in their key characteristics – except those for which the changes were studied.

The results suggest that the reform encouraged the banks to pay more attention to borrowers' financial standing and eventually made lending more affordable for more financially stable clients. On average, after 2017 profitable firms have been by 7.3% more likely to receive loans compared to the pre-crisis period. Since then, the banks' corporate borrowers have had a higher return on assets and lower debt. Due to a lower debt burden and a larger share of equity, debtors on average demonstrate a lower return on equity, although for profitable companies this difference is not significant.

After the reform, the banks have been more willing to provide smaller loans, and the concentration of the loan portfolio has decreased accordingly. Following the crisis, the average loan amount decreased by 15.4% in foreign currency equivalent. Loans to loss-making enterprises almost halved in size. However, the maturity of loans remained unchanged. As the reform coincided with a decrease in interest rates, the rates also declined for loans issued after 2017. At the same time, interest spreads narrowed for profitable borrowers: lower risks for the banks led to a decrease in the risk premium included in the interest rates.

Table 2. Effects of the reform on lending conditions

Indicators	Impact	
	All companies	Loss-making companies
Loan amount, EUR thousands equiv.	-27.89**	-83.39*
Interest rate, pp	-5.10**	-5.06**
Interest rate spread, pp	-1.86**	-0.57
Loan maturity, days	12.12	-7.11
Profitability	1.07**	-
Debt / EBITDA (debt burden)	-1.11**	0.49
Return on assets, pp	0.70**	4.82**
Return on equity, pp	-1.86**	-4.97

**, * indicate coefficient significance at the 1% and 10% level respectively. Profitability is a binary variable: 1 for profitable and 0 for loss-making companies.

Source: NBU estimates.

Profitable and disciplined firms were more likely to obtain new loans after the failure of former lenders

The second part of the study outlines the determinants of new loans issued to firms that had loans from bankrupt banks. To this end, survival models were used. The results indicate that profitable clients of bankrupt banks are by 79% more likely to receive a new loan than loss-making ones. If a company has loans from several banks at the same time, it also increases the chances of receiving a new loan after its lender's bankruptcy. However, borrowers that defaulted on their loans in the past receive new loans 55% less often compared to firms that serviced their debts on time. No significant effect was detected from company size and its debt burden on its ability to take out new loans.

The study found that less reliable banks that later left the market issued loans to their clients almost two times faster than resilient banks – over the year. The financial performance of firms with loans at the banks that closed during the reform deteriorated over time in comparison with those of the firms that received loans from other banks.

[4] For full description of this study see Bazhenova, Y. (2023). Effects of Banking Sector Cleanup on Lending Conditions: Evidence from Ukraine. IHEID Working Papers No. 06-2023, Economics Section, The Graduate Institute of International Studies.

Box 4. Impact of Lending Conditions on Corporate Lending Is Significant but Not Decisive

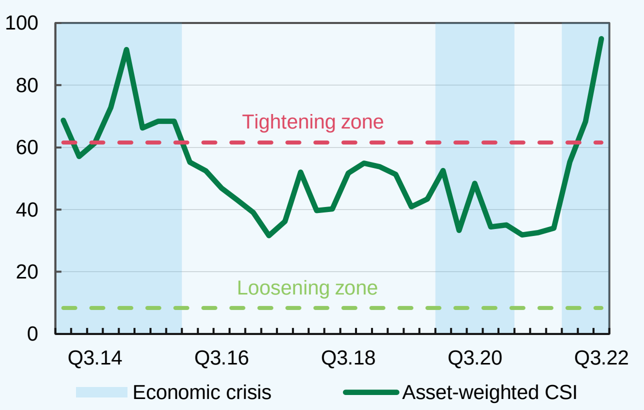
Analysis of corporate lending drivers shows that it has been slowed partially by the tightening of lending standards. However, economic growth and loan portfolio quality have a stronger impact on lending.

Lending activity is determined by both borrowers' demand for loans and creditors' readiness to meet that demand. Below are presented the results of a study of the impact of supply and demand factors on lending in Ukraine. The first stage of the study assessed the credit standards index (CSI), which reflects the supply of loans with regard to lending conditions. At the second stage, the study assessed the impact of the CSI and a number of other indicators, in particular the drivers of loan demand, on the volume of bank loans issued to businesses. The study[5] used data from 56 solvent banks, which accounted for 90% of the banking sector's assets, for the period from Q1 2013 to Q3 2022.

The banks reduced the supply of loans during crises

Lending surveys of banks are a key source of information on lending conditions. They often feed into scientific research. Such surveys are also conducted among Ukrainian banks. One of the questions in the survey is "How did the standards for approving applications for corporate loans change over the quarter that has just ended?" Responses to this question can be categorized as "tightened", "remained unchanged", or "eased". Using the Ordered Logit Model, the banks' responses were attributed to such factors as the hryvnia depreciation, economic growth, liquidity, interest rates on new interbank loans, and competition among banks. The model transforms questionnaire responses into assessments of the probability that their lending standards will tighten, later normalized to values ranging from 0 to 100 – thus producing the CSI. Higher values of the index signal a higher probability of lending standards tightening, and thus a decrease in the supply of loans.

Figure B.4.1. CSI weighted average by assets



The thresholds of tightening and easing zones were defined under the model.

Source: NBU estimates.

The banks most often reported unchanged lending standards, so the model forecasts such responses the most accurately. Since the survey was launched, only 28% of the responses pointed to a tightening of lending standards, and another 10% to their easing. This information is sufficient for the model to signal even a small change in the probability of the tightening or easing of lending standards, which is explained by the mentioned macroeconomic factors. The findings show that a tightening of lending standards is primarily determined by growth in interbank interest rates and a decline in economic activity, while an easing is driven by competition among banks. The asset-weighted average CSI indicates a tightening of lending standards in the banking sector only in 2015 and 2022, which coincides with crisis episodes.

The influence of supply on corporate lending is significant, yet not decisive

In the second stage of the study, the change in volumes of new corporate loans was explained by a number of factors, including the CSI as an indicator of supply. Other factors included economic activity as a measure of demand for loans, the level of interest rates, the non-performing exposures ratio, the banks' liquidity, and access to funding. The assessment was made using fixed-effects panel regression. The results prove that a tightening of lending standards restrains hryvnia lending. An increase in the CSI by one unit, which is comparable to lending standards tightening by the banks that account for 1% of the sector's loans, leads to a 0.7% decrease in new hryvnia lending. This effect occurs in six months. A stronger effect from the change in the CSI was detected for smaller banks: it was significant for both hryvnia loans and FX loans. At the same time, growth in real GDP has a major positive impact on new lending, driving an increase in demand for loans and a decrease in the ratio of non-performing exposures.

Table 3. Impact of lending drivers on change in volume of new corporate loans

Variable	Hryvnia loans	FX loans
CSI	-0.7%*	-0.7%
Real GDP change, yoy	1.0%*	3.0%*
NPL ratio	-0.2%*	-0.3%*
Interest rates on new deposits	1.0%	3.2%
Interest rates on new loans in respective currency	2.1%	0.7%
Liquidity coverage ratio	0.1%	0.3%

* The factor's statistical significance is 0.1%.

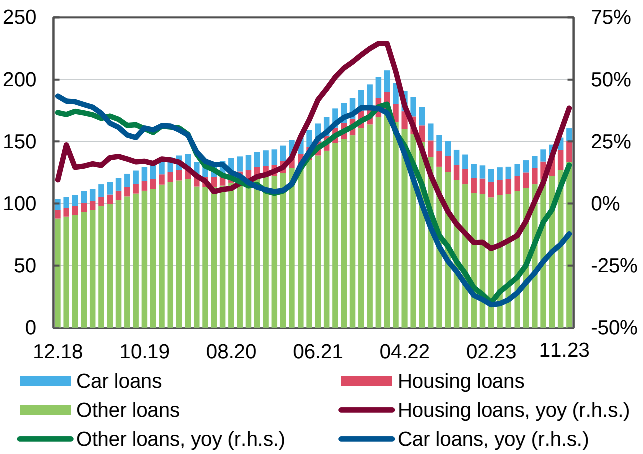
Source: NBU estimates.

[5] For full description of this study see Hlazunov, A. (2023). Corporate credit growth determinants in Ukraine: bank lending survey data application. IHEID Working Papers No. 16-2023, Economics Section, The Graduate Institute of International Studies.

3.4. Retail Lending Risk

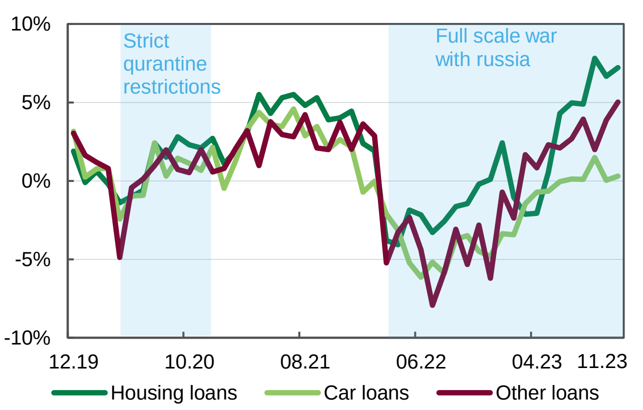
The retail loan portfolio is growing steadily after a long decline caused by the full-scale war. Recovery is being observed in two segments: mortgages and unsecured loans. Unsecured consumer loans are growing rapidly. Mortgage lending is growing only thanks to the state support program, while car lending is constrained by its high cost. Even if lending continues to grow strongly, the banks will not be able to restore their pre-war lending penetration levels for a long time. Portfolio quality is gradually improving, and the share of nonperforming loans (NPLs) is declining due to portfolio growth. However, loan impairment rates are slightly higher than before the full-scale invasion.

Figure 3.4.1. Net hryvnia retail loans, UAH billions



Source: NBU.

Figure 3.4.2. Change in net loans, mom



Source: NBU.

The retail loan portfolio is growing

Retail lending has been steadily recovering since spring. November was the ninth month of continuous growth in the net retail loan portfolio in the hryvnia. The average growth rate over this period was about 2.6% per month. Despite the continued growth, the volume of loans is still a quarter lower than it was before the full-scale invasion. Mortgage lending and unsecured consumer lending are increasing every month. The main reason behind this is the revival of demand for loans, as seen from the banks' estimates given in lending surveys and improved consumer sentiment.

Unsecured loans clearly dominate the portfolio structure

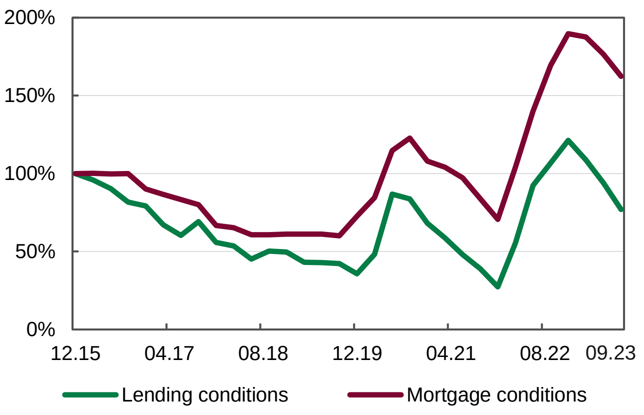
Unsecured consumer loans continue to form the basis of the retail loan portfolio, accounting for 83%. Over the last six months, this portfolio has grown by 21%, which is more than in 2021. However, this is a growth from a rather low base, and only a few financial institutions are increasing their portfolios. Portfolios are actively growing in the banks of a classic retail business model. Two of the leading banks in terms of the net hryvnia portfolio have already restored their portfolios to their pre-war sizes. At the same time, universal banks are at best maintaining the sizes of their portfolios. Developed online services and applications remain a key competitive advantage in the segment. Portfolios grow not only as the banks attract new clients, but also as they raise limits for existing ones. Limit increases are commensurate with nominal income growth, so they do not raise portfolio risks.

Almost all new mortgage loans are issued under state programs, and mainly by state-owned banks. Over the last six months, the net hryvnia mortgage portfolio has grown by 41%, which is more than the pre-war rate (read more in Section 2.2. Real Estate Market and Mortgage Lending). A full-fledged recovery in car lending is not yet in sight. Although demand for car purchases is picking up, high interest rates, large principal amounts, and long loan terms are holding back growth in this segment.

Retail lending will continue to grow

The current rapid growth in the portfolio is natural, as lending penetration declined significantly during the full-scale war. In 2022–2023, the ratio of retail loans to GDP decreased from 4% to 2.9%. Household consumption will continue to recover, and the banks are ready to meet the higher demand for loans. In the last two quarters, they have reported a marked easing of lending standards. Even at the current portfolio growth rate, it will take more than a year to bring this indicator to pre-war levels.

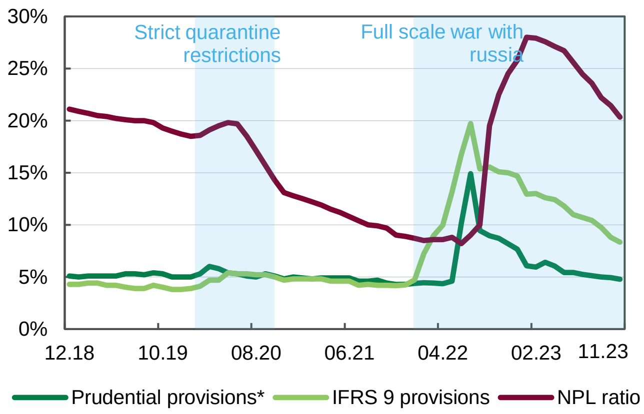
Figure 3.4.3. Lending standards for households



* The lines reflect the cumulative change in the balances of responses to the quarterly Bank Lending Survey question about how the criteria for approving retail loan applications have changed during the current quarter. An increase in the indicator points to a tightening in lending standards.

Source: NBU.

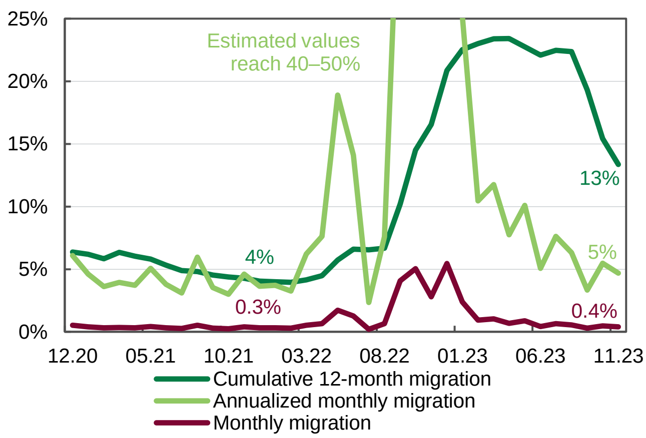
Figure 3.4.4. Provisioning for performing loans and the share of nonperforming hryvnia retail loans



* Credit risk, as measured according to Resolution No. 351.

Source: NBU.

Figure 3.4.5. Migration of hryvnia retail loans to Stage 3 under IFRS 9, % of loans at stages 1 and 2



Source: NBU.

Consumer loan defaults still slightly exceed pre-war levels

The wave of defaults caused by russia's full-scale invasion and the macroeconomic crisis was a powerful one. In 2022, more than 20% of retail loans became nonperforming. This was mainly due to a sharp decline in household incomes, although there were also significant losses of loans to borrowers who at the start of the full-scale invasion were registered in the territories that are currently occupied or affected by ongoing hostilities. These loans were analyzed separately during the bank resilience assessment. In April, as of the date of the resilience assessment, their share in the net portfolio was 5%. Two-thirds of the loans were recognized as nonperforming and were provisioned by 70%. Given the small size of this portfolio, the residual risks to the banks are insignificant, and these loans have likely been additionally provisioned for by now.

The retail loans default rate continues to be slightly higher than in 2021. A decline in the migration rate of performing loans into defaulted ones became visible only in recent months. The share of loans overdue for up to 90 days has also declined markedly in recent months. It is currently 3.8%, which is even lower than the average level of 2021.

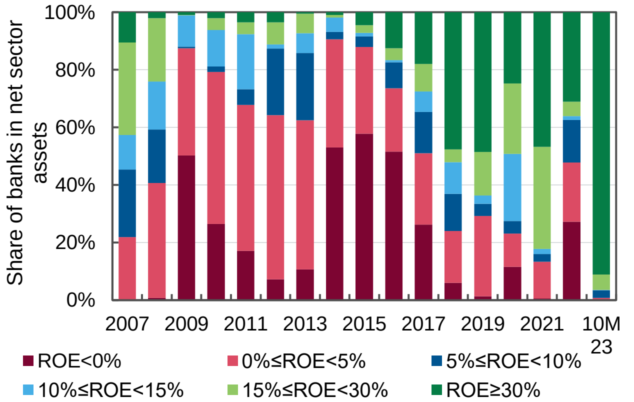
Despite the still high default rate, the NPL ratio has been declining over the past six months. This is primarily a result of the growth in the performing portfolio and write-offs of loans that have been nonperforming for more than a year. As the portfolio grows, the NPL ratio will continue to decline.

The banks remain conservative and maintain a fairly high level of provisions for performing loans. According to the lending survey, the financial institutions mostly expect that the quality of their loan portfolios will not change significantly over the next 12 months.

3.5. Profitability Risk

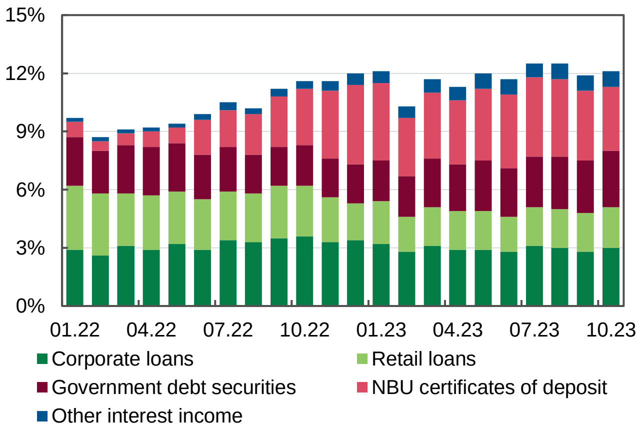
The banks continue to generate strong profits thanks to large net interest income and moderate provisioning. Due to monetary policy easing, the share of interest income from risk-free assets in total interest income will gradually decline. The cost of funding that the banks raise from businesses is decreasing, but rates on retail deposits remain high. The banks' net interest margins may decline from their current record-high levels, but will remain large. Net fee and commission income will remain depressed for some time, in part due to lower tariffs. A likely increase in administrative expenses does not pose a threat, given the banks' high efficiency.

Figure 3.5.1. Distribution of ROE by banks' assets



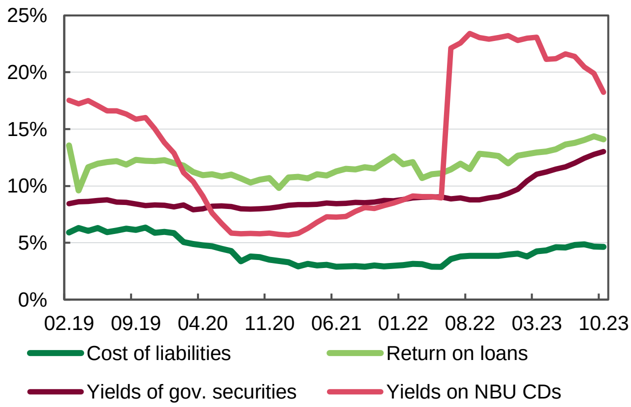
ROE for 2023 is based on an income tax rate of 18%.
Source: NBU.

Figure 3.5.2. Interest income components, % of net assets



Other interest income includes income from interbank loans, loans to authorities, and other lesser sources.
Source: NBU.

Figure 3.5.3. Return on assets and costs of liabilities



Source: NBU.

The banks are profitable and operationally efficient

The banks remain highly profitable and operationally efficient. In the first ten months of this year, the banks' annualized return on equity was 56% (before factoring in the higher income tax rate). Banks with more than 90% of the sector's assets operated with a return on equity of over 30% – an all-time high. Over this period, only four banks generated a net loss, and nine institutions posted an operating loss. These were small financial institutions whose total assets do not exceed 1% of the sector's assets. Profitability remains driven by strong interest income due to high interest margins, high operating efficiency, and very moderate provisioning costs.

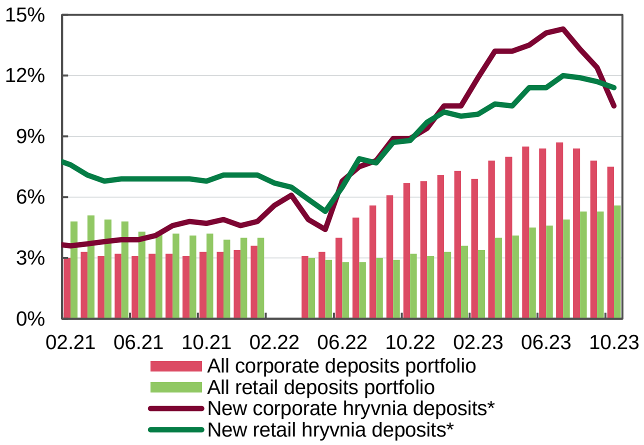
Interest income stabilized relative to assets

Since the start of the full-scale war, the banks' interest income has grown significantly relative to net assets, reaching around 12%. Interest income from lending declined slightly, but interest income from investments in risk-free assets – such as certificates of deposit and domestic government debt securities – increased markedly. They generated more than half of the banks' total interest income in the first ten months of the year. However, the sizeable cut in the key policy rate during the year has triggered, and is likely to continue to drive, a gradual decline in the share of interest income from risk-free assets in total interest income.

The NBU's key policy rate cut cycle, which started in July, lowered the yields on certificates of deposits for the banks. At the same time, the yield on the portfolio of domestic government debt securities remained stable and more inert. Maturing portfolios of domestic government debt securities contain a portion of securities issued several years ago at much lower coupons. Therefore, their replacement with new instruments will have a positive effect on the weighted average yield of the sector's portfolio of domestic government debt securities, even though rates on the new securities have recently declined at primary auctions.

Since August, interest rates on new hryvnia corporate loans have declined, with the most rapid fall seen in short-term working capital loans. They are likely to continue to decline gradually. Growth in the retail loan portfolio at almost unchanged rates has supported revenues in the segment. Although they are still lower than a year ago, a trend for their rapid recovery is already visible. The profitability of this segment is unlikely to change significantly in the future, as interest rates on consumer loans to households are generally unresponsive to changes in market conditions.

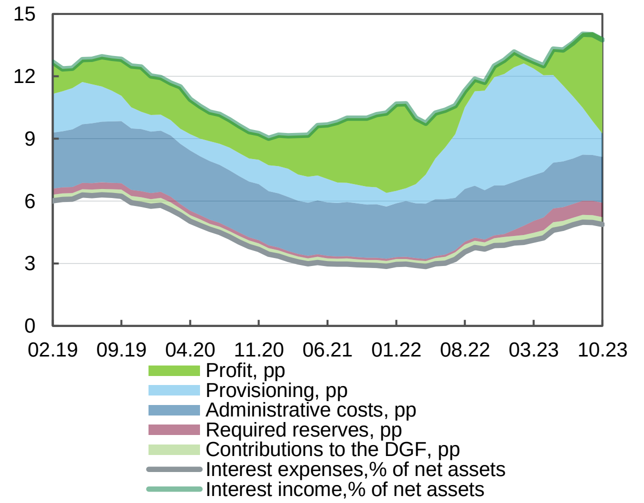
Figure 3.5.4. Interest rate on corporate and retail deposits in hryvnia, % per annum



No data was submitted on the interest rates of the deposit portfolio and liabilities for February–March 2022. * Without loan rescheduling or any other changes in contractual terms.

Source: NBU.

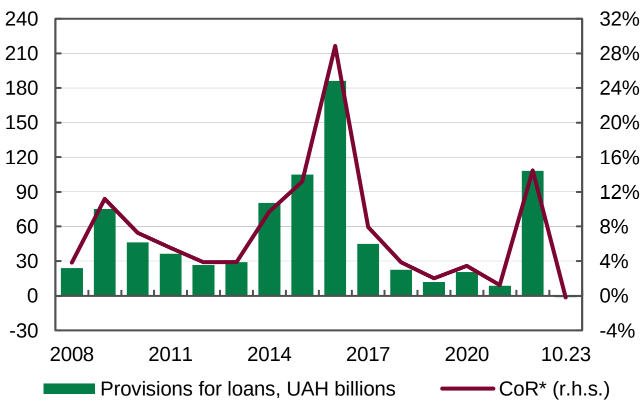
Figure 3.5.5. Decomposition of net interest margin (NIM) of Ukrainian banks, % per annum



* Three-month trailing average. Calculated as the ratio of interest expenses or income to the average volume of net interest-bearing assets for the past three months. Administrative expenses were taken into account proportionally to the ratio of net interest income and net fee and commission income, as a 12-month average. Provisioning included loan loss provisions and provisions for debt securities, taken as a 12-monthe average. Profit was estimated on a residual basis. At banks that were solvent as of the reporting date.

Source: NBU.

Figure 3.5.6. Cost of risk (CoR)



* Ratio of provisions for loans in the respective period to the net loan portfolio.

Source: NBU.

The cost of corporate funding has been on the decline since the key policy rate cut

Since the start of the full-scale war, the weighted average cost of corporate funding has been higher than the cost of retail funding. Since the middle of the year, rates on new hryvnia corporate deposits have fallen sharply in response to monetary policy easing. Due to the short maturity of these deposits, the overall cost of corporate funding is also declining. Their share in interest expenses has fallen by 5 pp since June 2023, to 55% in October. Thus, the pressure of this component on the banks' profitability has eased considerably. Instead, the weighted average rate on retail deposits has continued to grow. This is largely due to regulatory decisions that encourage the banks to build up their term deposits with maturities of over three months. The time lag with which changes in the key policy rate are reflected in retail funding costs is much longer than for corporate funding.

Net interest income and margin are sustainable

The banks' funding costs remain significantly lower than their interest income. Therefore, interest margin of the banks stays high. In the first ten months of this year, it reached almost 8%, compared to 7% and 6% in the same periods of the previous two years, respectively. High net interest income remains a key driver of the banks' profitability. Over the first ten months of the year, it grew by more than 36% yoy. Given the NBU's baseline macroeconomic forecast, key policy rate cuts will be paused next year. Although bank margins may continue to decline, they will remain high.

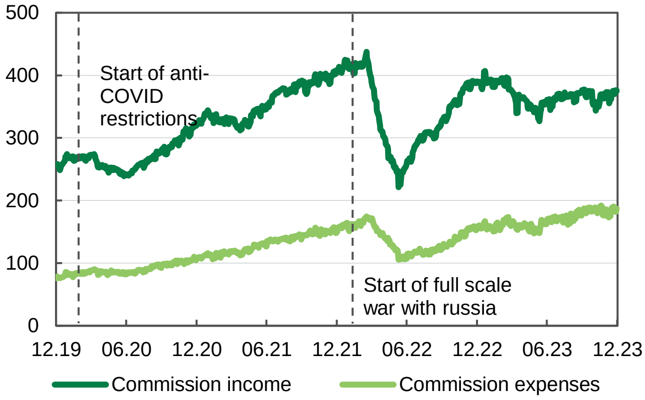
The banks are incurring almost no credit losses, and provisioning expenses are low

This year, the default rate was much lower than last year. Therefore, the provisioning for NPLs was fully offset by the release of provisions for the performing portfolio, which was due to the overall improvement in macroeconomic expectations. In general, the annualized ratio of loan loss provisions to the net loan portfolio (CoR) was close to zero in the first ten months of the current year, compared to more than 14% last year. In the foreseeable future, the cost of credit risk will normalize to the average levels seen before the full-scale invasion. However, the high operating margin allows risk losses to be covered without there being a critical impact on profits.

The banks' net fee and commission income is not recovering

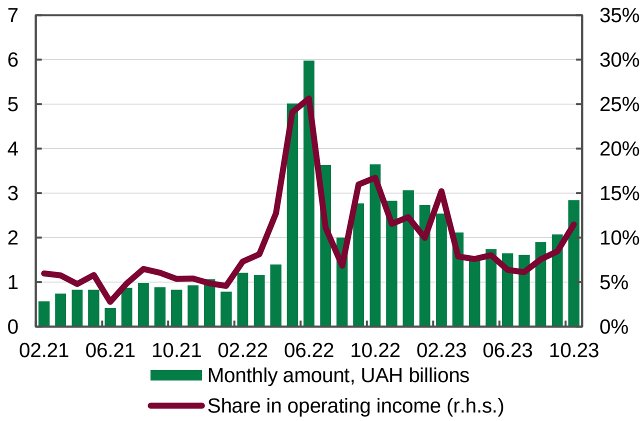
The sector's net fee and commission income remains relatively stable – it is only 12% smaller than in the first ten months of 2021. Its volumes are simultaneously affected by a number of divergent factors. The key positive factor in the recovery of fee and commission income is the growth in banking transactions due to the revival of economic activity in the country. At the same time, the volume of clients' transactions abroad declined in Q1 2023, and has remained almost unchanged. Given the easing of a number of restrictions and the transition to managed exchange rate flexibility, the banks' income from currency exchange have

Figure 3.5.7. Banks' fee and commission income and expenses per day*, UAH millions



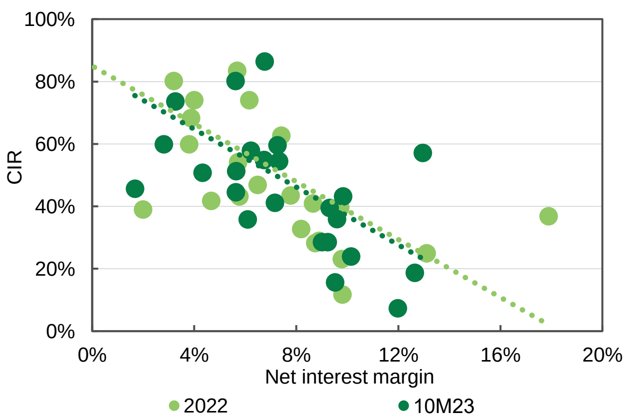
* Daily balance sheet data; 60-day trailing average.
Source: NBU.

Figure 3.5.8. Profit from FX trading



Source: NBU.

Figure 3.5.9. Operational efficiency of top-25 largest banks



Source: NBU.

started to grow. Their share in operating income has been growing over time. One of the key drivers of the decline in fee and commission income compared to the level before the full-scale war is the decrease in acquiring and interchange fees. The banks and payment systems took this step to support their clients during the period of full-scale invasion. Meanwhile, fee and commission expenses are increasing slightly, in particular due to higher expenses on payment infrastructure and processing fees.

Operating expenses will grow

Operating expenses increased by 9% in the first ten months of the year. The dynamics of administrative expenses were primarily driven by a rise in labor costs. This year, maintaining the functioning of branches and payment infrastructure also required additional funds. Expenses on the maintenance of fixed and intangible assets, along with maintenance and management costs, grew almost three times faster than other operating expenses. The banks continued to recognize losses from damage to, loss of, and destruction of property as a result of the war. In the middle of the year, the banks estimated that losses amounted to UAH 800 million in the territories affected by the war, including the territories liberated last autumn.

The banks have practically exhausted their options for economizing on operating expenses, as in recent years they have done a great deal to optimize their branch networks, staff, and information systems. Therefore, costs will continue to grow at least at a rate comparable to inflation. Due to competition for qualified employees, the banks will have to spend more on staffing. Some institutions have ambitious plans to modernize their payment infrastructure, which will increase their capital and operating expenses.

Given the current high operational efficiency of many banks, the increase in costs will not be critical to profitability. Over the past ten months, the average ratio of operating costs to operating income (CIR) remained below 40%, with the median value at around 60%.

The tax rate on the banks' windfall profits will be raised

High interest margins and operational efficiency provide the banks with a strong resilience margin and will continue to drive pre-tax profit growth. However, the banks' profits will now be taxed at higher rates: 50% in 2023 and 25% thereafter. Higher tax rates are a new permanent factor that will depress the profitability of the banking business, all other conditions unchanged.

Box 5. Ukrainian Banks Will Pay a “Windfall” Tax for 2023

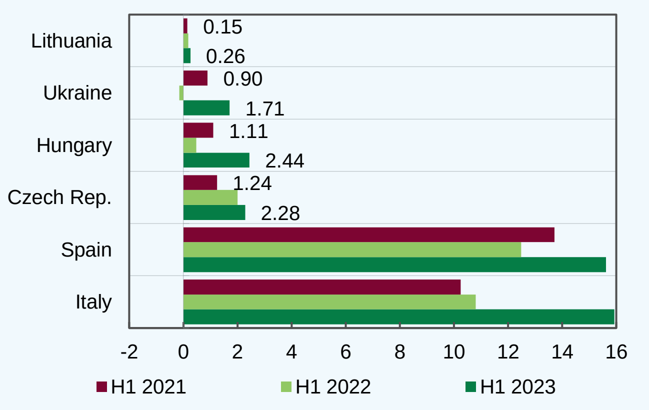
Several EU member states are introducing a “windfall” tax for banks. The tax is intended to redistribute some of the significant profits made by the banks into state coffers. It applies to gains that arose from market conditions and specifics of monetary policy design, rather than from the banks’ operational efficiency. Ukraine is also imposing a windfall tax on the banks to finance military spending.

More and more European countries are making banks pay windfall taxes

The practice of levying windfall taxes is rare but not unknown. It temporarily increases the tax burden on sectors that have reaped significant spontaneous gains. Windfall profits are what companies earn as a result of a favorable market situation rather than as an outcome of their own effective actions under business-as-usual conditions. Such taxes are known to have been applied in various industries around the globe: finance, energy, mining, and more.

Debate about the viability of introducing a tax on banks’ windfall gains has intensified in Europe since 2022. Thanks to the high interest rates set by central banks to curb inflation, banks have raked in significant interest income and, as a result, profits. Among EU countries, Italy, Spain, Lithuania, the Czech Republic and Hungary have introduced a tax on banks’ excessive profits over the past two years.

Figure B.5.1. Net income of the banking sector in selected countries, EUR billions



Source: ECB, NBU.

As high interest rates are the major source of windfall profits, most countries have primarily taxed net interest income. A number of international financial institutions and national regulators have made comments both about the mechanisms for such taxation and about the idea of such a tax in general. The ECB has noted that taxation should take into account the future capital needs of banks. The IMF has commented that it is desirable to direct the revenues from the tax toward reinforcing the sustainability of the financial sector. Some countries have responded to the criticism by designating priority areas for spending the revenues from the tax. Lithuania, for instance, allocated the tax receipts to bolster its defense capability, while Italy used them to partially compensate borrower expenses on floating-rate mortgages.

A windfall tax for Ukrainian banks

Despite the war, Ukrainian banks have seen their net profit grow: in the first 10 months of 2023, it was several times the level of the same period a year ago, and up 110% from 2021. The major factors in the significant profits in Ukraine as well as in a number of other countries have been high interest rates, particularly on risk-free assets, and the growth in asset volumes. Given the considerable budgetary needs and the sufficient margin of safety accumulated by the financial sector, the banks’ windfall gains will be taxed.

Table 4. Windfall taxes on banks by country

Country	Period, years	Rate, %	Tax base
Lithuania	2023–2024	60	NII that is 50% higher than the four-year moving average
Czech Republic	2023–2025	60	NII that is 20% higher than the four-year moving average
Spain	2023–2024	4.8	The sum of NII and NCI if the net income from these sources in 2019 exceeded EUR 800 million
Hungary*	2022–2024	13 / 30 (for profits over HUF 20 billion)	50% of net income
Italy	2023	40	NII that is 10% higher than in 2021

NII – net interest income, NCI – net fee and commission income.
* Current tax design.
Source: Ministries of finance of the countries.

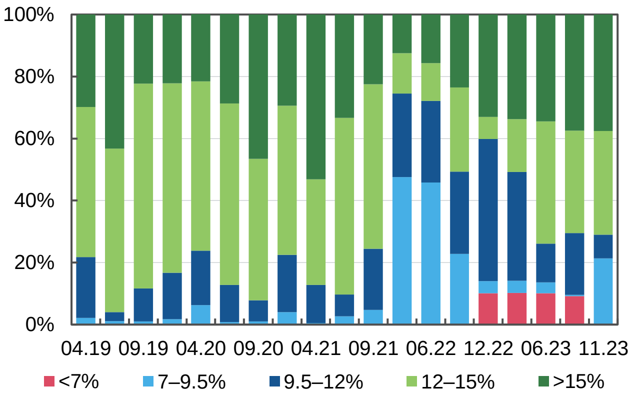
The tax base will be profit before taxes. This approach does not require additional complex calculations. The tax base equally takes into account all income and expenses of the banks without changing the attractiveness of various banking transactions or distorting financial performance. The banks’ profits for 2023 will be taxed at the rate of 50%. This will provide about 0.3% of GDP in additional budget revenues. On top of the one-off tax on windfall profits, the regular tax rate on bank profits has been raised to 25% from 18%.

The additional one-off tax is an exceptional step that will not harm the banking system’s resilience. After it is paid, the financial institutions will still have a sufficient margin of safety to meet current and planned capital requirements. However, an indefinite hike of the rate to 25% may have long-term adverse consequences. The tax burden on the banks will be higher compared to other sectors. In the November Systemic Risk Survey, for the first time in a long while, the banks said the quality of legislation and the tax system were among the biggest threats. Approaches to the taxation of all sectors should be harmonized in order for the economy to develop. It is expected that these approaches will be defined by the National Revenue Strategy, which is being developed by the Ministry of Finance. The issue of the long-term rate of tax on bank profits may return to the agenda when fiscal risks subside.

3.6. Capital Adequacy Risk

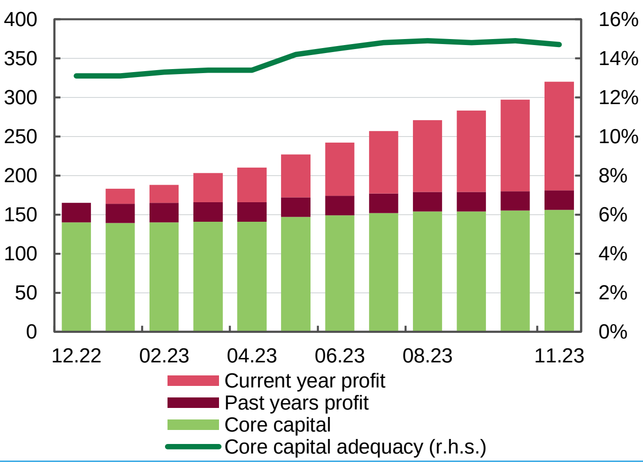
The banks increased their capital in H2 2023 thanks to their high profits. A resilience assessment that the NBU is finalizing confirms that most banks have adequate capital and that the system has a high safety margin: the central bank set higher capital requirements only for five banks. The banking sector's capital will rise even under conservative scenarios. Windfall taxes imposed on the banks will slow capital growth, but will not pose any threat to the system. Therefore, the conditions are set for further recovery and the introduction of new capital requirements.

Figure 3.6.1.Distribution of capital adequacy ratios by the banks' share of total assets



Source: NBU.

Figure 3.6.2. Banks' core capital and profits, UAH billions



The profits shown in this figure could be included in additional capital within the general limit of 100% of the core capital.

Source: NBU.

The banks' capital adequacy is rising

In 2023, the banks continued to increase their capital thanks to large profits. At the same time, risk-weighted assets declined. The loan portfolio, which comprises the bulk of the banks' risk-weighted assets, has been declining for a long time. The recalculation of the amount of operational risk to be covered by capital has also been suspended. As a result, capital adequacy ratios are already more than twice the regulatory requirements. The weighted average core capital adequacy ratio is almost 15%, while the weighted average regulatory capital adequacy ratio is over 25%. Financial institutions holding more than two-thirds of the sector's assets have a capital adequacy ratio of over 12% (the regulatory requirement is 7%).

The recent increase in the tax rate on 2023 profits will have an impact on the banks' capital. The banks will have to pay a tax of about 40% on their 2023 profits that are mostlyincluded in regulatory capital (read more in Box 5. Ukrainian Banks will Pay a Windfall Tax for 2023). According to the current capital structure, profits are mainly a component of additional capital. In early December, only a few banks included their current year's profits in their core capital, which makes combined less than a tenth of the total profit in the system. Therefore, the payment of a windfall tax will have little impact on the amount of core capital of most banks. In addition, given the banks' large cushions of both core and additional capital, only one bank could find itself in breach of regulatory requirements after paying the tax in full.

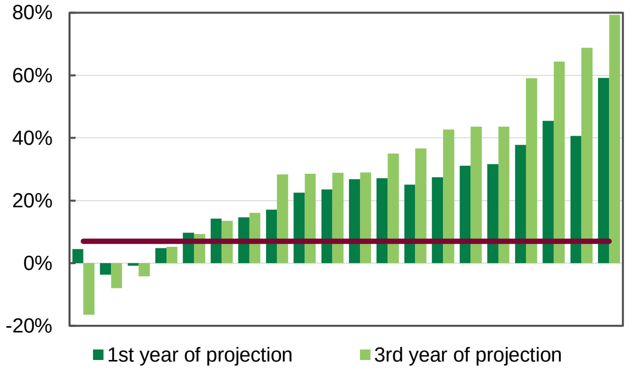
Most banks have sufficient capital, according to the resilience assessment results

This year's resilience assessment revealed sufficient capital and a large safety margin in the system as a whole. 20 banks that together account for over 90% of the sector's net assets were assessed. Based on the assessment's results, only five banks face required capital adequacy ratios above the minimum, and only three of them are at risk of losing their capital completely over a three-year horizon. These five banks will have to draw up capitalization and restructuring programs to achieve capital adequacy, or to maintain it at the required level. Some of these banks already have capital adequacy above the higher ratios set on the basis of resilience assessment findings.

This year, the resilience assessment was conducted only under the baseline scenario based on the NBU's macroeconomic forecast. However, the methodology still included rather conservative assumptions in several areas:

- The resilience assessment assumed a faster decline in interest rates on the banks' assets than in those on their

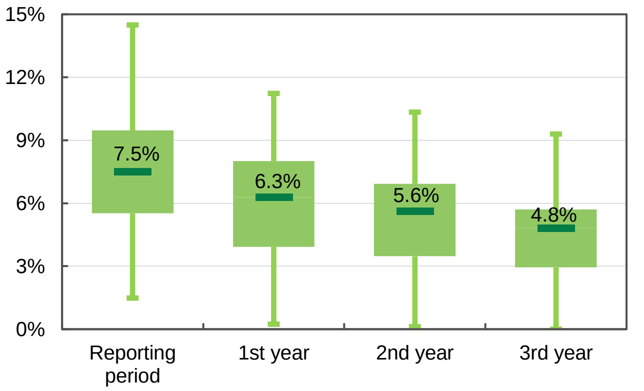
Figure 3.6.3. Assessment of core capital adequacy ratio by banks based on stress test



The red line shows the minimum required core capital adequacy ratio. The paired columns indicate values for individual banks.

Source: NBU.

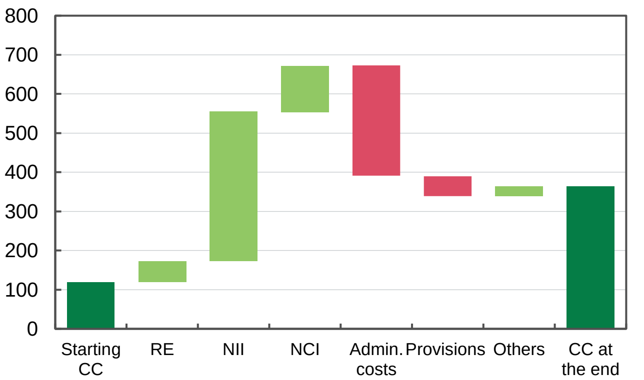
Figure 3.6.4. The banks' net interest margin based on resilience assessment results



Upper and lower faces of rectangles show 1st and 3rd quartiles of distribution. Dashes inside the rectangles show the mean. The lines extending above and below the rectangles indicate the minimum and the maximum.

Source: NBU.

Figure 3.6.5. Drivers of core capital (CC) change based on resilience assessment results



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

Source: NBU.

liabilities. As a result, the banks lost their net interest margins. Thus, it decreased from 7.5% in the reporting year (for resilience assessment purposes, this is the period from Q2 2022 through Q1 2023), to 4.8% in the third forecast year.

- To calculate credit risk losses, migration ratios ranged from 13% to 50% over three years, depending on the segment, currency, and the location of the debtor. The largest share of defaults was assumed to occur in the first forecast year. Additionally, minimum conservative LGD values were applied. Overall, the cost of the banks' credit risk in the resilience assessment averaged 5.2% in the first forecast year, but declined to 1.8% in the third year.
- According to the assumptions, fee and commission income and the banks' income from FX transactions dropped, while administrative expenses grew in line with inflation. The weighted average cost-to-income (CIR) ratio increased from 39% in the reporting year to 59% in the third forecast year.

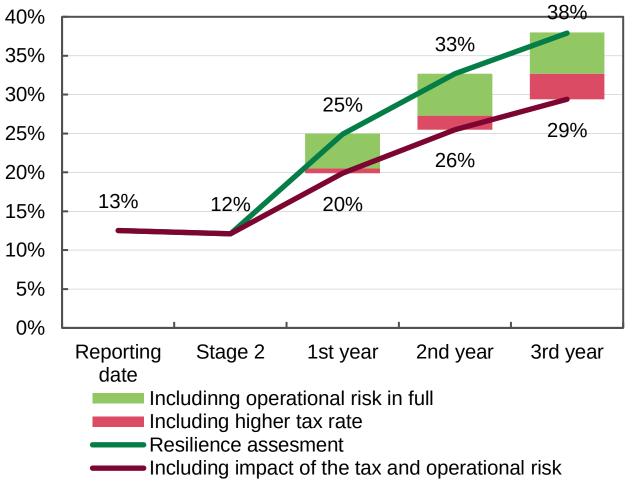
Despite conservative assumptions, the banks' capital in the resilience assessment grew in the forecast periods. This result should be considered in the light of the main modeling assumptions: for the purpose of stress tests, as usual, the balance sheets of banks are assumed to be static, i.e. they change only due to the revaluation of their FX components and credit losses, while all profits are reinvested.

The banks' capital will grow, even under more adverse assumptions

The decision to raise the tax rate on the banks' profits was made almost simultaneously with the completion of the resilience assessment. Thus, the tax rate hike is not reflected in the results for the forecast periods. However, the higher tax rate will not affect the targets for the banks' required capital adequacy ratios. Based on the results of the resilience assessment, higher ratios were only set for banks operating at a loss in the forecasting period. These banks do not incur any income tax liabilities. That said, the increased tax rate will slow capital growth in future. This will make it more difficult for banks facing higher required capital ratios to implement capitalization and restructuring programs. Another factor which will affect the dynamics of capital adequacy, and yet not included in the stress tests, is the reimposition of requirements to cover operational risk. However, additional calculations show that even an increase in the tax burden and the coverage of 100% operational risk will not prevent banks from boosting their capital adequacy.

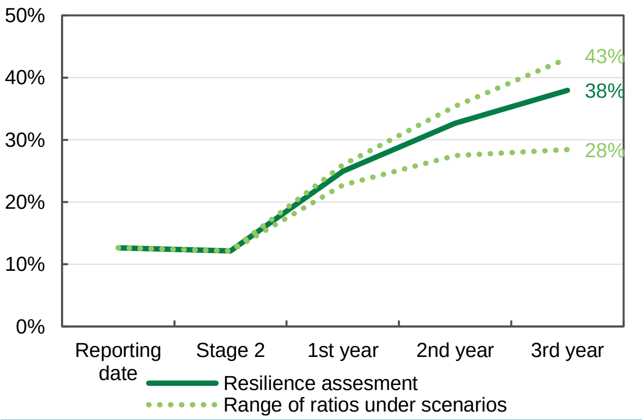
The NBU conducted an additional scenario analysis to make sure the system is resilient. The central banks assessed the dynamics of core capital adequacy under alternative scenarios. The former assumes that macroeconomic factors have half the negative impact on interest margins and loan migration ratios than they do in the resilience assessment. The latter scenario assumes the twice as large impact. Even under twice more conservative assumptions, core capital adequacy will grow, albeit more slowly. The system retains its ability to generate profits and to augment capital under all applied simulations. Under the most conservative scenario,

Figure 3.6.6. Weighted average core capital adequacy based on resilience assessment results and with account of additional factors



Source: NBU.

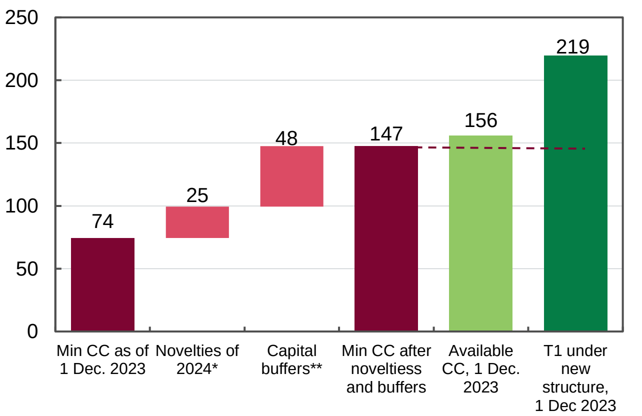
Figure 3.6.7. Core capital adequacy over forecast periods under alternative scenarios*



* Two scenarios assume a half lesser or twice stronger adverse impact of macroeconomic factors on interest margins and loan migration ratios.

Source: NBU.

Figure 3.6.8.The impact of new regulations on core capital /Tier 1 capital (CC and Tier 1) of the sector, UAH billions



The minimum CC reflects the amount of core capital that banks need in order to comply with minimum capital adequacy requirements. Tier 1 capital takes into account the income tax rise to 50% and the payment of dividends by state-owned banks.

* Effects of deducting 100% of non-core assets, taking into account 100% of operational risk based on current data from reports, and updated capital adequacy ratios under the new capital structure.

**The capital conservation buffer and the systemic importance buffer.

Source: NBU

the number of banks facing higher capital adequacy requirements rises from five to nine. Three of these extra four banks already have to meet ratios above these potential increased target ratios.

The next round of stress tests is scheduled for 2025

This year's resilience assessment will be completed in December, and its results will be relevant in 2024. The banks for which higher capital adequacy requirements have been set will have to draw up capitalization or restructuring programs in early 2024 and will implement them in stages over two years (read more in Box 3. Peculiarities of Bank Resilience Assessment in 2023, in the June FSR).

Next year, the banks and the NBU will focus on an independent asset quality review, if security conditions allow, as stipulated in the Memorandum with the IMF. The methodology for this review will be also developed by external experts. Therefore, the NBU will probably return to its usual stress tests in 2025. The stress tests will include both baseline and adverse macroeconomic scenarios.

NBU reinstates deferred capital requirements and introduces new ones

The results of the resilience assessment and the banks' actual capitalization showed that the sector was ready to recover and implement new solvency requirements. The key requirements are as follows:

- Starting in 2024, non-core assets will be fully deducted from capital (currently, only 75% are deducted).
- Starting in 2024, risk-weighted assets will include 100% of the estimated amount of operational risk (currently only 50%).
- From May, the banks will be required to update calculations of their operational risks on the basis of their latest financial statements (the calculations have not been updated since February 2022).
- After test calculations, the banks will take into account the estimated amount of market risk when meeting their capital adequacy ratios.
- Starting in August, new requirements for capital structure will be introduced: the minimum Common Equity Tier 1 capital adequacy ratio will be 5.625%, while the minimum Tier 1 capital ratio will be 7.5%.

Taking into account the current composition of the banks' balance sheets, the impact of all of the planned requirements is estimated at UAH 25 billion. That is, if today all banks hypothetically had capital adequacy ratios at the level of the minimum requirements, they would need an additional UAH 25 billion of capital to ensure that the adequacy ratio does not slip once the new requirements are introduced.

The new proposed changes also have very positive aspects for the banks. The transition to the new capital structure will allow them to include retained earnings directly in core Tier 1 capital, subject to certain requirements. Thus, the banks will have no difficulty in meeting the requirements, which also

Table 5. Priorities for using banks' accumulated profits

Order of priorities:	
1	Coverage of unexpected losses from risks that materialize during the war
2	Complying with deferred requirements to cover risks with capital: ▪ operational risk in full (currently the banks keep just enough capital to cover 50% of operational risk) ▪ market risk (implementation is expected after a test period) ▪ 100% risk weights for FX domestic government debt securities (taking into account the adjustment coefficients, the current risk weight is 50%).
3	Complying with new requirements to be introduced in 2023–2024, in particular: ▪ updated regulatory capital structure ▪ updated credit risk weights of individual asset categories ▪ leverage ratio.
4	Building up capital conservation buffer and systemic importance buffer.
5	Distribution of dividends.

Source: NBU.

bolster the sector's resilience and bring regulations closer to European ones.

Capital buffers could be restored next year

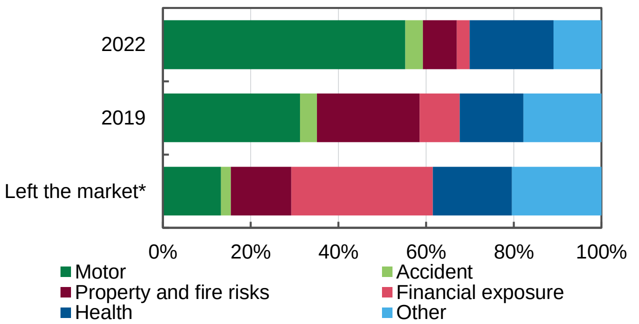
Given the dynamics of the sector's capitalization, early next year the NBU will analyze the expediency of setting the capital conservation buffer and the systemic importance buffer in full. In accordance with international practice, these buffers are permanent and are not deactivated during crises. Failure to comply with the buffers will not result in corrective actions taken against banks, but will restrict capital distribution, including through dividend payments. Capital buffers during periods of market volatility are key to safeguarding the system's resilience. From the date the buffers are set, the NBU will be likely to ease or cancel restrictions on capital distributions and dividend payments for banks that build these buffers in full.

Part 4. Non-Banking Sector Conditions and Risks

4.1. Insurance Risks

It has been three years since the NBU received its mandate to regulate and supervise insurers. Since then, the requirements for market participants have been tightened considerably, and the implementation of the new law on insurance in 2024 will help bring them even closer to European standards. The new regulatory requirements are designed to increase market resilience and transparency, and insurers that did not meet the new requirements had to cease their operations. These were mostly dormant institutions that did not provide services to households and did not make significant insurance payments. Consumers barely noticed the disappearance of these institutions. The onset of the full-scale war was a great shock to the market, and the market's recovery from its consequences has been uneven. Institutions with retail and universal business models are in a better position, as they are being driven by the growth of car insurance. Corporate insurance, life insurance, and reinsurance are recovering slowly.

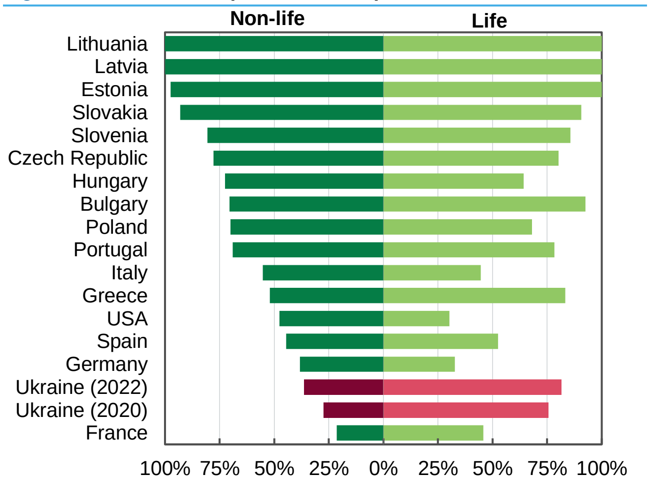
Figure 4.1.1. Gross written premiums in non-life insurance



* For companies removed from the register between 1 July 2020 and 1 October 2023, data are provided for the last reporting year before the removal.

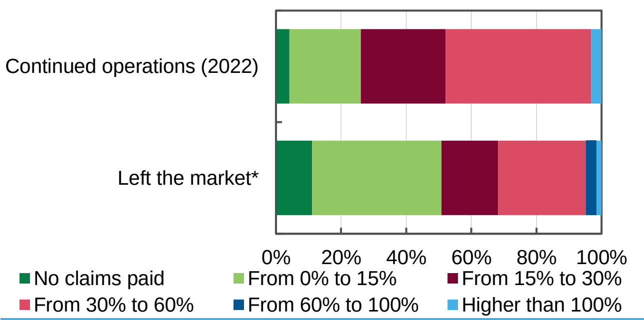
Source: NBU.

Figure 4.1.2. Share of top-5 insurers in premiums in 2022



Source: NBU, EIOPA, NAIC.

Figure 4.1.3. Insurers' ratio of claims paid



* For companies removed from the register between 1 July 2020 and 1 October 2023, data are provided for the last reporting year before the removal.
Calculated for companies that collected premiums.

Source: NBU.

The insurance sector has been transforming following the implementation of the Split project

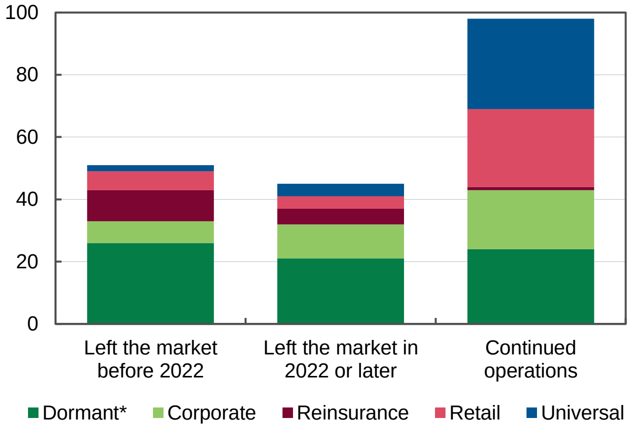
July marked the third anniversary of the implementation of the Split project, which transferred the regulation and supervision of insurers to the NBU. The Split was designed to solve long-standing market problems (read more in the Solvency Risks of Non-life Insurers, June 2020 FSR): insurers underestimating insurance liabilities (reserves), the prevalence of illiquid and low-quality components in assets, and the poor quality of corporate governance and risk management. These problems, among other things, made many insurers unreliable, and insurance penetration remained at record-low levels. In addition, imperfect regulation contributed to the use of scheming insurance – using insurers to legalize income and to optimize the tax burden within business groups. The insurance market has transformed considerably over the past three years.

The shutdown of a number of non-life insurers went unnoticed by consumers

Between July 2020 and October 2023, the number of non-life insurers almost halved, from 195 to 99. More than half of the insurers left the market before the full-scale russian invasion. Of all the companies that closed their business, 40 did so at their own initiative. In addition, 10 companies registered in the territories that had been temporarily occupied before 2022 were excluded from the register of financial institutions. The NBU revoked licenses of the rest due to their non-transparent ownership structures or because they violated laws and regulatory requirements. Only one new insurer has entered the market in the past three years. Despite the decrease in the number of participants, the non-life insurance market in Ukraine remains much less concentrated than in most European countries.

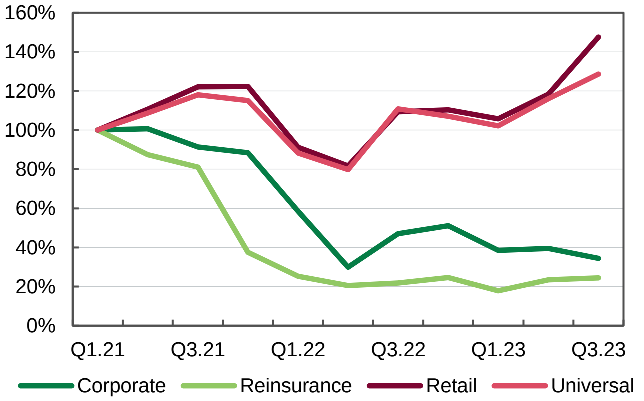
More than half of the non-life insurers that left the market in the last three years were dormant: they had small premium volumes or did not operate at all. A significant number of the closed insurers served mainly corporations and did not provide insurance services to households. Some companies were almost exclusively engaged in reinsurance – they accounted for 87% of the domestic insurance market. The insurance premiums of corporate insurers and reinsurers were dominated by property and financial exposure insurance. Some of these transactions represent insurance that lacks market motives and is essentially used in "schemes". A common feature of the insurers that left the

Figure 4.1.4. Number of insurers by business model



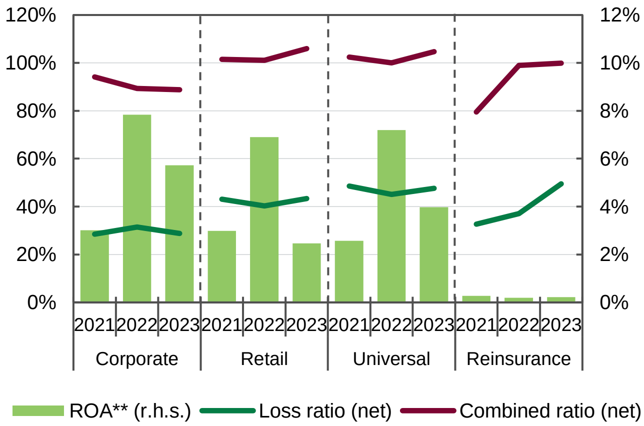
* Companies that collected less than UAH 10 million in premiums in the last reporting year.
Source: NBU.

Figure 4.1.5. Insurance premiums of non-life insurers by business model, Q1 2021 = 100%



Source: NBU.

Figure 4.1.6. Operating indicators by non-life insurers' business models, four quarters prior to 1 October of the respective year*



* Calculated for companies listed in the register as of 1 October 2023.
** For the first nine months of the respective year.
Source: NBU.

market was their extremely low ratio of claims paid. In contrast to the median of 28% in 2022, it was only 14% for the closed insurers in the year preceding their market exit. And for reinsurers that left the market, this figure was close to 2%. The low claims paid ratio emphasizes the insignificant role of the insurance for the clients of these insurers. Therefore, for the vast majority of financial services consumers, the market cleansing went unnoticed. In addition, insurers whose licenses have been revoked are obliged to continue to meet their obligations to policyholders.

The recovery of the non-life insurance market from the shock caused by the war has been uneven

The full-scale war has been a stress for insurers: operational risks have increased, demand for insurance has declined, and uncertainty makes risk assessment more difficult (read more in Non-bank Financial Sector Review in the June 2022 FSR). The collection of insurance premiums declined significantly, with the decline being the most pronounced in Q2 2022. Loss reserves grew due to difficulties in settling claims.

Today, the dynamics of insurers' key indicators vary depending on their business models. According to a study, Ukrainian non-life insurers can be divided into four groups by basic business models: corporate, retail, universal, and reinsurance. The main criterion for attribution to a particular business model is the share of insurance premiums from each type of client. Insurers that receive more than 70% of their premiums from legal entities (other than insurers) are classified as corporate insurers. If the share of premiums from individuals exceeds this threshold, they are retail insurers. Those that receive more than half of their premiums from other insurers are reinsurers. The rest are universal insurers.

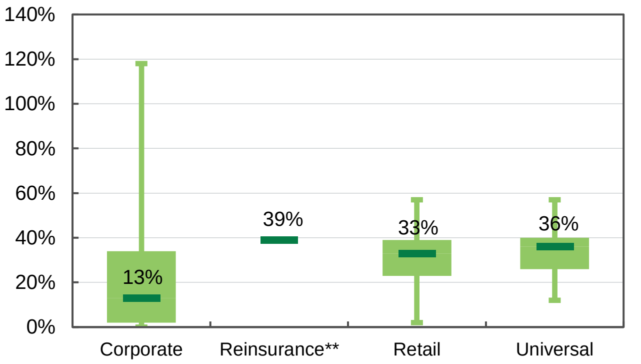
Currently, only the household insurance segment has recovered, thanks to car insurance, which dominated premiums in past as well. Motor insurance is fueling the businesses of universal and retail insurers. Corporate insurers and reinsurers had been lagging behind the rest in terms of premium growth even before the full-scale invasion, and now they are continuing to stagnate. It is noteworthy that they are not picking up the clients of insurers that had the same business models and left the market.

Due to uncertainty in risk assessment and rising reserve volumes, insurers raised policy prices in 2022. Only universal insurers increased their average prices by less than the inflation rate. Nevertheless, retail and universal insurers had a combined ratio of more than 100% in the last four quarters before October, indicating inefficiency of their core business. Thanks to high investment income and currency revaluations, the non-life segment was profitable in 2022.

Life insurance remains depressed

Since July 2020, eight life insurers have left the market – five of them at their own initiative. These insurers had a combined share of less than 4% of 2020 premiums. The full-scale russian invasion has set the life insurance market back by years. The volume of premiums from new contracts halved in

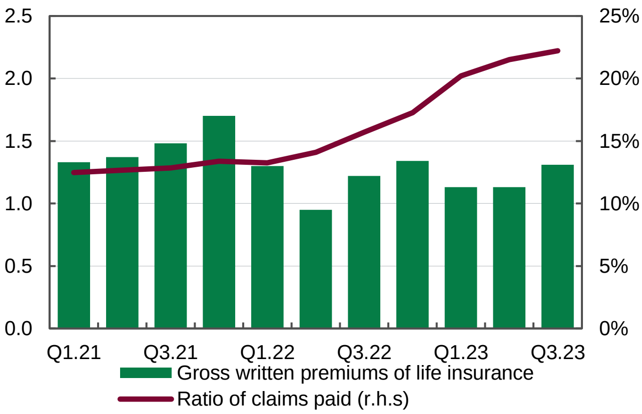
Figure 4.1.7. Ratios of claims paid by non-life insurers' business models in 2022*



* Calculated for companies listed in the register as of 1 October 2023.
** One insurer followed the reinsurance business model.
Upper and lower faces of the green rectangles represent the first and the third quartiles of the indicator distribution across the insurers for the date. Dashes inside the rectangle show the median. The lines extending outside the rectangles indicate minimum and maximum.

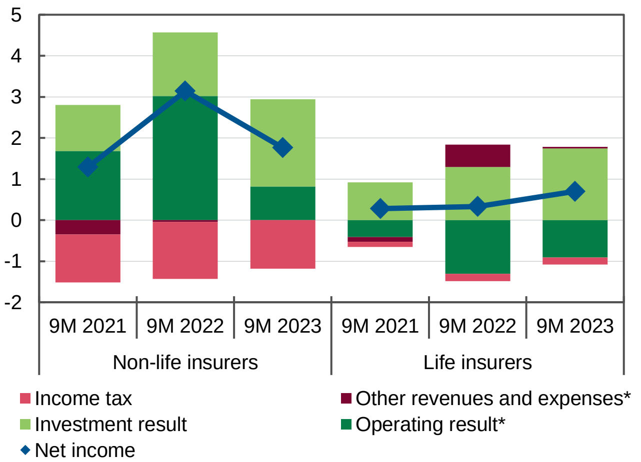
Source: NBU.

Figure 4.1.8. Premiums and ratio of claims paid in life insurance, UAH billions



Source: NBU.

Figure 4.1.9. Components of insurers' net income, UAH billions



* Including FX revaluations depending on insurers' classification.

Source: NBU.

2022. Thus, the portfolio is "aging": the share of older contracts with higher claims paid ratios is growing. Currently, insurers have no problems meeting their obligations to customers, but further portfolio aging will put pressure on performance indicators. The life insurance segment is traditionally operationally unprofitable. However, insurers' operating losses were offset by sizeable investment income. High interest rates provided life insurers with a record return on assets of 3% in January–October 2023. Therefore, insurers are accumulating capital. About a quarter of the investment income is allocated to future payments under policies with investment component, so customers will also benefit.

Regulations will be further updated

The NBU responded to the challenges of the war by easing a number of regulatory requirements, including through not imposing corrective measures for violations of regulatory ratios. As the market adapted to wartime, the NBU gradually restored pre-war requirements and introduced new ones. In particular, in 2023, the NBU tightened the requirements on the eligible assets of insurers. As of 1 October 2023, 13 insurers violated the required solvency and capital adequacy ratios. The share of violators in the sector's assets was 6%, with one large insurer with a minor violation accounting for 5% of the assets.

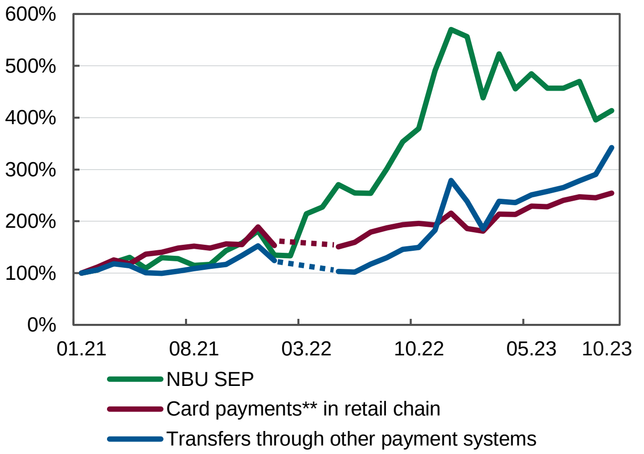
Legislative amendments have been made that will produce a system-wide overhaul of the regulation and supervision of the insurance market. In 2021, the new Law of Ukraine *On Insurance* was adopted. It will come into force on 1 January 2024 and will fully apply after a transition period. The new law significantly updates the requirements for insurers in corporate governance and risk management, solvency, and investment activities (read more in Updated Legislation for the Non-bank Financial Services Market in the December 2021 FSR). The NBU started changing the rules of the game in the market even before the law came into force, in particular, by introducing new requirements on the transparency of the ownership structure of insurers, and updating the requirements for assets eligible to cover insurance liabilities.

After the requirements of the Law of Ukraine *On Insurance* come into force, the requirements for asset quality and solvency will be tightened again, and the number of violators is likely to increase. Insurers that are prepared to operate under the updated rules will be given time to bring their operations into compliance.

4.2. Payment Market Risk

Payments in Ukraine are being made without interruptions and on time, despite the full-scale war. Moreover, transaction volumes and the variety of payment services on offer are growing. The regulation and oversight of payment systems in Ukraine are aligned with international standards. New legislation on payment services has expanded access to this segment for new players. Increased competition among payment service providers brings extra benefits for users.

Figure 4.2.1. Payment amounts in Ukraine, January 2021 = 100%*



* Some statistics were not collected in February–April 2022.
** Issued by Ukrainian banks; excluding payments in non-resident banks' networks.
Source: NBU.

Resilience of payment market infrastructure is one of the pillars of financial stability

Payment infrastructure is a critical component of the financial system. Convenient, fast, and secure payments are vital for the provision of financial services. The integrity and promptness of transactions give clients confidence in the security of financial services. The full-scale war confirmed the importance of the uninterrupted, reliable, and effective functioning of payment infrastructure (read more in the section Payment Infrastructure Risk, December 2022 FSR). Therefore, the ability of financial institutions to make payments despite unfavorable external circumstances is a cornerstone of financial stability.

Payment services market participants face a wide range of risks, including financial risks traditional for the banks – such as credit risk and liquidity risk – as well as specific ones, such as settlement and custody risks. An important risk for both types of institutions is operational risk, including cyber risk. Depending on the type of transactions performed, the significance of these different risks varies. Since the business continuity of other financial market participants depends on the operation of payment systems and payment service providers, their risks may pose a threat to financial stability.

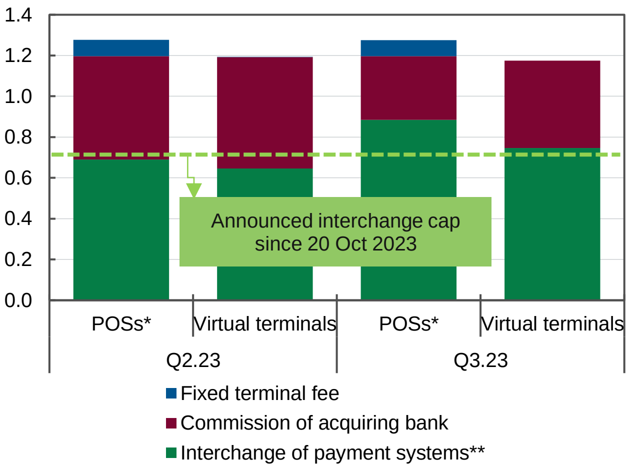
NBU operates SEP and minimizes risks to its functioning

Many domestic banks have wide client networks, so most transfers are made within the same institution. Interbank transfers in the hryvnia are the second largest segment of the Ukrainian payment market. They are made almost exclusively through the NBU's System of Electronic Payments (SEP). The system is designed to transfer hryvnia funds from an account in one bank to an account in another (payments to IBAN). SEP is the only systemically important payment system in Ukraine, and is a key element of its payment infrastructure. This year, the average monthly volume of payments in SEP was around UAH 17 trillion. The banking sector and its clients are critically dependent on the promptness and accuracy of its functioning.

The NBU is the operator and settlement bank of SEP, and ensures its uninterrupted, reliable, and effective operation and development. The NBU allocates considerable technical, human, and financial resources to continuously improving and enhancing SEP's security. SEP usage fees remain low. Despite the war, a new, fourth generation of SEP has been in operation since early April 2023. Its implementation has made it possible to:

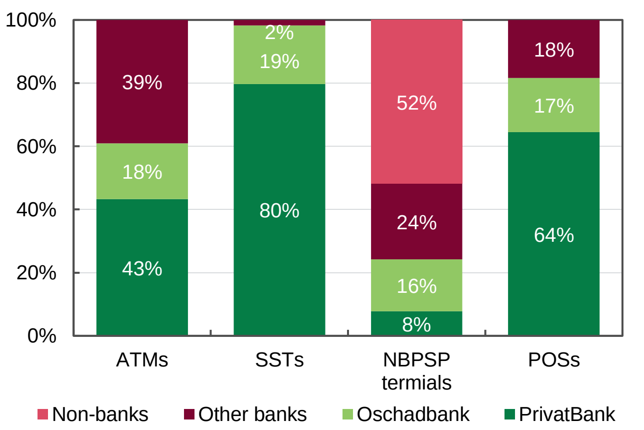
- standardize the information exchange between SEP participants and depositories in line with the ISO 20022 international standard, harmonizing the Ukrainian payment space with the global one

Figure 4.2.2. Acquiring income structure, % of payments for goods and services



* POSs – point-of-sale terminals.
** Domestic interbank commission fees of Mastercard and Visa paid by the acquirer to an issuer.
Source: NBU.

Figure 4.2.3. Structure of payment devices by card system participants as of 1 November 2023



ATMs – automated teller machines, SSTs – self-service terminals, NBPSP – non-bank payment service providers, POSs – merchant point-of-sale terminals.
Source: NBU.

- make payments continuously in a 24/7 mode, without technical breaks
- use a modern system of cryptographic information protection
- increase the level of payment automation
- supplement payment details with additional information.

The NBU is performing oversight of SEP as a systemically important payment system in accordance with international standards. Based on the results of the oversight in 2022, the NBU found that SEP generally complies with the international principles for financial market infrastructure (PFMI[6]). Since the onset of the full-scale war, SEP has been functioning without interruption, which has helped maintain confidence in the banking sector.

Strict requirements for international card payment systems ensure security of Ukrainians' card transactions

Another segment of the payment market is payments initiated by payment cards. This function is performed by payment systems that have the status of card payment systems. Until July, the issuance of payment cards was the prerogative of banks exclusively, so card payment systems mainly serviced transactions with the cards of the banks' retail clients. This year, the turnover of transactions with payment cards issued in Ukraine has reached around UAH 500 billion per month. Out of the existing card payment systems, two – Mastercard and Visa – account for over 99% of transactions. Therefore, they are recognized as important payment systems. The third largest card system is PROSTIR, which is owned by the NBU.

Mastercard and Visa in Ukraine are overseen by the NBU and are also regulated by the central banks of their respective jurisdictions (Belgium and the United States), which imposes increased requirements on the operations of these international payment systems. In addition, international card payment systems require payment participants, acquirers, and card issuers to maintain significant security deposits with investment-grade banks to secure transactions. This minimizes liquidity risk in settlements. Amid the full-scale war, the main facilities of key card payment systems being located outside of Ukraine minimizes the risk of destruction.

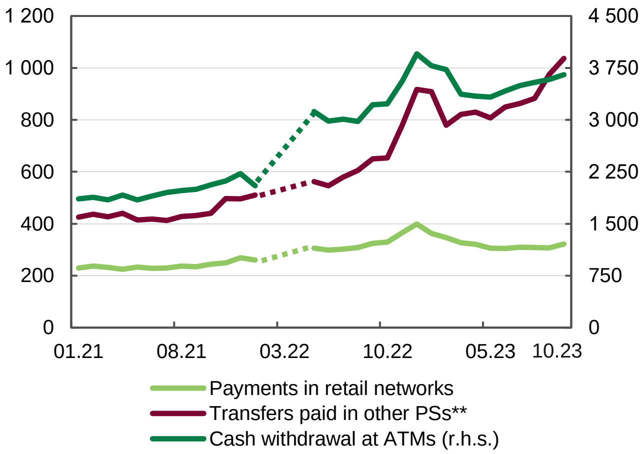
In addition to managing their own risks, card payment systems additionally monitor acquirers' compliance with the rules for making payments. Violations of these rules are subject to penalties ranging from fines to the termination of business relations. Moreover, tight requirements for the risk management systems of Ukrainian banks, which are the largest card issuers and acquirers, are designed to minimize compliance risks in card payments.

The landscape of retail payments is also changing

The services of international card systems are quite expensive for both participants in these systems and users. Card systems use the interchange mechanism in payments for goods and services, meaning that they distribute a portion

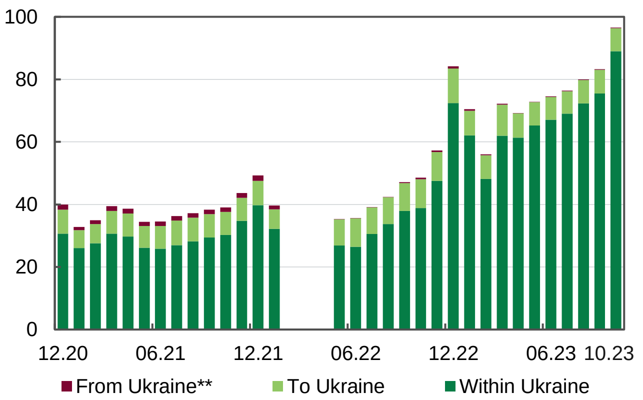
[6] Principles for Financial Market Infrastructures are international standards for payment systems, central securities depositories, securities settlement systems, central counterparties, and trade repositories established by the Committee on Payments and Market Infrastructures of the Bank for International Settlements and the International Organization of Securities Commissions (IOSCO).

Figure 4.2.4. Average amount of a settlement transaction, UAH*



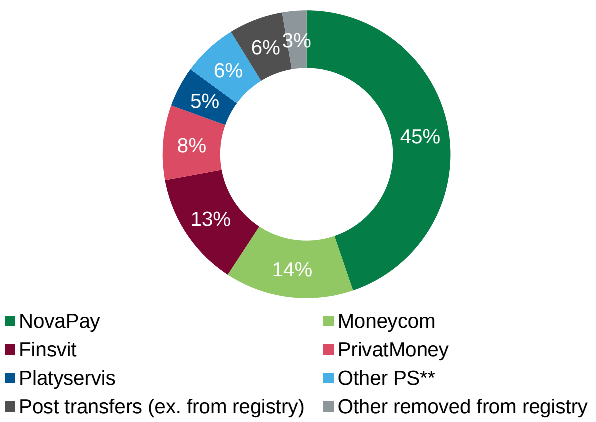
* The statistics were not collected in February–April 2022.
** Payment systems, except for SEP and payment systems using e-payments, or their requisites.
Source: NBU.

Figure 4.2.5. Transfers made through payment systems (except for SEP and card payment systems), UAH billions*



* The statistics were not collected in February–April 2022.
** Transfers processed via VISA B2B Connect service.
Source: NBU.

Figure 4.2.6. Share of payment system transfers* within Ukraine in January–October 2023



* Excluding SEP and card payment systems. ** Payment systems.
Source: NBU.

of the fees received by acquiring banks to issuing banks. In recent years, the interchange fee in Ukraine has been decreasing in accordance with the Memorandum on Promoting a Competitive Payment Market in Ukraine signed between the NBU, Visa, and Mastercard in 2021, as well as thanks to this year's permission from the Antimonopoly Committee to reduce domestic interbank fees. However, given the large scale of transactions, these extra costs are quite noticeable for merchants. This encourages businesses to look for alternative ways to receive and make payments, and financial market participants to develop technologies and find new niches in the market.

Transactions of Ukrainian private payment systems are concentrated mainly within Ukraine, with transfers amounting to around UAH 67 billion per month. Operators and participants of such payment systems are mainly non-bank financial institutions. Although the number of these payment systems has decreased due to the exit of dormant players, their transaction volumes are increasing. Another UAH 8 billion in monthly transfers to and from Ukraine is handled by international money transfer systems, such as Western Union and MoneyGram.

Non-bank payment service providers (NBPSPs) mainly specialize in transfers without opening an account (in particular, cash via self-service terminals), cash on delivery, and integration of payment solutions for Internet acquiring[7]. Participants in this segment are deeply immersed in client needs or are integrated into a larger business group. Prominent examples are NBPSPs created by large retailers (such as Evo by Rozetka) and postal operators (for example, NovaPay, a related business of Nova Poshta). Despite a hefty cost of payments for NBPSPs, the creation of their own infrastructure allows them to keep funds at the disposal of non-bank institutions, large retail chains, and their business groups. Stronger competition in the payments segment will further improve the quality and possibly reduce the cost of services for users. Legislation updates are facilitating the rapid development of the segment.

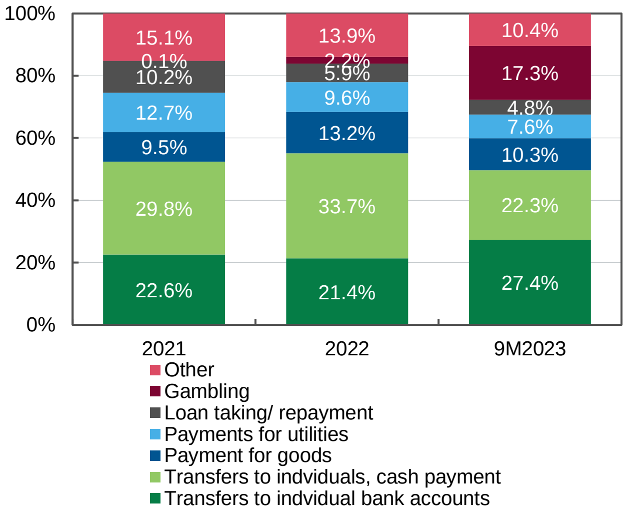
New legislation widened the list of services and non-bank payment service providers

Since August 2022, the provisions of the Law of Ukraine *On Payment Services* have been gradually implemented, reflecting the main provisions of Payment Services Directive 2 (PSD2). According to the new payment legislation, there are seven types of financial payment services in Ukraine, including opening and maintaining accounts, conducting payments, including on credit terms, issuing payment instruments, acquiring, issuing electronic money[8], and performing payment transactions with it. Non-bank financial institutions can provide payment services, which gives them access to a number of functions that were previously available only to banks.

With the introduction of the new legislation, market participants had to re-apply for their payment licenses. Of the

[7] Using special pages on websites for making payments.
[8] For the period of martial law, the replenishment of electronic wallets and the issuance and distribution of electronic money are suspended.

Figure 4.2.7. Structure of payment transactions of non-bank payment service providers



Source: NBU.

old money transfer licensees, the lion's share were unable or unwilling to obtain licenses in accordance with the new rules. As of the start of December, 31 institutions had obtained licenses, 29 of which had only the right to transfer funds without opening accounts. NovaPay, which is the largest NBPSP among the new market entrants, is the only one licensed for the full range of transactions, except for e-money issuance. The postal operator Ukrposhta, in addition to transferring funds without opening accounts, has a license for acquiring payment instruments (accepting payments through terminals).

Re-licensed NBPSPs have not yet managed to increase the volume of new services

The NBPSPs are dynamic, but increasing service volumes will take a long time. At present, due to their relatively small transaction volumes and narrow specialization, the risks carried by NBPSPs to the payment market are not systemic. However, expanding the range of their activities and increasing transaction volumes will raise existing risks and pose new ones further on. In particular, liquidity risks are growing, and credit risk is emerging. That said, compliance risk and other components of operational risk are the main ones that are currently growing. Thus, in January–November 2023, seven large payment market participants that belonged to non-bank financial institutions were fined for a total of UAH 185 million for violations in the area of anti-money laundering, and some of them have already ceased operations.

Prudential requirements have been established to control the risks of payment service providers. Currently, there are five of them: minimum capital requirements, regulatory capital adequacy, maximum credit risk per user and for all persons (users), and short-term liquidity. NBPSPs are primary anti-money laundering entities, and the NBU also regulates and supervises them in this area. As new services become more widespread, the list and design of these regulatory requirements may be improved to prevent the accumulation of risks.

Recommendations

Ensuring financial stability in extremely difficult wartime conditions requires coordinated efforts and close cooperation between all financial market players – the banks, NBFIs, the NBU, and other market regulators – as well as effective support from the state authorities. The NBU makes recommendations to the authorities and financial institutions, and communicates its near-term goals and plans.

Recommendations for the state authorities

Maintain the dynamic implementation of the IMF program and agreements with other donors and partners, in particular to speed up EU accession

The timely disbursement of financing from international partners ensures the economy's resilience in wartime. Thanks to joint actions by the authorities, Ukraine passed two revisions of the EFF program without any delays. This positive trend has to be maintained. By opening talks with Ukraine about accession, the EU gave new impetus to reforms, but qualifying for EU membership requires that Ukraine make even greater efforts to incorporate European standards and approaches into national legislation and economic policy.

Pass laws necessary for financial stability

This primarily applies to Draft Law No. 9667–1, which aims to bolster the resilience of the deposit guarantee system. This document clarifies the legal framework for the DGF's regulation of the banks that participate in the deposit guarantee system, in particular in the event of their liquidation, and sets out a clear and transparent order in which the claims of the banks' depositors and other creditors are to be met.

For the relevant law to be effective, and for the regulation of this segment of the financial market to function, it is also necessary to define approaches to the taxation of transactions with virtual assets. At the same time, the provisions of the new EU Regulation on Markets in Crypto-Assets (MiCA) should be taken into account.

Prepare a conceptual note on the *Affordable Loans 5-7-9%* program, eliminate its shortcomings

The *Affordable Loans 5-7-9%* state support program remains the main driver of new lending. At the same time, the program has expanded significantly in complexity and scale, a tendency that dilutes the support and ramps up the burden on public finances. Draft changes to the program have already been prepared that will focus it back on lending to SMEs. In accordance with the IMF Memorandum, a concept for the further functioning of the program will be developed, and monitoring of effectiveness and controls over its financial needs will be strengthened.

Recommendations for financial institutions

Banks in need of capital should develop and implement recapitalization or restructuring programs

The majority of Ukraine's banks passed the resilience assessment successfully, but a few of them will now have to meet above-minimum capital adequacy ratios. These banks must develop plans to meet and maintain the increased ratios through recapitalization or balance sheet restructuring. Once approved, these programs must be implemented according to an agreed-upon schedule.

Update their strategies to account for expected changes in regulatory requirements

The NBU is gradually re-imposing all of the regulatory requirements that were in place before the full-scale invasion. Also on the agenda is the introduction of new requirements to align Ukrainian rules for calculating capital needs with European rules. A preliminary estimate shows that taken as a whole, these rules will not create problems for the banks in meeting the minimum capital requirements. At the same time, the stricter requirements may prompt some of the banks to adapt their strategies to changes in capital requirements for different business segments or operations, including due to full consideration of operational risk and the introduction of capital requirements for market risk. In addition, the banks should incorporate into their strategies the results of the resilience assessment, which revealed both the strengths and vulnerabilities of the financial institutions.

Follow the rules for responsible lending
During the full-scale war, the financial institutions lost a significant portion of their retail business, so they are now trying to build up their loan portfolios again whenever possible. The recovery in household consumption is facilitating the trend. In an effort to boost business volumes, lenders may resort to aggressive marketing programs and intrusive offers of credit products that are not always necessary or optimal for clients. Such practices may cause financial difficulties for borrowers, especially those from vulnerable social groups, which have significantly grown in size since the onset of the full-scale invasion. The banks and other lending institutions should follow best practices for responsible lending and avoid making intrusive offers that are not suitable for clients.

Providers of non-bank financial services should adjust their business to the requirements of new legislation
New laws and regulations on finance companies, insurers, lessors, pawnshops, and credit unions will take effect at the beginning of 2024 (see Updated Legislation for the Non-Bank Financial Services Market, FSR, December 2021). Therefore, there is increasing focus on the quality of corporate governance and risk management, and requirements for solvency and market conduct towards consumers of services. Each sector of the non-bank market will be given sufficient time to bring their activities into line with the new requirements. The duration of transition periods will depend on the scope and complexity of the changes.

NBU's plans and intentions

Going forward, the NBU will gradually introduce new requirements for financial institutions, while meeting new challenges as they occur.

Implement deferred and new regulatory requirements
The NBU will gradually reinstitute all regulatory requirements that were in place before February 2022 and impose new requirements that were postponed due to the full-scale invasion. Information about planned changes to the calculation of regulatory capital requirements is provided in the section Capital Adequacy Risks. In addition, the Internal Capital Adequacy Assessment Process (ICAAP) will be applied: the banks must develop the relevant internal documents by January next year and submit test reports to the NBU by 31 May 2024. As far as the calculation of foreign-currency LCR is concerned, starting in January 2024, only 60% of the funds in correspondent accounts with the banks will be included in high-quality liquid assets (currently, the cap is 80%).

Prepare for further introduction of EU *acquis* and regulatory requirements for the banks
In 2024, the NBU will start implementing requirements for the updated structure and for the banks' regulatory capital, as well as requirements for the Internal Liquidity Adequacy Assessment Process (ILAAP). In the medium term, new approaches will be implemented to determine asset risk weights, the leverage ratio, the large exposures limit, settlement risk assessment and its inclusion in the calculation of capital adequacy, as well as disclosure requirements.

Streamline the regulation and supervision of the nonbank financial sector
The NBU plans to impose requirements in line with European standards on solvency, eligible assets, the capital and investment activity of insurers, as well as the capital of finance companies. The NBU is finalizing the preparation of drafts of the new rules.

Pay more attention to third-party risk
In view of the recent cyber-attack on Kyivstar, the NBU plans to tighten its focus on third-party risks that the banks accept in the course of their operations. This incident exposed the over-reliance of a number of financial institutions on access to communication channels that cannot be replaced quickly. Identified risks will therefore be discussed with the banks, and ways to mitigate these risks going forward will be worked out.

Abbreviations and Terms

The Report presents data for banks that were solvent as of 1 December 2023 unless stated otherwise.

War, invasion	Full-scale russian invasion to Ukraine since 24 February 2022
War-affected, warzone	Communities in areas of hostilities, under temporary occupation or surrounded, in line with definition of Ministry for Reintegration
Pre-war	Before the full-scale invasion
5-7-9%, 5-7-9% state program	State program Affordable Loans 5-7-9%
ATM	Automated teller machine
AQR	Asset quality review
BDF	Business Development Fund
CD	Certificate of deposit
CIR	Cost-to-income ratio
CoR	Cost of risk
COVID, COVID-19	Coronavirus disease 2019
CPI	Consumer price index
DGF	Deposit Guarantee Fund
EBIT	Earnings before interest and taxes
EBRD	European Bank for Reconstruction and Development
ECB	European Central Bank
EIB	European Investment Bank
EU	European Union
Fed	Federal Reserve Board
FX	Foreign currency/exchange
GDP	Gross Domestic Product
ICAAP	Internal Capital Adequacy Assessment Process
IFI	International Financial Institutions
IFRS	International Financial Reporting Standards
IMF	International Monetary Fund
ILO	International Labor Organization
HQLA	High-quality liquid assets
LCR	Liquidity coverage ratio
LGD	Loss given default
SMEs	Small and medium enterprises
NBFI	Non-bank financial institution
NBU	National Bank of Ukraine
NPE/NPL	Nonperforming exposure / loan
OPEC	Organization of the Petroleum Exporting Countries
o/w	Of which
Parliament	Verkhovna Rada of Ukraine (Supreme Council)
Regulation No 351	Regulation of the NBU of 30 June 2016 No 351 approving Regulation on credit risk calculation by Ukrainian banks
ROA	Return on assets
ROE	Return on equity
SEP	System of electronic payments
SMEs	Small and medium-sized enterprises
SSSU	State Statistics Service of Ukraine
STSU	State Treasury Service of Ukraine
T-bonds	Domestic government debt securities
Ukrfinzhytlo	Ukrainian Financial Housing Company
UK	United Kingdom of Great Britain and Northern Ireland
U.S.	United States of America
w/o	without

bn	billion
sq. m	square meters
EUR	euro
UAH	Ukrainian hryvnia
USD	US dollar
USD eq.	US dollar equivalent
pp	percentage points
yoy	year-on-year
mom	month-on-month
r.h.s.	right hand scale
H	half of a year
Q	quarter
M	month
Y	year