

Financial Stability Report

December 2024



National	Bank of	Ilkraina

The Financial Stability Report (FSR) is a key publication of the National Bank of Ukraine (NBU). It aims to provide information about existing and potential risks that might undermine the stability of Ukraine's financial system. The report further focuses on the risks that Ukraine's financial sector and economy face amid the protracted full-scale war. The FSR also provides authorities and financial institutions with recommendations for mitigating wartime risks and enhancing financial system's resilience against these risks.

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

The Financial Stability Committee of the NBU approved this report on 18 December 2024.

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National Bank of Ukraine Summary

Summary

In 2024, macroeconomic conditions were favorable for operations of the financial institutions. They managed to ensure that payments and transfers were made properly, and that households and businesses had secure and uninterrupted access to their savings. They were also able to provide increased financing to the economy to overcome the fallout of the war. The liquidity, solvency, and operational resilience of the banking system do not raise any concerns. The war remains the key risk to financial stability. While it does not pose immediate challenges to the banks and non-bank financial institutions, it significantly increases their operating costs and restrains their risk appetite for developing certain business lines.

Economic growth continues, although its pace has been volatile in recent months. Domestic demand remains the main driver of the recovery, with growth also supported by the government's capital expenditures on defense, and by stable functioning of logistical export routes. The effects of these factors are expected to continue into the next year. Energy terror waged by russia restrained companies' activity in Q4, but did not stop the growth in their production and revenues. The restoration of energy infrastructure will increase the potential for economic growth next year. At the same time, the Ukrainian economy continues to be subject to structural war-induced vulnerabilities. The state budget deficit and public and gross external debt remain high. A significant foreign trade deficit persists due to a steady increase in demand for imports and a slow recovery in export capacity. Pressure on the FX market is rising, although the liberalization measures taken so far have had a rather limited impact on the demand for foreign currency. Steady inflows of international assistance ensure there are regular influxes of capital, which mitigate these risks. The NBU's stock of international reserves allows it to guarantee stable FX market operations and to smooth out excessive exchange rate fluctuations.

At the end of the year, inflation accelerated, exceeding the NBU's forecast. This was primarily driven by higher food prices due to weak harvests, as well as a certain increase in electricity costs, higher labor costs, and the hryvnia's depreciation over the course of the year. Inflationary pressures will ease in the middle of the next year as new crops come to market. In December, the NBU raised its key policy rate by 0.5 pp, to 13.5%, in order to prevent the worsening of inflation expectations. The tightening of monetary conditions will halt the decline in commercial bank rates that has been going on for more than a year.

The banks continue to rely on client deposits as their core funding. After a spell of seasonal volatility, retail and corporate deposits with the banks are growing. This maintains a significant level of liquidity in the banking sector: the banks meet short- and long-term liquidity ratios with a considerable margin to spare. In the autumn, the NBU increased its reserve requirements, which somewhat reduced the stock of the banks' free liquidity. As the banks, especially the state-owned ones, invested more actively in domestic government debt securities, the certificates' of deposit share in their high-quality liquid assets shrank. Such a change in the composition of liquid assets will require the banks to manage liquidity more actively, so they may be expected to offer more attractive terms to attract client deposits. At the same time, the banks' liquidity is now favorable for further increasing investments in domestic government debt securities and lending.

Lending continues to be active across all segments, driven by stronger demand. In the lending survey, the banks reported an increase in clients' demand for credit, and estimates of corporate loan demand were at their highest since the end of 2021. The net hryvnia portfolio of corporate loans grew by more than 20% over the year, and that of retail loans by more than 30%.

Corporate loan portfolios are growing at banks of all groups, and across companies of all sizes. Financial institutions are actively financing enterprises in the largest industries – agriculture, trade, and industry – thus contributing to their growth. A memorandum signed by the banks in the summer facilitated the financing of energy sector recovery on favorable terms. The step-by-step implementation of the *Lending Development Strategy* is closing existing gaps in the market to facilitate access to credit. The banks are competing for corporate clients, which is reflected in the easing of lending standards. The financial standing of companies allows the banks to expand their portfolios by lending to stable and solvent clients. Even those that use benefits are mostly able to service their debts on market terms. Accordingly, the quality of the corporate loan portfolio is very good, with default rates at the level of 2021.

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In the segment of unsecured retail lending, competition is even stronger than in corporate lending. An increasing number of banks are actively trying to strengthen their role in lending to households. Therefore, the market share of the leading banks has slightly decreased over the past six months. Despite the growth in loans, their penetration rate remains quite low relative to GDP and household income. This indicates that there is significant room for portfolio expansion. Mortgage lending is active, but is the least stable of all of the segments. Its volumes are determined by the dynamics of the government's eOselia program, which dominates the market and leaves little room for the development of market-term mortgages. Recently, attempts have been made to redirect this program to the primary market, but its financial resources are limited. As a result, lending slowed at the end of the year.

Reform of the program *Affordable Loans 5-7-9%* is slow, and it is still lacks focus on the clients who need it most. This resulted in a significant increase in the debt on interest compensation to the banks at the end of the year. Funding under the program will also be complicated by the requirements for the banks to comply with environmental and social standards, which will require additional expertise from the banks and their clients. Activity under the program is expected to decline. The role of government support in corporate lending is further weakening, with the share of subsidized loans in the corporate loan portfolio falling back to one third again. Market-term unsubsidized loans and the banks' access to credit risk sharing instruments will ensure the continuity of corporate financing. Further on, the design of government support programs should ensure that market mechanisms dominate, in particular in determining interest rates, and that they target only those borrowers who need them. This applies to both the *Affordable Loans 5-7-9%* program and the *eOselia* program. The development strategies for these programs and for the activities of the managing institutions should be updated to reflect market needs. At the same time, guarantees to cover credit risk are playing an increasingly important role in the resumption of corporate lending. For example, guarantees from both the Ukrainian government and international financial institutions are becoming more accessible.

The prolonged decline in interest rates prompted the banks to manage their assets more actively. As a result, the banks were largely able to maintain asset yields, while their funding costs declined slightly. As a result, the banks' net interest margins remained very high. Thanks to the continued high profitability of core operations, as well as an increase in fee and commission income, the banks can sustain higher administrative costs without losing efficiency. Given the high quality of their portfolios, the banks are incurring almost no provisioning expenses. As a result, their profitability remains strong, and this allows them to maintain a high level of capital. A recent second increase in the income tax rate, to 50%, which will apply to the profits for the whole of 2024, was a significant unfavorable factor for the banks' profitability. The practice of retroactive tax changes considerably complicates capital planning for the banks and, for some, reduces lending opportunities.

The key regulatory novelty of the last six months is the banks' transition to a new three-tier regulatory capital structure. The banks also started to take into account all three key risks in full – credit, market, and operational ones – when calculating their capital needs. In addition, financial institutions obtained the first results of their own capital adequacy assessment under the ICAAP. Taken together, this contributed to significant progress in bringing domestic banking regulations into line with EU acquis. This work will continue going forward.

Non-bank financial institutions will transform further under the influence of updated regulatory requirements. In many areas, the work has only just begun, and market players still have a long way to go to adapt to the new legislation and prudential requirements. The number of market participants has declined significantly in recent years, but this has not led to a narrowing of access to financial services. The assets of the non-bank financial sector are growing, as is its resilience to adverse events. This will continue to boost confidence in non-bank financial services and promote market development.

National Bank of Ukraine Financial Stress Index

Financial Stress Index

Since September, the Financial Stress Index (FSI)¹ has declined markedly, primarily thanks to a significant drop in the government debt sub-index. This was driven by the external public debt reprofiling in late summer and a corresponding decline in sovereign Eurobond yields. Yields on hryvnia debt securities also fell slightly. Since then, the most substantial unfavorable contribution to the FSI has been the persistence of a moderately high level of the FX sub-index due to the NBU's large-scale interventions in the FX market. The value of households' behavior sub-index has been slowly improving due to the inflow of funds into accounts. Growth in prices for Ukrainian companies' bonds has improved the corporate securities sub-index. The banking sub-index remained the lowest compared to other sub-indices, despite a slight decline in liquidity coverage ratios as the NBU raised required reserve requirements.

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.

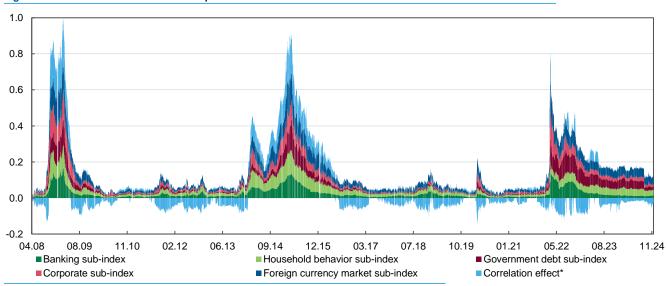
Figure FSI1. Financial Stress Index



Since the beginning of 2023, the components of the government debt sub-index have been adjusted: the average yield of sovereign Eurobonds has been estimated without taking into account instruments with a maturity date before the planned reprofiling date of 2024; the credit default swap price, which has not been estimated since August 2022, has been excluded (the value of August 2022 was still used).

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, ٧. (2021).New Financial Stress Index for Ukraine. Ukraine. 251. 37-54. Α Visnvk Bank of the National of https://doi.org/10.26531/vnbu2021.251.03

Part 1. External Conditions and Risks

1.1. External Developments

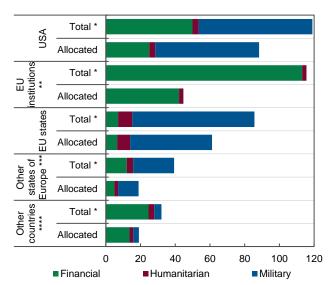
The risk of a further prolongation and escalation of the war persists, while market reactions indicate that the participants are becoming more optimistic about the end of hostilities. International support is expanding through the use of profits from immobilized russian assets, and Europe's role in financial assistance to Ukraine is growing. At the same time, Ukraine is moving toward European integration. The economies of partner countries are growing at a moderate pace, which will support demand for Ukrainian exports. The price environment for Ukrainian external trade is improving. However, the risks of global trade fragmentation are growing.

Figure 1.1.1. Geopolitical Risk Index (GPR) globally and in Ukraine



Source: Dario Caldara and Matteo Iacoviello. https://www.matteoiacoviello.com/gpr.htm.

Figure 1.1.2. Committed official assistance for Ukraine from January 2022 through October 2024, euro billions



^{*} All commitments, including disbursed ones. ** European Commission, EU Council, and European Peace Facility. *** United Kingdom, Iceland, Norway, and Switzerland. **** Australia, Canada, New Zealand, South Korea, Taibei, Turkiye, and Japan.

Source: Kiel Institute for World Economy.

Ukraine is resisting increased enemy pressure

The enemy is pressing in several areas of the frontline and has achieved some tactical success at the cost of significant losses. For Ukraine, a new challenge on the battlefield was the actual entry of the North Korean army into the war on moscow's side. Massive terrorist air strikes have intensified considerably. The tactics of the attacks point to russia's intention to leave Ukraine without electricity in the winter, causing as much damage to the economy as possible. The attack on Ukraine with a new type of ballistic missile and the accompanying threats to Ukraine's partner countries further escalate the war.

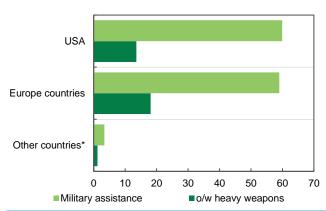
Ukraine is adapting to these threats and investing in strengthening its defense capabilities. Domestic production of military products is growing. The range of countries with which Ukraine has signed security agreements is gradually expanding: 27 such agreements have already been signed, including with all G7 countries, the EU, and most of its member states. This confirms Ukraine's partners' readiness to provide further military assistance.

The search for a peace formula for Ukraine with the participation of international partners continues. The results of the U.S. election improved international investors' assessments of the prospects for ending the war. In particular, this was reflected in the growth in the value of Ukrainian Eurobonds. However, the parameters and possible timeframes for achieving peace remain uncertain, and the risks of the prolongation of the war remain high.

The portion of external financial support coming from income from russian assets is growing

International support for Ukraine remains significant. In October, the leaders of the G7 countries agreed to allocate around USD 50 billion in assistance to Ukraine under the ERA (Extraordinary Revenue Acceleration) program. Interest and principal under these loans will be paid using proceeds from immobilized russian assets. These funds will be targeted at budgetary and military support and will be disbursed based on bilateral agreements. The EU has already committed to provide a large part of this amount to Ukraine. The disbursement under this program will depend on the fulfillment of Ukraine Facility. For its part, Japan has also announced the allocation of USD 3 billion for Ukraine under the ERA. In addition, conditions have been agreed for receiving USD 20 billion from the United States under the G7 commitment through the World Bank. At the same time, in the United States, strategic decisions about the forms and

Figure 1.1.3. Military assistance to Ukraine between January 2022 and Ocober 20224, euro billions



Military assistance includes financing tied to military purposes. Heavy weapons are estimates that do not include ammunition of any kind, smaller arms or equipment.

* Canada, Australia, Turkiye, Japan, New Zealand, and South Korea. Source: Kiel Institute for World Economy.

Table 1. Clusters and chapters of Ukraine's negotiations with the

Cluster	Chapters				
. Fundamentals	23. Judiciary and fundamental rights				
	24. Justice, freedom, and security				
	5. Public procurement				
	18. Statistics				
	32. Financial control				
	Economic criteria				
	Public administration reform				
	Functioning of democratic institutions				
2. Internal	1. Free movement of goods				
market	2. Free movement for workers				
	3. Right of establishment and freedom to provide services				
	4. Free movement of capital				
	6. Company law				
	7. Intellectual property law				
	8. Competition policy				
	9. Financial services				
	28. Consumer and health protection				
3. Competi-	10. Digital transformation and media				
tiveness and	16. Taxation				
inclusive growth	17. Economic and monetary policy				
giowai	19. Social policy and employment				
	20. Enterprise and industrial policy25. Science and research				
	26. Education and culture				
	29. Customs union				
4. Green	14. Transport				
agenda and sustainable connectivity	15. Energy				
	21. Trans-European networks				
	27. Environment and climate change				
5. Resources,	11. Agriculture and rural development				
agriculture, and cohesion	12. Food safety, veterinary, and phytosanitary policy				
	13. Fisheries22. Regional policy and coordination of structural instruments				
	33. Financial and budgetary provisions				
6. External	30. External relations				

31. Foreign, security, and defense policy The cluster for which the screening has been completed is marked in green; chapters for which the screening has been started are in blue. Source: European Commission, the Cabinet of Ministers of Ukraine.

volumes of further support for Ukraine will be approved no sooner than late January, after the newly elected president is inaugurated. The new ERA mechanism has allowed the use of current and future income from russian assets for the benefit of Ukraine, but it does not solve the issue of transferring all of these assets to Ukraine to compensate for losses caused by the war.

Ukraine continues to cooperate productively with its partners under other programs. The sixth review of the IMF's Extended Fund Facility Arrangement has been successfully completed. Going forward, the IMF's funds will drop in cost by around a third as a result of a revision of approaches to appraising the cost of credits by the IMF itself. Ukraine is receiving the support committed under the Ukraine Facility according to schedule. The country also receives large volumes of financing from the World Bank.

Overall, the international support announced for 2025 will be sufficient to finance the deficit of the state budget and maintain the NBU's international reserves at the necessary levels. Considering the large amount of government spending on defense and the persistence of security risks, continued financial support remains critical macroeconomic and financial stability of Ukraine.

Ukraine's progress toward the EU accession is dynamic

From July, a bilateral screening process has been underway to assess the conformity of Ukraine's laws with EU acquis. This year, screening was completed for the first out of six clusters and was started for a number of chapters under other clusters. This process could be completed for all clusters by the end of next year. After the screening is finished, the European Commission (EC) will present a report to EU member states. Negotiations on the first chapters are expected to start in 2025. The negotiations should result in Ukrainian legislation and practices attaining sufficient conformity with EU standards, after which the chapters will be closed one by one. The Treaty of Accession is to be prepared after that.

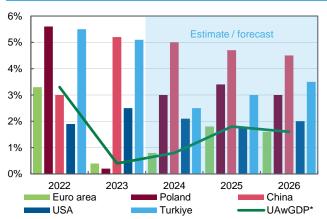
In October, the EC said that screening was progressing smoothly, and expressed readiness to move to the next stage of negotiations as soon as possible. The EC's October report on the progress Ukraine made over the year also showed good pace of reforms.

Partners' economies will grow moderately

The advanced economies have tamed high inflation. The IMF forecasts that inflation will return to target levels next year, which will reduce social pressures. That said, leading central banks are cautious in their communications about potential further key rate cuts. Going forward, the central banks will keep searching for a balance between controlling inflation risks and avoiding recession threats. At the same time, monetary policy in the advanced economies will remain tight. Economic growth in partner countries will be relatively stable, albeit moderate. The euroarea's GDP growth is being supported by a recovery in exports and a revival of domestic demand. GDP growth is also accelerating in Poland, the

relations

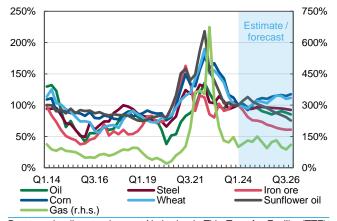
Figure 1.1.4. Change in real GDP of Ukraine's main trading partners, % yoy



* Weighed average indicator of economic growth of Ukraine's main trading partners.

Source: NBU, Inflation Report, October 2024.

Figure 1.1.5. Global commodity prices, Q1 2024 = 100%



Brent crude oil; natural gas at Netherlands Title Transfer Facility (TTF); steel billet Exp FOB Ukraine; China import Iron Ore Fines 62% FE spot; average global quartely prices for sunflower oil, wheat, and corn.

Source: NBU, Inflation Report, October 2024.

United Kingdom, and Türkiye. Together, these factors create the preconditions for an increase in demand for Ukrainian exports and steady financial support for the country. The IMF forecasts that economic growth in the United States will decline somewhat next year as the country shifts away from stimulating budgetary policy, but that it will be close to 2%. The economy of China is expected to continue to slow despite a range of incentives offered by the government.

Global trade is growing, according to World Trade Organization forecasts. This growth will be supported primarily by an increase in transactions inside international political and economic blocs. Meanwhile, trade between such blocs is declining – trade restrictions imposed between them are already beginning to be felt. Further trends in global trade will depend on the stance of the new U.S. presidential administration In the future, it may also impact Ukrainian exports.

The economy of russia is weakening but continues to fund the war

New sanctions against the aggressor country, primarily by the United States against Gazprombank, further limit the enemy's use of the international financial system and complicate the sale of russian natural gas to advanced economies. A new round of British and European sanctions has restricted russia's use of its "shadow fleet" of oil tankers. Other countries joining in these restrictions could have a significant impact on the oil trade that is bypassing sanctions. The russian economy is under considerable pressure from persistent high inflation and financial system problems. The IMF predicts a sharp slowdown in russia's economy due to a decline in private investment and consumption - but not yet a recession. In addition, the aggressor state has managed to find ways to circumvent certain sanctions. Therefore, sanctions and monitoring of their compliance should be further strengthened.

Price terms are mostly improving for Ukrainian exports

Global wheat prices have stabilized after falling, while corn prices have resumed growth, primarily due to forecasts of poorer harvests in the EU and the Black Sea region. Next year, the price of these grains will increase moderately. The price of sunflower oil also increased and remains high amid limited supply, particularly from Ukraine. At the same time, persisting problems in China's real estate sector and strong supply from competitors are driving down prices for steel and iron ore. This trend is likely to continue next year. Crude oil prices will further decline due to increased production outside OPEC+ and a lower geopolitical risk premium. At the same time, the risk of an escalation of conflict in the Middle East is already well established, which could increase price volatility. Natural gas prices remain relatively stable.

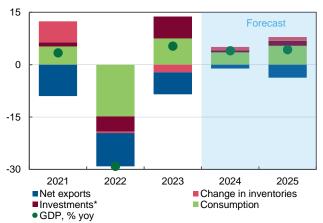
Key logistical challenges for Ukrainian exports have been overcome. The sea corridor is operating without interruption, but from time to time threats arise to the land transit of goods on certain parts of the border with Poland. Risks to exports of metallurgical products are increasing, given the enemy's approach to Pokrovsk, which is the main source of coking coal in Ukraine for this industry.

Part 2. Domestic Conditions and Risks

2.1. Macroeconomic and Fiscal Risks

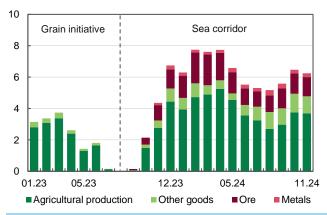
Ukraine's economy continues to grow steadily in an extremely challenging environment. At the same time, the country continues to face significant deficits of the budget and the current account of the balance of payments, and thus shortages of foreign currency on the market. Ukraine's funding needs are being covered by large-scale international support, which has been confirmed in sufficient amounts for the next year. Due to rising food prices and higher production costs being passed on to prices, inflation will exceed the NBU's forecast as of the year-end. Rising inflation risks led to an increase in the NBU's key policy rate at the end of the year, which will keep commercial interest rates higher going forward.

Figure 2.1.1. Contributions of components to GDP growth, pp



* Gross fixed capital formation. Source: SSSU, NBU estimates.

Figure 2.1.2. Exports from ports of Greater Odesa*, million tons



^{*} Ports Pivdennyi, Chornomorsk, Odesa.

Source: Ukrainian Sea Ports Authority, Ministry of Infrastructure.

Ukraine's economy will grow steadily further on

In 2024, Ukraine's economy continued to recover, supported primarily by robust domestic consumer demand. Economic growth was also driven by the government's sizeable capital expenditures, in particular in the defense industry, and by an increase in exports, given the stable operation of seaports and the expansion of metallurgy and mining production. All of these positive factors will continue to play a role going forward. However, the persistence of active hostilities and air strikes will depress investment sentiment in the private sector. There are also risks of continued attacks on port infrastructure. In addition, labor shortages and structural imbalances on the labor market will hold back production growth. Significant uncertainty will remain at the start of the next year due to the risks of further damage to the energy sector. As of mid-December, businesses are able to operate without significant interruptions, but the widening of the deficit in the power grid is quite noticeable. The NBU forecasts that, despite all the challenges, GDP growth will accelerate to 4.3% in 2025. This acceleration will be ensured by the rebuilding of the energy infrastructure. The growth will also be boosted by continued significant fiscal stimuli, robust domestic and foreign demand, as well as better weather conditions.

International assistance will provide a margin of safety for the next year

By the end of 2024, the state budget deficit should amount to about 24% of GDP (excluding grants in budget revenues). The Ministry of Finance estimates that next year the budget deficit will moderately narrow, to 19% of GDP. The government will finance it almost entirely at the expense of international assistance: in 2025, more than USD 38 billion is expected to come from international partners. Most of this amount will be provided under the multi-year ERA program, which was initiated by the G7 and the EU and totals USD 50 billion. The funds will come, among other things, in the form of macro-financial assistance and will be repaid from future incomes from frozen russian assets. Simultaneously, the timely implementation of planned reforms by Ukraine is necessary for the regular inflows of international assistance. An important marker of Ukraine's compliance with its commitments is the sixth successful review of the IMF cooperation program - the Extended Fund Facility (EFF) - as well as the fulfillment of the next quarterly indicators under the Ukraine Facility, the EU's program to support Ukraine.

Figure 2.1.3. Current account balance, 12-month moving average, USD billions

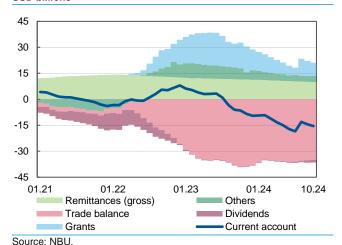
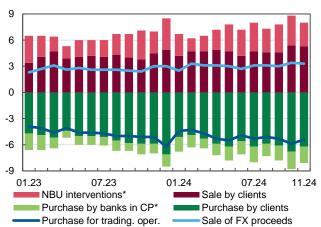
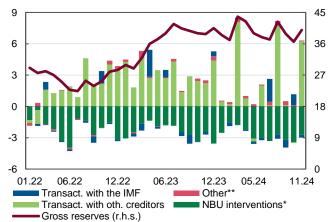


Figure 2.1.4. Demand and supply for non-cash foreign currency, USD billions equiv.



* On a net basis. CP – purchases into the currency position. Source: NBU.

Figure 2.1.5. 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" refers to the revaluation of financial instruments due to changes in their market value and exchange rate fluctuations, as well as other transactions.

Source: NBU.

The current account deficit will keep widening

The stable operation of the sea corridor eased logistical constraints and helped boost exports. However, due to the protracted war, export potential is growing very slowly. The escalation of fighting near Pokrovsk poses a threat to steel production and exports, as this area has the deposits of coking coal used for pig iron production. At the same time, demand for imports is stable and will continue to grow, particularly for military goods and energy equipment. These factors will determine the further widening of the trade deficit, from USD 35 billion in 2024 to USD 38 billion in 2025. Additional outflows will be driven by the already implemented FX liberalization measures, including the permission given to partially pay out dividends. At the same time, the size of the current account deficit may change depending on the format of international assistance: as grants or as loans, which are recorded in the financial account.

International assistance will provide capital inflows to the financial account, which will cover the current account deficit. There has also been a steady increase in net trade loans to Ukraine. However, a significant inflow of private capital is possible only after the security situation normalizes. At the same time, FX cash outflows from the banks are growing – in the first nine months of 2024, they reached the figure for the whole of 2023.

International reserves will remain sufficient despite significant NBU interventions

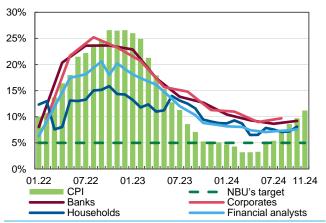
The NBU continues to be a key participant in the FX market, and its interventions are the main tool for balancing supply and demand of foreign currency. Net demand for foreign currency is expanding as the economy recovers and imports pick up. The easing of some of the restrictions on capital flows has so far had a rather moderate impact on the market, as companies used foreign currency they already had for more than a third of the cross-border payments they made as a result of the FX liberalization. At the same time, households' demand for FX cash increased in the autumn. The growth in demand is the main factor behind the additional pressure on the exchange rate. However, the NBU is able to cover foreign currency shortages and smooth out excessive exchange rate fluctuations.

Inflows of international assistance allow the NBU to maintain international reserves at a sufficient level despite the increase in demand for foreign currency. Since Q4 2023, the volume of reserves has exceeded the 100% adequacy level according to the IMF metric, and it is expected to be close to 120% by the end of the year. The NBU forecasts reserve adequacy under this metric will decline gradually, but will still be above 100% in 2025.

The current acceleration in inflation will be short-lived

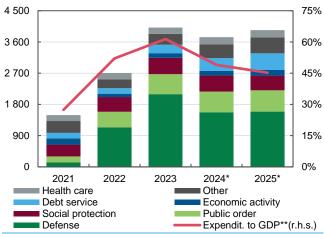
In November, annual inflation rose to 11.2%. The acceleration in inflation was primarily driven by higher food prices due to the summer drought and poor harvests. The rise in raw material prices led to higher prices for finished goods, primarily in the food industry. Higher electricity costs, rising labor costs, and the weakening of the hryvnia during the year

Figure 2.1.6. CPI and inflation expectations for the next 12 months



Source: NBU, Info Sapiens.

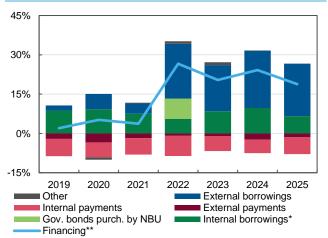
Figure 2.1.7. State budget expenditures by component, UAH billions



* Expenditures in 2024 and 2025 according to the adopted laws on state budget. ** GDP in 2024-2025 is the NBU forecast published in the October 2024 Inflation Report.

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

Figure 2.1.8. State budget financing, % GDP



* Excluding the NBU. ** 2024 – Law of Ukraine "On the State Budget of Ukraine for 2024" with amendments, 2025 – Law of Ukraine "On the State Budget of Ukraine for 2025".

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

also partially passed through to the prices charged by businesses.

Inflation is most likely to remain at double-digit levels in H1 2025. Inflationary pressures from rising food prices are expected to ease as new harvest enters the market. High base effects from 2024, the resilience of the energy sector, and the expected decline in global energy prices will also contribute to slowing down inflation. At the same time, there will be continued pressure on prices from rising production costs – primarily labor costs due to higher wages and labor shortages. The NBU forecasts that inflation will return to the 5% target only in 2026.

In December, the NBU decided to raise the key policy rate by 0.5 pp, to 13.5%, to avoid an unanchoring of inflation expectations. The tightening of monetary conditions is expected to halt the decline in commercial bank rates that lasted for more than a year. The current levels of deposit rates and rates on government bonds ensure that yields on hryvnia assets are higher than the inflation rate projected for the end of 2025, thus maintaining the attractiveness of these assets.

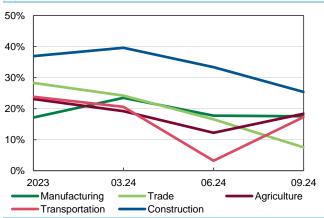
A part of the budget deficit can still be financed from domestic market

The protracted war and the need for additional defense spending have repeatedly forced the government to revise budget expenditures during the respective budget year. In 2024, budget financing needs increased by UAH 275 billion compared to the original plan. The government managed to raise necessary funding on the domestic market in time mainly from the banks. This was facilitated by the NBU's increase in the reserve requirements and the possibility to cover a larger share of reserves with government securities. If necessary, the government may further increase debt borrowings from the banks. Despite the growth in investments in domestic government debt securities this year, the banking sector's liquidity allows for an increase in this portfolio next year as well, if needed. This will be facilitated, in particular, by maintaining the level of interest rates on the borrowings.

2.2. Real Sector and Related Risks

The recovery of the real sector continues, driven by rising domestic demand and improved export logistics. Revenues in most industries continue to grow, and businesses' profitability is improving. Despite the generally positive performance, business expectations are rather guarded. In business outlook surveys, companies say they expect an increase in their output, but they are concerned about the possible consequences of the ongoing war and the shortage of skilled labor. Companies' investment sentiment is depressed.

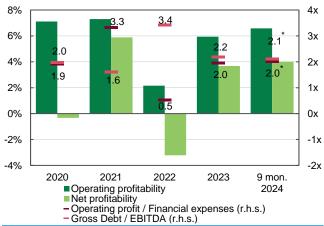
Figure 2.2.1. Change in annual* income of businesses by sector, yoy



* 12-month trailing.

Source: Open data portal, NBU estimates.

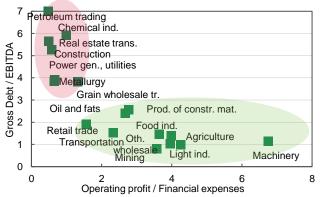
Figure 2.2.2. Profitability and debt burden



* Calculated for the 12 months ending September 2024.

Source: Open data portal, NBU estimates.

Figure 2.2.3. Debt burden for the 12 months ending September 2024



The colored segments indicate the ranges of high (red) and low (green) debt burden.

Source: Open data portal, NBU estimates.

Businesses' income is recovering

Most sectors are steadily recovering production and sales. Growth is being fueled by robust domestic private and public consumption. Export industries are further supported by the continuous operation of the sea corridor and lower freight tariffs. Businesses stepped up their operations despite electricity shortages. Some companies, such as trading companies, had purchased backup power supplies in previous years, so they were prepared for power outages. A number of companies have invested in power generation this year. Banks provided these companies with preferential loans. Businesses were also shored up by the possibility of direct electricity imports.

Real sector revenues are growing at a slower pace than last year, due to the gradual waning of the low base effect. In the first nine months of 2024, companies' revenues grew by more than 11% yoy. The operating income of companies grew proportionally. Net profitability also increased slightly, but it is still below its 2021 level. Businesses are maintaining their financial resilience, while debt burdens are moderate and close to their pre-war levels. For the year ending September, the ratio of operating income to financial expenses was 2.0x, and while that of gross debt to EBITDA was 2.1x.

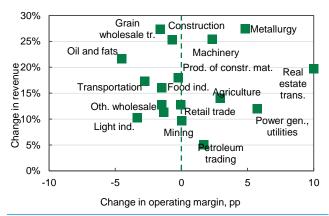
The growth of a number of industries was driven by external factors

Trade sector companies continue to increase their revenues thanks to robust consumer demand. The industry has demonstrated some of the highest resilience to electricity shortages; it maintains good financial performance, making its companies attractive clients for banks.

Over the year, the agricultural sector's revenues grew, primarily due to stable export logistics routes, which enabled agricultural companies to sell their last year's bumper harvest and to significantly reduce agricultural stocks. However, for a long time, low export prices for agricultural products curtailed the operating profitability of agricultural producers. The upward u-turn in price trends for a number of agricultural products will support the sector's revenues and operating profitability going forward. As a result, the risks of lending to agricultural companies have eased somewhat. Demand from farmers for fertilizers has contributed to the growth in the chemical industry.

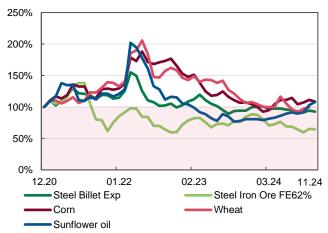
Rising domestic demand and favorable export conditions have driven growth in the food industry. However, the low harvest of food commodities is putting pressures on production costs. Food companies are offsetting the rise in raw material prices by passing production costs on to consumers. Global sunflower oil prices have risen and are to stay high, which is likely to improve the financial standings of

Figure 2.2.4. Change in revenue and operating margin for the 12 months ending September 2024, yoy



Source: Open data portal.

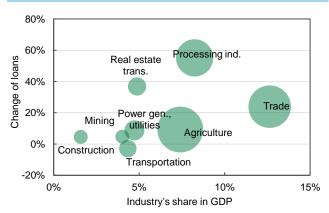
Figure 2.2.5. Change in world price for Ukrainian export commodities, December 2020 = 100%



World price on FOB terms.

Source: World Bank, APK-inform, NBU estimates.

Figure 2.2.6. Value added in 2023 and change in net hryvnia corporate loans for the year to 1 November 2024



The size of the circle is the amount of net loans outstanding as of 1 November 2024.

Source: SSSU, NBU estimates.

companies in the industry. Meat and meat products production, the second largest segment of the food industry after oil production, is actively stepping up output. In some product groups, output has already approached the record levels of 2021.

Strong demand from exporters for transportation pushed up revenues in the transportation sector. The increased throughput of railway and port infrastructure contributed to higher revenues in the metals and mining industries. However, moderate external demand and low prices are holding back the recovery of the sector's operating profitability. The utilization of production capacities in the metals and mining industries increased over the year, but is far from its pre-war levels. The biggest risk for the metals industry is the escalation of fighting near coking coal deposits in Ukraine, which could threaten the loss of raw materials for cast iron and steel production. Another risk is the introduction of a tax on carbon intensive goods (Carbon Border Adjustment Mechanism) starting in 2026.

The construction of fortification facilities and logistics infrastructure has increased the construction of non-residential buildings and engineering structures. Demand from the defense sector is also fueling mechanical engineering. Companies in the sector have good profitability and are seeing their revenues rise, which makes them attractive clients for banks.

Businesses are cautious about their business prospects

Businesses expect only a slight recovery in business activity next year (see the <u>Business Outlook Survey</u>). Companies hope to sell more of their own products and are considering stepping up investments in machinery and equipment. However, investment sentiment is rather subdued, with capital investment in construction remaining below the equilibrium level since the start of the full-scale invasion

Businesses see the war and its consequences as the key risk to their operations. The second most important constraint for businesses is the shortage of qualified staff. For a year now, respondents to the NBU's business outlook survey have indicated that access to credit has no significant negative impact on their operations.

The banks support real sector growth

Over the past year, the banks' contribution to supporting economic growth has strengthened. Net hryvnia corporate loans grew by 22%, providing financing to key sectors of the economy. The largest recipients of the loans were the agricultural and trade sectors, which together account for about a quarter of GDP. Loans to the processing industry are growing at a fast pace, while loans to the mechanical engineering and chemical industries rose by more than a third. Lending to energy projects is an important component of banking support for the economy.

2.3. Real Estate Market and Mortgage Lending

Demand for residential real estate is gradually increasing, mostly for ready-made, cheaper housing. The supply of housing is slowly increasing, mainly due to the completion of existing facilities, with new housing complexes being built only in the west of the country. At the same time, there are significant mismatches between the supply of housing and the requirements of potential buyers, so the market is recovering slowly, and housing prices on the secondary market are barely rising. Given the growth in incomes, the price conditions for buying a home are even more favorable than in 2021. However, security risks deter people from buying a home. At the same time, due to changes in the program's terms and a lack of funding, mortgage lending under *eOselia* has slowed down.

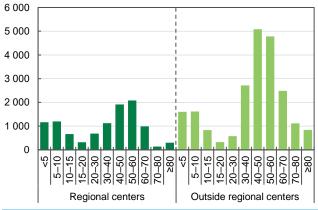
Figure 2.3.1. Housing market activity



Since 2023 – SPFU transactions data certified by notaries, resulted in the personal income tax payment obligation.

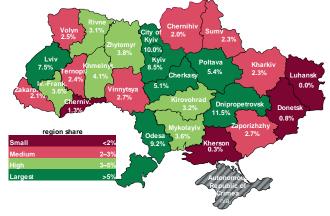
Source: Ministry of Justice, State Property Fund of Ukraine, banks' data.

Figure 2.3.2. Number of agreements for the purchase and sale of apartments by age of building in years, units



Source: State Property Fund of Ukraine.

Figure 2.3.3. Share of housing purchase and sale agreements in January – November 2024 by regions



Source: State Property Fund of Ukraine.

Secondary market activity is slowly growing

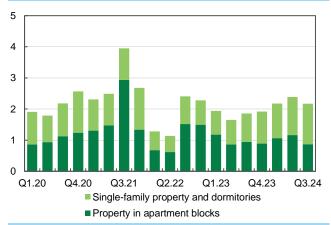
Demand for housing is slowly recovering, primarily on the secondary market. In the first eleven months of 2024, notaries certified 14% more agreements than in the same period last year. The number of sale and purchase agreements has increased in each of the quarters since the beginning of the year. However, it has reached only 70% of the level before the full-scale invasion. About 60% of agreements in the first three quarters of 2024 were for the purchase of apartments, while the rest were for private houses. In 2021, the ratio was two to one. Otherwise, the structure of agreements is close to that of 2021. Smaller and therefore cheaper housing is in greatest demand on the secondary market. The median area size of purchased apartments is 48 square meters (both nationwide and in Kyiv), while that of houses is 71 square meters. Most agreements involved purchases of housing built more than 35 years ago, with only a quarter of agreements involving purchases of housing less than 15 years old. At the same time, according to advertisements on LUN, the median area size of housing available for sale in Kyiv is significantly higher about 60 square meters – and the age is lower.

The vast majority of secondary market agreements were for the purchase of housing outside of regional centers – 78% of agreements. The capital accounts for another 10% of deals. Among regional centers, housing in the west of the country is more popular. Compared to 2021, the share of housing purchase agreements in regional centers (excluding Kyiv) increased, while in the capital it slightly decreased. However, the trend has reversed in the last year.

Buyers are still not interested in purchasing real estate on the primary market. According to a LUN survey, in early 2024, the number of purchase and sale agreements on the primary market remained almost unchanged compared to last year, and did not exceed one-fifth of its the pre-war level. It is unlikely to have increased since then. Purchases on the primary market are still ssen as quite risky, both because of long-standing problems and a lack of transparency in the market, as well as because of high security risks.

In H1, 5% of deals involved a mortgage, but later this share dropped to 4%, which is comparable to 2021. Almost half of all mortgages since the beginning of the year the banks have issued on housing in Kyiv and Kyiv oblast. The decline in the role of mortgages resulted from the slowdown of the *eOselia* program due to changes in its design and limited resources. Thus, the program's role in the real estate market is unlikely to increase in the near future. To stimulate the market, the banks have to develop more mass products.

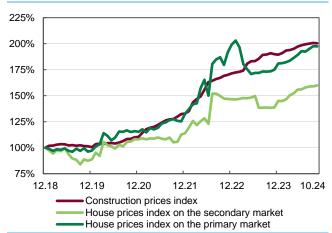
Figure 2.3.4. Commissioned housing in Ukraine, sq. m millions



In 2023, the area was divided in proportion to the structure by the number of commissioned apartments. In Q1 and Q2 2024, the structure reflects the data for H1 2024.

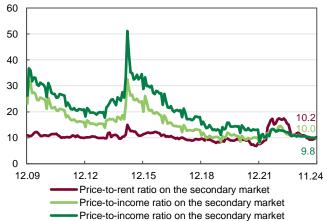
Source: SSSU.

Figure 2.3.5. Construction and housing price index, in hryvnias, December 2018 = 100%



Source: SSSU, real estate agencies, and NBU estimates.

Figure 2.3.6. Price-to-rent and price-to-income ratios in Kyiv



Since February 2022, income has been calculated based on average salary increases in Kyiv according to work.ua and robota.ua, and salary increases in Ukraine according to the SSSU compared to January 2022.

Source: SSSU, websites of real estate agencies, websites of job aggregators, and NBU estimates.

Household incomes are continuing to recover, but demand on the real estate market is unlikely to grow commensurately. The persistence of war risks will restrain demand, while the mismatches between supply and demand parameters will curb the growth in the number of deals.

There is a lot of housing for sale, but the market is slowly being replenished with new buildings

The construction of new housing is rather slow: new sites are being launched more often in the western regions, while in the capital phases of existing residential complexes are being completed. Construction continues with significant delays due to a lack of resources, including labor. In the capital, developers are more actively completing higher-quality housing complexes, including business class ones, and those that have a larger number of unsold apartments. Cheaper housing and residential complexes with almost sold out apartments are more likely to remain frozen. Housing commissioning in Ukraine as a whole is close to the pre-war although multi-apartment housing is commissioned more slowly. Less than a fifth of the residential complexes where sales are ongoing have already been completed. According to LUN, the number of housing complexes for sale in Ukraine has increased by 10% since the beginning of the year. However, further replenishment of the supply through new construction will be slow given protracted uncertainty and security threats. Therefore, the risks of a shortage of new high-quality housing remain.

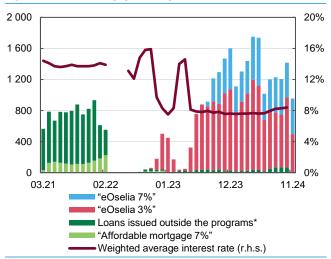
Prices grow sluggishly in response to FX rate changes

Sluggish housing prices growth on the secondary market is most likely due to changes in the exchange rate, as prices in U.S. dollars still often serve as a benchmark for the market. The cost per square meter in the dollar equivalent in the capital and western Ukraine is mostly flat, while in other regions it is even declining. According to LUN, the price of sold apartments is still a quarter below the average advertised price. The conditional pegging of housing prices to the dollar only deepens this difference.

Over the past six months, rents have been rising in line with housing prices. So the price-to-rent ratio in Kyiv remained at 10x. This is close to the long-term average and indicates that buying a home is a good alternative to renting (see Box 1. Price-to-Rent Ratio in Kyiv Based on Advertisements). In recent months, another market indicator, the price-to-income ratio, returned to its historic lows seen at the end of 2021 (when real estate prices declined due to rising security risks). On average, a family with 1.1 employed members spends the equivalent of 10 years of income to buy a 70-square-meter apartment in Kyiv. Therefore, the price conditions of the real estate market are even better than before the war. However, war risks have significantly changed the attitude: people are not ready to invest in housing on the same terms as before.

Housing prices on the primary market are growing faster than those on the secondary market. Prices are moving upward primarily in western regions, where construction and demand are higher. Prices there have risen by 17%-18% since the beginning of 2024, while in Kyiv and several other big cities

Figure 2.3.7. New mortgage lending, UAH millions



eOselia 7% covers loans to broad categories of households.

* Data on mortgages issued outside the program are not yet available for November.

Source: banks' data, BDF, and UFHC.

they have increased by only 9%. The main price drivers are changes in the FX rate and rising construction costs.

Mortgage lending under eOselia slowed, as expected

Mortgage lending continues predominantly under *eOselia*, while mortgages outside the program are few. The number of banks participating in the program has increased to eleven, but some of the new participants have not yet disbursed any mortgages. More than 90% of mortgages are concentrated in three state-owned banks.

In the first eleven months of 2024, the amount of mortgages granted exceeded that for the whole of 2023 by more than a half. However, the average monthly lending volume in H2 is one third lower than in March-April, when the volume was at a record high. Lending slowed for two reasons. First, the program operator, Ukrfinzhytlo, changed the mortgage terms to increase the share of mortgages on the primary market (even while reducing the amount of mortgages to purchase finished housing). The October design changes limited the maximum age of housing to 3 years (except for a few regions and internally displaced persons); reducing the downpayment to 10% for young people; and increasing interest rates after the tenth year of the mortgage. The number of accredited developers has also increased: now you can get a mortgage for an apartment in 201 buildings from 91 developers. Second, Ukrfinzhytlo once again faced a lack of funds.

Given the weak demand, lending to purchase housing on the primary market is unlikely to be brisk. Despite all the efforts to refocus the program, the number of mortgages for housing from developers grows quite slowly. Meanwhile, eOselia will continue to discourage customers from alternative offers, and banks from launching unsubsidized products.

The retail real estate market is in good condition, while that of the office spaces is in a lull

The retail real estate market continues to improve. Shopping mall traffic is growing significantly, and in safer regions, including Kyiv, the figures are no worse than before the full-scale invasion. Accordingly, renter demand has increased considerably, and the vacancy rate is very low. Trade volumes are growing steadily in key segments: clothing and household appliances. Increased footfall and lower vacancy rates are typical for both smaller shopping malls in the city centers and larger ones located farther from the city centers. Rental income is growing, but the construction of new shopping malls is of little interest to investors.

The vacancy rate of office spaces is stably high. Rental rates remain significantly lower than before the COVID-19 quarantine and the full-scale invasion. Due to discounts, renters are able to get space in higher-quality offices for a reasonable price, so demand for these spaces is higher. On the other hand, owners of lower-end properties or of those in more dangerous regions find it much harder to retain renters, and continue to be willing to offer them space only for the payment of utilities bills. No new office centers are being built. The demand for warehouse space is primarily among traders who are setting up their own logistics. Commercial real estate is currently not very attractive to investors.

Box 1. Price-to-Rent Ratio in Kyiv Based on Advertisements

The NBU regularly estimates the price-to-rent ratio to analyze the real estate market, using average data on purchase and rental prices for housing on the market as a whole. This time, the price-to-rent ratio was also estimated using information about specific apartments that share similar basic characteristics. The results of both approaches turned out to be very close, which confirms the utility of the averaged ratio.

The price-to-rent ratio in Kyiv is close to the long-term average

The ratio of the purchase price of a home to the annualized rental cost reflects the number of years it will take for the rental costs to equal the purchase price. In a balanced real estate market, rental and purchase prices should move in line with each other, as they are shaped by similar factors. Therefore, the price-to-rent ratio should tend toward its long-term average. A significantly higher level often indicates the emergence of a price bubble in the market², while a value below the average may signal an undervaluation of housing or an overvaluation of rental prices. The price-to-rent ratio can be used to determine whether it is more benefitial to buy or to rent out an apartment. For example, according to Moody's, the long-term average price-to-rent ratio in the United States is 16x.

The NBU regularly estimates the price-to-rent ratio for the secondary market of Kyiv. To calculate the ratio, the NBU uses data from real estate agency websites on average sales prices per square meter and rental prices. In November 2024, the price-to-rent ratio for the secondary market in Kyiv was close to 10x, which corresponds to the long-term average for more than twenty years. The proximity of these values indicates that there are no significant price imbalances between housing prices and rental prices.

Figure B.1.1. Price-to-rent ratio on the secondary market in Kyiv



Source: real estate agencies, NBU estimates.

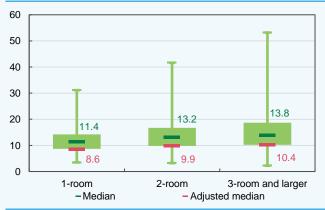
The ratio between the sale and rental prices of similar apartments is also close to 10x

Although use of the calculation of the price-to-rent ratio on the basis of average prices is quite common, it does not take into account the heterogeneity of prices for apartments with different characteristics. Therefore, an alternative calculation was made using data from individual advertisements from LUN website for the rental and sale of apartments in the

secondary market of Kyiv in November 2024. In addition to prices, the ads contain the address, year of construction, number of rooms, and total area. The structure of ads for sale and rent is quite similar: about a third of them are for one-bedroom apartments, another third are for two-bedroom apartments, and about a quarter are for three-bedroom apartments. The median area of an apartment is slightly larger than 60 square meters (around 40 square meters for one-bedroom apartments and 60–64 square meters for two-bedroom apartments). The average age of buildings is 16–17 years. Pairs of apartments with the same street location, similar construction periods³, the same number of rooms, and similar total area (rounded to the nearest 5 square meters) were identified. The price-to-rent ratio was calculated for each such pair.

The resulting average value of the price-to-rent ratio in Kyiv was 12.7. However, while apartments are most often rented out at the advertised price, actual selling prices of apartments are mostly 25% lower than the advertised price (See 2.3 Real Estate Market and Mortgage Lending). Taking into account this adjustment, the price-to-rent ratio in Kyiv averages 9.5, which is close to the figure calculated on the basis of aggregate data.

Figure B.1.2. Distribution of price-to-rent ratios for similar apartments in Kyiv by number of rooms



The faces of the rectangles correspond to the distribution's first and third quartiles. The dashes inside the rectangles and numbers indicate the median. The lines extending above and below the rectangles indicate maximum and minimum values.

Source: LUN.

The price-to-rent indicator increases with the number of rooms in an apartment, as the cost of buying a home depends more on the area than the cost of rent. Although the obtained values of the price-to-rent ratio have a wide range, the vast majority of estimates are close to the average.

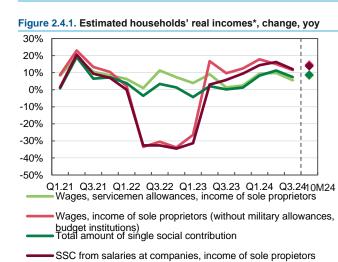
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² Shmygel A. and Hoesli M., <u>House price bubble detection in Ukraine</u>, Journal of European Real Estate Research, (2023).

³The following ranges of construction periods were defined for the analysis: before 1960, 1960–1989, 1990–1999, 2000–2009, and since 2010.

2.4. Households and Related Risks

Household incomes are growing due to further wage rises at companies. Significant regional and skill mismatches in the labor market persist, but unemployment is gradually declining. Real income growth is somewhat restrained by accelerating inflation. Income growth is improving consumer sentiment and boosting loan demand. However, household debt burden remains low. Household savings are growing, and investments in domestic government debt securities are becoming increasingly popular among households.



^{*} Data on the amounts of official wages and incomes of individual entrepreneurs come from bank reports. PrivatBank's data was adjusted to include only wage payments.

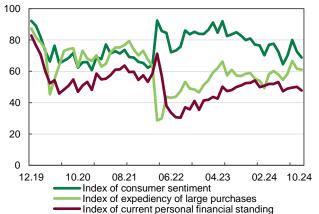
Source: Pension Fund of Ukraine, State Treasury of Ukraine, bank data, and NBU estimates.

Figure 2.4.2. New resumes and vacancies, thousands



Source: work.ua.

Figure 2.4.3. Households' consumer sentiment*, points



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

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

Household income continues to grow steadily

Nominal household income continues to grow at double-digit rates. The main driver of income growth remains the increase in its largest component – total wages of company employees (up more than 20% yoy in October). Employers are driven to raise wages by labor market conditions: there is still a shortage of skilled workers, and competition for them is intensifying. In addition, the minimum wage has been raised twice this year. This pushed up the salaries of budgetary institution employees. The total military payroll grew moderately. Pensions have also increased slightly due to the indexation in March and additional increases in July for certain age groups. However, the acceleration of inflation this year is slowing down income growth in real terms. Therefore, since the middle of the year, the annual growth rate of real household income has declined to around 10% yoy. The NBU estimates that this year real wages will exceed the levels seen before the full-scale invasion.

Employment is rising despite labor market mismatches

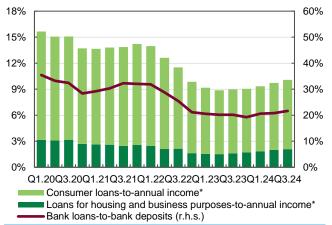
The unemployment rate is declining and, according to the NBU's forecast, will be around 14% at the end of the year. The need for employees is growing as the economy recovers. At the same time, the supply of labor does not fully meet businesses' needs. Significant skill and regional mismatches persist in the labor market. The mobilization is complicating the search for personnel. The shortages of labor remains one of the main obstacles to doing business, according to a survey conducted by the Institute for Economic Research and Policy Consulting in October 2024. Respondents even expect a decrease in the number of employees in the next 12 months. For the second time in a row this year, responding to the NBU's survey the banks named the shortage of qualified staff as being among the biggest systemic risks to the sector.

Economic and employment growth, coupled with competitive pressures in the labor market, will contribute to drive income growth in the private sector. However, the ability of businesses to offer increasingly higher wages is slowly declining, so wage growth will decelerate. In addition, the minimum wage is not expected to be revised next year, which will limit the growth of wages in budgetary institutions. On the other hand, the slowdown in inflation in H2 2025 will keep incomes growing comfortably in real terms.

Active consumption contributes to retail lending

Continued growth in household incomes is supporting consumer sentiment, and private consumption is growing accordingly. Over the past quarter, the index of propensity to make large purchases, determined by the research agency Info Sapiens, has increased noticeably, although it still remains in negative territory. As consumption picks up, the demand for banking services is also growing: card payments

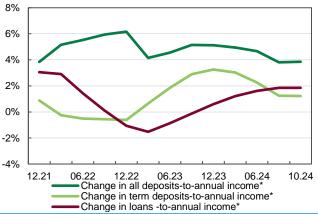
Figure 2.4.4. Household debt burdens



^{*} Data on the amounts of official wages and incomes of individual entrepreneurs come from bank reports and data on pensions from the State Pension Fund of Ukraine.

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

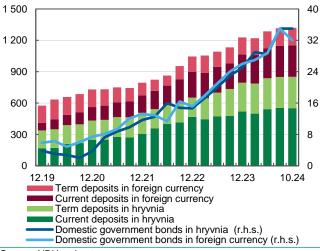
Figure 2.4.5. Ratio of changes in hryvnia deposits and retail loans in banks to annual income



* Data on the amounts of official wages and incomes of individual entrepreneurs come from bank reports and data on pensions from the State Pension Fund of Ukraine.

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

Figure 2.4.6. Main instruments of households' financial savings, UAH billions



Source: NBU estimates.

in retail chains and consumer loans are on the rise. Financial institutions are encouraging Ukrainians to use credit more actively. They offer a variety of promotions and cashback programs, which makes card lending more appealing. However, a significant share of card loans is repaid during the grace period (the period with ultra-low or zero interest rates). Therefore, for a number of clients, the use of loans is only a tool for managing personal liquidity.

Demand for loans from non-bank financial institutions is recovering. The growth rate of this portfolio is even higher than that of the bank portfolio. Portfolio growth continues despite changes in a number of regulatory requirements for lenders and new legislative restrictions on loan interest rates, which restrained lending in H1.

There is also continued demand from households for preferential mortgages under the government *eOselia* program. However, a significant number of applications have recently been made for mortgages to buy older housing on the secondary market, the granting of which will be limited by the terms of the program. Therefore, looking ahead, mortgage lending is likely to slow down. The program's preferential terms keep borrowers' debt burdens low.

This year, the loan portfolio grew faster than income. Thus, at the end of Q3, the ratio of loans from banks and non-banks to annual household income rose slightly, to 10%. However, this level indicates that the loan penetration rate for households is still low. The banks also confirm this in the NBU's lending survey.

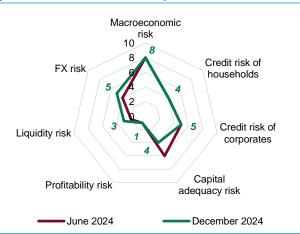
The portfolio of domestic government debt securities held by households is growing

Despite strong consumption, household savings are also growing, primarily due to higher incomes. Moderate growth in current accounts and bank deposits continues after a seasonal decline in summer balances. The share of term bank deposits has remained close to 35% for more than a year. Such a term structure of bank deposits is quite typical of European countries (see Liquidity and Funding Risk in the June 2023 FSR). Given the increase in the military tax paid on personal income and accelerating inflation, domestic government debt securities are becoming a much more attractive alternative to classic bank deposits. Households' investments in government securities grew rapidly, by almost half over the year. Investments in domestic government debt securities are becoming more accessible, as some banks offer the opportunity to purchase government securities through their own mobile apps or websites. However, household investments in domestic government debt securities account for only about 5% of total retail deposits in banks.

Part 3. Banking Sector Conditions and Risks

3.1. Financial Sector Risk Map

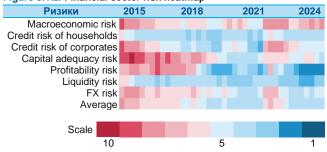
Figure 3.1.1. Financial sector risk map



The NBU assesses risks on a scale from 0 to 10, with 0 being the lowest level of risk and 10 the highest. The assessment reflects the outlook for the next 12 months. The methodology for building the risk map has been adjusted given 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 reaeconomy, the external sector, and the fiscal area.
- The credit risks of households and corporates reflect expectechanges in the share of non-performing loans in bank loan portfolio and the need for extra provisions for those loans.
- Capital adequacy risk measures the ability of banks to maintain a 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 liabilitie 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: unchanged

The economic recovery continues despite the damage done to the energy sector. The state budget deficit, the deficit of the current account of the balance of payments (excluding grants), and public and gross external debt remain high. Stable inflows of international assistance offset these risks.

Credit risk of households: unchanged

The credit risk of households is moderate, and its level is determined by a number of diverging trends. The quality of the retail portfolio is improving, with the share of past due loans gradually declining. At the same time, the banks expect a slight deterioration in portfolio quality, and households' economic expectations have deteriorated.

Credit risk of corporates: unchanged

The default rates of the corporate loan portfolio continue to decline and are now comparable to the levels seen during the period of macroeconomic stability. That said, the banks point to a possible deterioration in the portfolio quality. The financial standing of companies remains satisfactory, while businesses are cautious about the prospects for a recovery in business activity.

Capital adequacy risk: decreased

Capital adequacy risk has decreased markedly. Following the transition to the new capital structure and the inclusion of profits in Tier 1 capital, capital adequacy has risen. The banks' capital cushions remain strong, and their profitability will allow maintaining them going forward.

Profitability risk: unchanged

Risks to the banks' profitability remain minimal further on. The banks have gone through a cycle of rate cuts and maintained high interest margins. Thanks to the good quality of the loan portfolio, loan loss provisions are insignificant. The banks' operational efficiency remains high.

Liquidity risk: increased

Liquidity risk has increased moderately. Inflows of client deposits to banks have slowed down. The LCR ratio has declined slightly, although it remains well above minimum requirements. The stock of highly liquid assets is substantial. The banks expect liquidity risk to rise in the future.

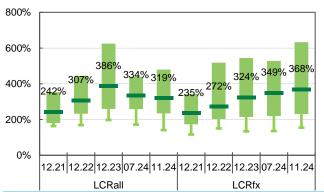
FX risk: increased

FX risk is medium. Since the spring, the banks' assessments of the level of FX risk and depreciation expectations of businesses and households have worsened. At the same time, the volatility of the UAH/USD exchange rate has remained low. International reserves are sufficient to smooth out exchange rate fluctuations.

3.2. Liquidity and Funding Risk

The banks remain highly liquid. The existing stock of high quality liquid assets and the stable inflow of funding from clients provide banks with a degree of comfort in expanding their loan portfolios and investing in domestic government debt securities to finance the budget. However, higher reserve requirements, increases in corporate income tax rates, and planned dividend payments by state-owned banks may temporarily change the structure of liquid assets and require the banks to manage liquidity more actively.

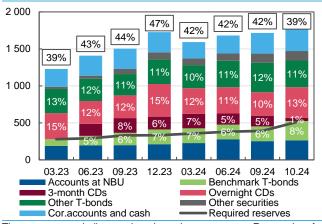
Figure 3.2.1. Liquidity coverage ratios in all currencies (LCRall) and FX (LCRfx)



Upper and lower edges of rectangles represent the first and the third quartiles of the indicator distribution. Dashes inside the rectangle show the median. Lower dashes outside the rectangle show the minimum. Regulatory requirement is 100%.

Source: NBU.

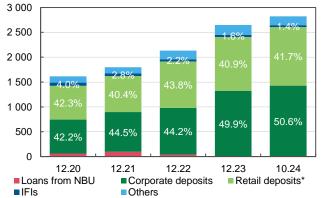
Figure 3.2.2. High quality liquid assets in all currencies, in UAH billion terms, and its share in net assets



The percentage indicates the share in net assets. Face value for benchmark domestic government bonds.

Source: NBU.

Figure 3.2.3. Banks' liabilities, UAH billions



* Including certificates of deposit.

Source: NBU.

The banking sector is highly liquid, the structure of high quality liquid assets is changing

The banks' liquidity further does not raise any concern. Short-term LCR ratios in all currencies and in foreign currencies are more than triple the minimum requirements. The banks also meet NSFRs with a margin. The share of high quality liquid assets (HQLA) in the banks' assets remains significant, at almost 39%. At the same time, in October, the volume of HQLAs declined slightly due to the NBU's decision to raise reserve requirements. Accordingly, liquidity ratios have declined slightly in recent months.

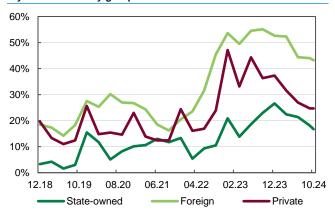
Since October, reserve requirements have increased by 5 pp for all types of funding, except for hryvnia retail deposits with a maturity of more than three months, for which reserve requirements remain zero. So now, the level of required ratios varies from 15% for hryvnia corporate deposits to 35% for current retail FX deposits. Differentiated requirements for required reserves are encouraging the banks to attract more hryvnia term retail deposits and thus maintain attractive deposit rates for customers. Longer-term deposits, among other things, allow the banks to narrow the average maturity mismatch. By raising the reserves requirements, the NBU allowed a larger share of them (60%, compared to about 40% previously) to be met with special benchmark domestic government debt securities. After that, the banks reduced their investments in certificates of deposit in favor of correspondent accounts with the central bank or invested in new benchmarks offered by the government. As instruments used to meet required reserves are not included in HQLAs, these assets fell by more than 5% compared to late September. At the same time, the banks' investments in domestic government debt securities grew by almost 5%, or UAH 30 billion.

FX HQLAs continue to be dominated by balances on correspondent accounts with investment-grade foreign banks. Starting next year, they should account for no more than 40% of LCR-eligible HQLAs (currently up to 60%). Most likely, the banks will invest part of the funds from correspondent accounts into investment-grade securities. Currently, these instruments account for one third of FX HQLAs. The gradual exclusion of correspondent accounts from HQLAs is in line with EU approaches. Looking ahead, these accounts will be accounted for as inflows to the LCR, which will also improve the ratio. Therefore, FX liquidity will remain high.

Changes in the liquidity profiles of banks are not uniform

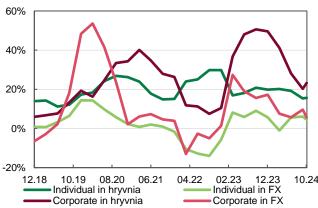
In addition to purchasing benchmark domestic government debt securities, state-owned banks stepped up their investments in regular and military hryvnia government bonds

Figure 3.2.4. Ratio of investment in certificates of deposit and hryvnia liabilities by groups of banks



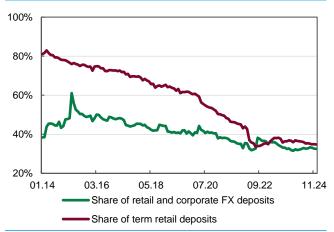
Source: NBU.

Figure 3.2.5. Annual rate of change of corporate and retail deposits



Source: NBU.

Figure 3.2.6. Dollarization rate of retail and corporate deposits and the share of term deposits in retail deposits



Source: NBU.

to meet the increased required reserves. Therefore, they cut their placements in three-month certificates of deposit (CDs) to almost zero. Overall, the banks' investments in this instrument fell by three times compared to September. Their share in HQLAs shrank to 1%. State-owned banks also significantly reduced their investments in overnight certificates of deposit.

In H1 2025, the banks will pay income taxes at a higher rate of 50%, which will include additional charges for the months of the year when the rate was 25%. The state-owned banks will also transfer significant amounts of dividends to the government. Like this year, this will have a noticeable one-off negative impact on their unbound liquidity. The reduction in liquidity will require the banks, especially the state-owned ones, to pay more attention to their liquidity management, and to more actively raise term deposits. Accordingly, in the future, one can expect more attractive conditions for attracting client funds and stronger price competition in the borrowing market.

Bank funding from clients is stable

Client deposits remain the main source of funding for banks, accounting for 92% of liabilities. In H2, hryvnia deposits continued to grow, although the growth slowed significantly. Over the year to November, hryvnia corporate deposits grew by 23%, while retail deposits rose by almost 16%. Deposits grew at banks of all groups. Corporate FX deposits increased by 6% yoy, but in recent months they have begun to decline, largely due to payments of dividends and interest on external loans allowed on the back of eased FX restrictions. At the same time, retail FX deposits continue to grow gradually. Despite some volatility, bank funding from clients is quite stable and enables active lending and investments in medium- and long-term instruments. Therefore, financial institutions do not need any alternative funding. The latest Funding Survey shows that the banks expect further growth in retail and corporate deposits. The amount of outstanding refinancing loans at a few small banks is negligible. Despite occasional new project borrowings, the banks' debt to IFIs remains at historically low levels since 2004.

The term and currency structure of funds is stable

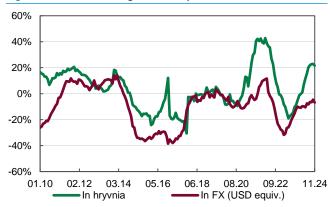
Term retail deposits have been growing recently, albeit more slowly than current accounts. As a result, the share of term retail deposits has declined slightly, approaching 35%. However, tighter reserve requirements further encourage the banks to focus on attracting term deposits.

The dollarization rate of the banks' liabilities remained almost unchanged, at around one third. The volatility of the hryvnia exchange rate sometimes technically increased the hryvnia equivalent of FX deposits. In general, the banks expect the share of FX deposits to decline further, as the options for using these funds are still very limited, and higher reserve requirements limit the returns on such deposits for banks.

3.3. Corporate Lending Risk

The banks have been maintaining high rates of hryvnia lending to businesses for more than a year in a row. The steady growth in SME lending has recently been fueled by demand from larger companies. Banks of all groups are ramping up their lending, and they are strongly competing for clients. Lending is driven by better terms, including lower interest rates. The percentage of subsidized loans under the *Affordable Loans 5-7-9%* Program is decreasing. The quality of the corporate loan portfolio has improved, with default rates at pre-crisis levels and acceptable client debt burdens.

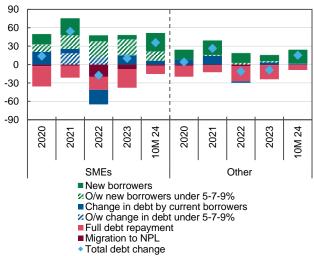
Figure 3.3.1. Annual change in net corporate loans



At banks solvent at each reporting date.

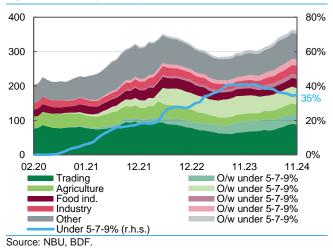
Source: NBU.

Figure 3.3.2. Change in performing hryvnia corporate loans, UAH billions



Loans exceeding UAH 2 million. 5-7-9% loans issued before 1 July 2024. Source: NBU. BDF.

Figure 3.3.3. Net hryvnia corporate loans, UAH billions



Corporate loans are on the rise due to stronger demand

Throughout 2024, net hryvnia corporate loans grew. In October, the portfolio increased by 22% yoy. The resilience of businesses to security threats and macroeconomic stability has revived businesses' activity and their demand for financing. In the latest Lending Survey the banks reported the largest increase in demand for corporate loans since 2021 – primarily demand for hryvnia loans. Financial institutions, for their part, are ready to meet the stronger demand. They report an increase in the approval rate for loan applications and an easing of lending standards for the first time since 2021. Primarily, market interest rates have become more appealing to clients. Interest rates on hryvnia loans average 15%, which is in line with the levels of seen in the pre-Covid 2019. Banks also report more intense competition for reliable clients.

Lending in foreign currency continues to be in short demand. Therefore, the FX loan portfolio is shrinking, despite the technical effect of its revaluation due to the weakening of the hryvnia during the year. Since the start of the full-scale invasion, FX loans have decreased by one third.

The share of corporate loans in bank net assets is still low, at around 16%-10 pp below the level before the full-scale invasion. The ratio of loans to GDP is less than 8%. Therefore, there is considerable room for further portfolio growth.

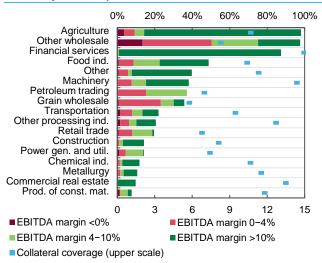
Companies of all sizes and banks of all groups are increasing their hryvnia loans

During the year, loans to SMEs grew at the highest rate. In H2, the loan demand of large companies increased significantly, with international trading corporations and agricultural holdings applying for bank loans more frequently. Banks of all groups are expanding their portfolios dynamically, with private bank portfolios growing the fastest. Lending is being boosted by the emergence of new borrowers. The main recipients of new hryvnia loans over the past year have been trading, agricultural, and food The banks also financed state-owned companies. companies; the share of their loans in the hryvnia performing loan portfolio is 13%, while that of state-owned banks is close to a third. The banks, primarily state-owned ones, provided a significant amount of loans to Ukrfinzhytlo to implement the eOselia program. Overall, hryvnia loans to state-owned companies grew by 17% over the year. The banks are also actively financing defense needs.

The role of compensation programs is weakening, while that of guarantees is strengthening

Favorable lending conditions, primarily lower interest rates, have significantly reduced the need for government subsidies

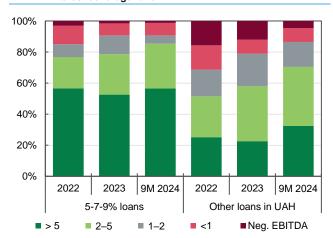
Figure 3.3.4. Performing hryvnia corporate loans granted over 12 months, by borrower profile



Loans exceeding UAH 2 million. Coverage of debt with collateral, taking into account prudential liquidity ratios.

Source: NBU, Open Data Portal.

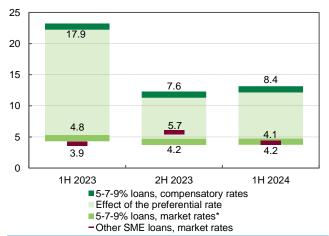
Figure 3.3.5. Breakdown of the performing corporate portfolio by EBITDA interest coverage ratio



Loans exceeding UAH 2 million.

Source: NBU, Open Data Portal, BDF.

Figure 3.3.6. Coverage of annual financial expenses by borrowers' EBITDA under new working capital loans from banks



^{*} Hypothetical coverage of financial expenses by EBITDA of clients who took out "5-7-9%" loans if they paid the average market rate. Individual values of the indicator are limited to the range [-50; 50].

Source: Open Data Portal, BDF, NBU estimates.

for loans. In 2024, only about a third of new SME clients received loans under the *5-7-9%* program. The share of loans granted under the *5-7-9%* program in the hryvnia gross performing portfolio decreased by 6 pp over the year to about 34%. Further improvement in business performance will reduce the role of government support for lending.

A recent NBU analysis showed that the operational efficiency of the program participants and the rest of the companies does not differ significantly (see *The Affordable Loans 5-7-9% Program Requires Sweeping Change* in the June 2024 FSR). The analysis shows that many program participants could have obtained and serviced loans on market terms. On average, the ratio of annual EBITDA to estimated debt service costs for program participants would be no worse than for other borrowers who did not receive subsidies (see Figure 3.3.6). This is yet another proof that preferences should be narrowed.

At the same time, credit risk sharing instruments are becoming increasingly important for lending development. At present, about a quarter of performing hryvnia corporate loans are covered by portfolio guarantees (see <u>Box 4. Credit Guarantees – An Effective Tool to Support Lending</u>).

Lending resumption is in the focus of the NBU's attention

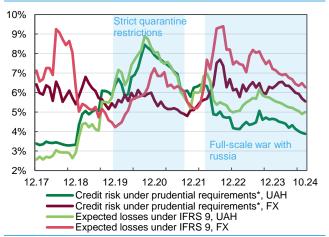
The war and security threats have exposed lending market flaws that cannot be overcome without government involvement. Measures to address these flaws are outlined in the Lending Development Strategy developed by the NBU jointly with the government. The strategy envisages both immediate steps to boost lending during the war, and the development of credit market infrastructure for the future. To ensure that regulatory innovations do not hinder lending, the NBU is implementing them in stages in accordance with the Strategy. In November 2024, the government launched a program to compensate for the cost of loans to defense companies. The strategy's measures and the banks' initiatives have already made energy loans more affordable for businesses. Since the banks signed a memorandum on preferential lending for energy sector recovery, applications received have reached almost UAH 70 billion. Projects worth UAH 8 billion are already being financed to increase generation capacity by more than 400 MW. Despite the preferential energy lending program, more than half of the loans were issued by banks outside the program on favorable terms.

Going forward, the priority is long-term structural reforms. In particular, the reforms provide for improvements to legislation to strengthen the protection of creditors' rights, streamline procedures for foreclosing on collateral, and help avoid tax burdens in loan settlement. Work is also underway to improve the infrastructure for the resolution of distressed assets.

Credit risk has eased, provisions are not growing

The quality of corporate loans is quite high, with a significant portion of the portfolio granted to clients with good financial metrics (see Companies). Borrowers with

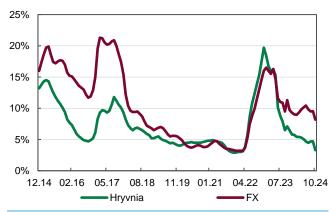
Figure 3.3.7. Provision coverage of corporates performing loans



^{*} Credit risk according to Resolution No. 351.

Source: NBU.

Figure 3.3.8. The default rate of large borrowers* over a 12-month horizon by quantity, smoothed data



^{*} Credit risk according to Resolution No. 351.

Source: NBU.

Table 2. Corporate loan portfolio as of 1 November 2024

performing loans maintain a satisfactory debt burden, with the average debt to EBITDA ratio remaining at 4.7x, and the ratio of EBITDA to financial expenses increasing to 5.5x. Since February 2022, the banks have recognized the default of about 19% of borrowers, who had 26% of all loans before the full-scale invasion. Most of the loans became non-performing in 2022. At the same time, about 4% of borrowers defaulted in the last 12 months ending November, which is comparable to the figures for 2021. The share of non-performing loans is slowly declining.

Given the good quality of their portfolios and the small number of default events, the banks have little need to increase provisions. The coverage of performing corporate loans with financial provisions under IFRS and prudential provisions is further declining. Therefore, the total losses from the war-related provisioning for corporate loans remain close to 15% of the net corporate portfolio. The banks expect a possible deterioration in portfolio quality in the future, which may be explained by generally more active lending. The current profitability and capital cushions make it possible to cover credit risks, and timely response to increased risks reduces their impact.

Table 2. Corporate loan portfolio as of 1 November 2024												
		Gross performing loans		Loans migrating* to NPLs in 12 months		NPL	Debt ratio (net debt to EBITDA)*		Interest coverage ratio (EBITDA / Financial		Loan Structure, Affordable	
No.	Industry	total, UAH bn	of which SMEs, UAH bn	credit risk coverage	by number	by debt amount	ratio**	dept to i	9M	expens		Loans 5-7-9% (Total UAH 120 billion)
			UAH DN					2023	2024	2023	2024	
1	Agriculture	102	81	3.2%	3.2%	4.3%	14%	3.5	2.9	4.4	6.1	41.8%
2	Grain wholesale	28	8	3.6%	7.7%	6.5%	35%	5.2	4.9	2.5	3.5	2.0%
3	Petroleum trading	22	9	9.3%	7.4%	2.0%	4%	4.2	5.0	2.5	2.5	2.2%
4	Other wholesale	68	48	3.9%	3.1%	3.1%	14%	2.9	3.6	4.2	4.2	17.9%
5	Retail trade	22	5	5.4%	1.9%	0.3%	18%	2.4	2.5	4.7	5.2	2.4%
6	Food industry	39	20	3.6%	3.3%	3.4%	22%	3.2	3.2	4.9	5.1	9.0%
7	Oil and fats	17	8	3.3%	1.4%	0.1%	11%	3.4	2.4	3.2	5.5	1.1%
8	Mining	3	1	5.7%	18.2%	11.8%	40%	1.1	2.5	5.3	5.3	0.3%
9	Metallurgy	8	6	2.9%	2.2%	0.3%	48%	2.7	3.7	4.6	4.8	2.9%
10	Machinery	7	5	2.9%	4.4%	4.4%	45%	2.1	1.9	5.3	6.4	2.3%
11	Chemical industry	8	7	2.1%	3.3%	4.1%	19%	2.1	2.5	5.9	6.2	3.5%
12	Production of constr. materials	5	2	3.0%	2.0%	1.4%	24%	4.0	4.8	5.4	6.3	1.3%
13	Light industry	2	2	3.7%	9.4%	10.6%	22%	2.3	5.2	6.1	4.1	0.9%
14	Other processing	10	7	2.2%	3.1%	1.1%	15%	2.2	3.0	6.7	6.3	3.3%
15	Electr. supply and publ. utilit.	7	4	6.4%	8.3%	20.2%	56%	2.4	2.3	5.9	6.7	0.5%
16	"Green" energy	10	7	3.3%	3.5%	1.7%	62%	6.6	6.0	3.4	3.5	0.4%
17	Real estate transactions	13	9	6.8%	8.3%	8.8%	47%	7.6	7.3	1.9	2.4	0.3%
18	Commercial real estate	8	5	3.6%	7.6%	6.7%	86%	4.6	6.5	3.0	3.2	0.3%
19	Transportation	16	11	3.3%	3.7%	5.2%	20%	2.6	2.3	4.8	4.9	3.6%
20	Construction	5	3	8.8%	5.5%	11.3%	68%	1.0	1.3	6.3	7.8	1.9%
21	Financial services	13	12	0.4%	8.2%	5.6%	13%	0.9	5.2	1.0	2.0	0.0%
22	Other	14	9	6.6%	5.8%	6.2%	16%	3.6	3.9	3.8	4.5	2.0%
23	State-owned companies	76	11	3.0%	0.0%	0.0%	8%	5.1	4.5	2.3	2.6	0.0%
	Total	503	280	3.9%	3.7%	3.6%	28%	4.7	4.7	4.7	5.5	100%

^{*} The ratio of the number of loans or the amount of debt of borrowers that defaulted within 12 months, in accordance with the requirements of Resolution No. 351. ** Excluding non-performing loans issued to PrivatBank's former shareholders and individuals affiliated with them.

Source: Open data portal, BDF, NBU.

Box 2. "Stars" and "Zombies". A Quality Assessment of the Real Sector Companies⁴

Since 2022, Ukraine has been facing unprecedented challenges caused by russia's full-scale invasion. At the same time, businesses are showing resilience to the shocks of the war and signs of recovery. To assess the financial health of bank borrowers, the NBU replicated a 2018 study. The results are optimistic: loans are mostly issued to borrowers with good financial metrics. The share of "Zombies" in the portfolio is insignificant, and their loans are mostly recognized as non-performing and are well provisioned for. The banks' prudent lending standards have ensured good portfolio quality; this provides a good start for further lending growth.

The financial health of bank borrowers is good

Economic crises significantly change the financial health of businesses. In 2018, the NBU for the first time assessed in detail the consequences of the two past financial crises for corporate bank borrowers and classified them depending on their financial condition from "Stars" that have no financial problems to "Zombies" that are insolvent and are trapped in this situation (see <u>Stars and Zombies: An Assessment of the Quality of Companies in the Real Sector</u> in the December 2018 FSR). At that time, "Zombie" companies accounted for about a third of bank loans and another quarter belonged to "Infected" companies, while "Stars" or "Almost Stars" accounted for less than a quarter. Therefore, the banking portfolio as a whole was quite risky, although it was well provisioned.

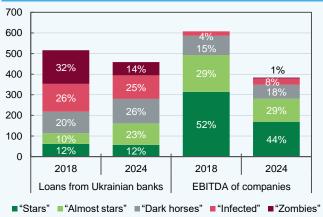
In 2024, the NBU repeated this study using slightly adjusted approaches. A sample of companies with loans from Ukrainian banks as of November 2024 was analyzed based on financial statements for 2023. The sample includes the largest private companies with revenues or net loans from banks exceeding UAH 100 million. The sample consisted of 4,332 borrowers with loans totaling UAH 459 billion, which is almost three quarters of the gross corporate portfolio, excluding loans to state-owned companies and legacy NPLs of state-owned banks. The share of sample loans accounts for three quarters of the overall performing and nonperforming portfolios. The companies in the sample generated 31% of the revenue of all companies in 2023. To assess borrowers belonging to groups under common control (about one third of all loans), the consolidated financial statements of groups were used.

The companies were assigned to one of five categories based on three criteria: debt burden, profitability, and change in revenue (Table 3). The "Stars" and "Almost Stars" are companies with mostly good performance. The "Dark Horses" included companies with minor vulnerabilities. "Infected" borrowers have some unsatisfactory metrics, while "Zombies" were recognized as borrowers that have extremely unsatisfactory results (see Table 4 for the classification algorithm).

Currently, only 14% of bank loans are granted to "Zombie" clients. At the same time, 35% of the analyzed portfolio is made up of loans to "Stars" and "Almost Stars", a share that has increased significantly compared to the previous assessment.

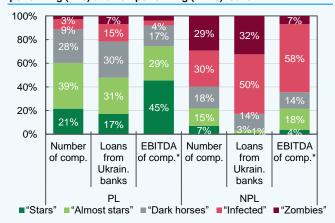
The high debt burden is the main reason for poor company assessments. A third of companies are classified as "Zombies" or "Infected" by gross loans due to an excessive debt burden, but almost all of these loans have already become NPLs. The vast majority of the analyzed NPLs arose during and as a result of the full-scale invasion of russia (see *Causes of Business Defaults during the Full-Scale War* in the December 2023 FSR). At the same time, more than half of these clients have satisfactory profitability and revenue dynamics. This indicates that, in the absence of new shocks, these borrowers have the potential to resume repayment through restructuring.

Figure B.2.1. Borrower indicators by quality group, UAH billions



Source: Open data portal, NBU estimates.

Figure B.2.2. Borrower indicators by quality groups in terms of performing (PLs) and non-performing (NPLs) loans



^{*} EBITDA for operationally profitable companies.

Source: Open data portal, NBU estimates.

Lending to new sectors is improving the portfolio

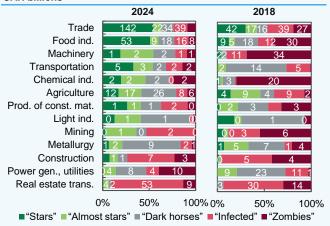
The best financial health of borrowers is in trade, the food industry and machine building. Trade companies are old

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⁴This study was inspired by a PWC report titled "Stars and Zombies. Greek corporates coming out of the crisis".

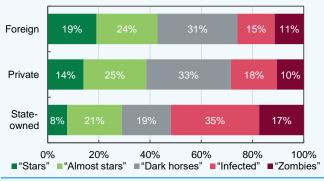
clients of banks, while most companies in the other two industries are new clients. This demonstrates the expansion of the banks' customer base with quality companies. The portfolios of high-margin agricultural branches have a fairly good quality. On the other hand, the portfolios of energy, construction, and real estate companies are in the worst shape. The problems of the former are related to russian energy terror and long-standing problems with feed-in tariff payments (see Banks Suffer Losses Due to Crisis in Green Energy Sector in the June 2023 FSR). The latter two industries are suffering due to the downturn in the real estate market after the full-scale invasion.

Figure B.2.3. Borrower loans by quality groups across sectors, UAH billions



The numbers show the sum of the gross loans issued to particular group. Source: Open data portal, NBU estimates.

Figure B.2.4. Borrower loans by quality group across bank groups



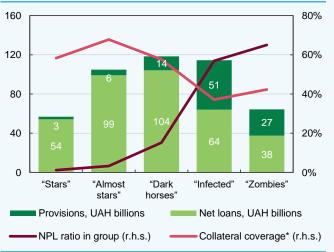
Source: NBU estimates.

The quality of clients in the loan portfolios of banks from different groups differs little. The noticeably higher share loans to "Zombie" and "Infected" companies in state-owned banks is a natural consequence of the higher share of NPLs, while the performing loans of state-owned banks have been issued mostly to companies of very high quality.

Adherence to prudent standards is the basis for further lending development

Overall, the good financial standing of bank clients despite the devastating effects of the war reflects not only business resilience but also prudent lending standards. The experience of previous crises has forced banks to better assess the financial health of their borrowers. Provisioning for loans to poorer clients is higher. The reason for the incomplete provision coverage is the significant collateral coverage of loans, which has grown significantly over the past seven years.

Figure B.2.5. Provisioning by quality groups



* In line with the liquidity ratios set in Regulation No. 351. Source: Open data portal, NBU estimates.

Increased attention to the financial state of clients enables banks to build a better quality portfolio and respond in a timely manner to clients' debt servicing difficulties. Together, this considerably reduces potential losses for banks and enables them to meet the growing demand for loans without worsening their risk control standards. Therefore, thanks to the prudent lending practices prior to the full-scale war, one can count on active bank lending for post-war recovery.

Table 3. Methodology for assessing company quality

	Good (G)	Satisfactory (S)	Poor (P)
Debt burden	Gross debt/EBITDA <2 or negative net debt and Gross debt/Assets <0.5	Gross debt/EBITDA <7 and Gross debt/Assets <1	Gross debt/EBITDA > 7 or negative equity or EBITDA<0
Profitability		EBITDA margin and return on invested capital are greater than 0%	EBITDA margin or return on invested capital are less than 0%
Income growth		The decline in revenue (adjusted for a deflator) compared to 2021 exceeds the real decline in the sector's production by no more than 10 pp	The decline in revenue (adjusted for a deflator) compared to 2021 exceeds the real decline in the sector's production by more than 10 pp

Table 4. Quality group distribution criteria (the letters show the result of the criteria evaluation in a specified order)

rable 4. Wallity group distribution of iteria (the letters show the result of the officera evaluation in a specified of der)							
	"Stars"	"Almost Stars"	"Dark Horses"	"Infected"	"Zombies"		
	GGG	SGG, GSG, GGS, GPG, GGP	GSS, SGS, SSG, SSS, GSP SPG, SGP, GPS	PGG, PGS, PSG, SSP, SPS PSS, PPG, PGP, GPP	PPS, PSP, SPP, PPP		

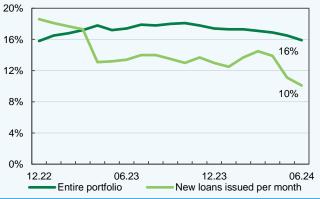
Box 3. Affordable Loans 5-7-9% Program Is Changing Slowly

The annual budget for Affordable Loans 5-7-9%, the state lending support program, was exhausted in October. During the year, the loan portfolio under the program grew slowly, and the April revision of its terms had little impact on the expenditures on the program. As a result, the debt to the banks for interest compensation will amount to about UAH 10 billion at the end of the year. This is likely to deter the banks from issuing loans under the program. The slow refocusing of the program to supporting the clients that are in the greatest need reduces its effectiveness.

Changes in the program did not prevent debt accumulating

Since June, the state program Affordable Loans 5-7-9% (hereinafter referred to as the program) has undergone hardly any change, although there is still a need to address its problems (see the June 2024 FSR). The April revision of the conditions had a limited impact on the program's budget. Back then, the maximum amount of a working capital loan in non-priority areas was reduced from UAH 60 million to UAH 5 million per borrower (in September, the government reinstated the UAH 60 million limit for a group of related companies), and the banks' margin over the UIRD index was reduced by 3-5 pp. As a result, the weighted average base rate (received by the banks) and the state compensation for each hryvnia of new concessional loans decreased by around 4 pp. However, these changes have been rather slow to manifest in the rates on the existing portfolio: over the same period, the average rate and compensation for all loans decreased by only 0.4 and 1.2 pp, respectively. The state pays an average of 10% compensation for new loans, and almost 16% for the outstanding portfolio. Given the average maturity of loans, it will take at least a year for the revised rates to have a significant impact on the portfolio. Meanwhile, the most popular lending areas under the program are those with the lowest rates, which increases their share in the portfolio and slows down the decline in average compensation. The reduction of the maximum loan amount had almost no impact on program expenditures - in particular, given the low average loan amount under the program, which is UAH 3 million.

Figure B.3.1. Compensation from the state under the program "Affordable Loans 5-7-9%"*, % of the loan amount



^{*} For loans as of 1 July 2024.

Source: Business Development Fund, NBU calculations.

Due to the high expenditure on the accumulated portfolio and the further growth in loans, the program's annual budget had already run out in October. By the end of the year, the debt to the banks under the program will be close to UAH 10 billion, which is UAH 3 billion higher than a year ago.

This creates additional uncertainty for the banks and borrowers participating in the program and slows down its performance.

The state reinstated the limit on the amount of support

Since November, parliament returned the limit on the maximum amount of state assistance per recipient. In future, this amount should not exceed the equivalent of EUR 200,000 over the past three years. This limit had been waived since the introduction of martial law. The limit will apply to new loans and will not apply to agricultural producers and defense companies. This move is a reasonable step to reduce the role of the state in supporting businesses as the economy recovers and lending conditions improve. Reinstating the limit may save some of the program's budget. At the same time, to maintain the confidence of participants in the program, the changes should be accompanied by clear mechanisms for controlling the amount of assistance.

New environmental and social requirements for borrower assessment have been introduced

As announced, since December, the banks have been providing loans to agricultural companies under the program only if they comply with environmental and social (ES) standards. The relevant standards were developed by the Business Development Fund (BDF), the program's operator, together with the World Bank. From now on, the banks have to assess clients' ES risks when issuing loans. High-risk projects, as well as companies with activities from the exclusion list, will not be financed at all. The banks may issue loans to companies with medium risks. However, in this case, the borrower must develop an action plan to mitigate its ES risks, which will become part of the loan agreement. Clients with low ES risks can be financed without additional restrictions. The implementation of ES standards will require the banks and borrowers to strengthen their expertise in the relevant areas. Changes in lending approaches and the lending process may slightly slow down the growth of the portfolio of loans issued under the program. Going forward, these requirements will be extended to other industries.

The program will change, but without focus it will lose effectiveness

All of the above changes will continue to affect the program's portfolio dynamics and its accessibility to potential participants. However, the key priorities remain the efficient use of the available funds and debt reduction. To this end, it is necessary to focus the limited funds on projects that need support the most, such as investment projects. Clients' eligibility for the program should be assessed regularly. All recommendations previously made by the NBU for changes to the program's design remain relevant.

Box 4. Loan Guarantees are an Effective Instrument to Support Lending

The resumption of lending during the full-scale war was made possible by the introduction of numerous credit risk-sharing programs, including portfolio guarantee programs. The Ukrainian government and IFIs are the largest guarantors. Currently, about a quarter of the portfolio of performing hryvnia corporate loans is backed by guarantees. Such programs should be scalable without distorting competitive conditions in the market.

Guarantees are fueling the banks' appetite for lending

The war dampened the banks' risk appetite, and it has just started to grow again. Financial institutions maintain rather high requirements for the financial standing of clients and collateral. Under such conditions, additional risk mitigation tools are needed to develop lending. One such tool is guarantees from high-grade solvent institutions. Such guarantees reduce the amount of financial and prudential provisions (credit exposure) held by the banks, and thus ease the burden on their capital. This reduces the cost of loans for borrowers. In the event of a borrower's default, the bank can promptly receive compensation for the loss from a guarantor. If the bank subsequently recovers some funds from the borrower or as a result of collateral collection, the bank proportionally compensates the guarantor for part of the losses. Given all the advantages of guarantees, their extension to a wider range of clients and banks is envisaged by the Lending Development Strategy, and their increase by the Ukraine Facility program. Therefore, the amount of guarantees available to the banks will grow.

Loan guarantees are issued primarily on a portfolio basis. A bank receives an overall limit, which it then allocates to eligible loans. Upon repayment of a loan by one borrower, a bank often includes another borrower's loan in the guaranteed portfolio. The risks of losses under portfolio guarantees are reduced through diversification. Banks most often use portfolio guarantees for SME loans. Portfolio guarantees create a leverage effect: each hryvnia of guarantees provided allows a bank to increase loans by more than one hryvnia.

The limit of portfolio guarantees exceeds UAH 120 billion

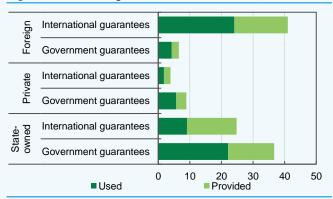
In October, the NBU surveyed the banks about the amount of portfolio guarantee limits available to them. Most banks – some 30 institutions – use guarantees from the Ukrainian government. Four banks have guarantees from the Business Development Fund (BDF), and another six banks have guarantees from the Partial Credit Guarantee Fund in Agriculture (PCGF). Guarantees from international institutions were provided to 12 banks. In total, 31 Ukrainian banks use portfolio loan guarantees.

Ukrainian banks received the largest amounts of portfolio guarantees from the government of Ukraine, which provided limits worth UAH 52 billion. The second largest guarantor is the EBRD, providing guarantees to an amount equivalent to UAH 47 billion. The EBRD guarantees are funded from many sources, including its member states. They are followed by the European Investment Bank (EIB) with UAH 12 billion worth of guarantees, the U.S. International Development Finance Corporation (DFC) with UAH 8 billion, and other international partners with UAH 3 billion. The volume of guarantees from the BDF and the PCGF is close to UAH 0.4 billion each. Although IFIs provide guarantees in

foreign currencies, the banks use them mainly for hryvnia loans. By providing guarantees, foreign donors are thus supporting hryvnia lending, which is backed by domestic funding.

Foreign-owned banks received the largest guarantee limits from international partners. State-owned banks are also increasing their cooperation with IFIs, but the government has provided them with the most guarantees. IFIs are reluctant to cooperate with private Ukrainian banks. This sometimes distorts market competition, so this approach needs to be critically reassessed.

Figure B.4.1. Portfolio guarantees as of October 2024, UAH billions



Amounts of guarantees in foreign currencies at the official exchange rate. Source: bank data, Ministry of Finance, NBU estimates.

The banks used more than half of the guarantee limit

The largest share of the limit was utilized under state guarantees – 62%. Guarantees from international partners were only 50% utilized. The utilization of international guarantees is constrained by their tighter conditions. In total, the banks have utilized guarantees worth UAH 68 billion.

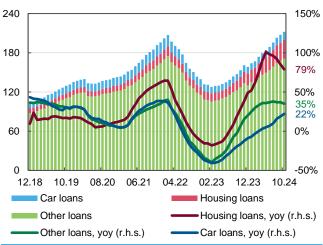
In most cases, a portfolio guarantee covers half of the loan amount. Thus, each hryvnia of the guarantee ensures two hryvnias in lending. In October, the volume of corporate loans issued under portfolio guarantee programs amounted to around UAH 97 billion. Guarantees are often combined with other support programs.

Borrowers pay for using guarantees. The fee for international donor guarantees varies from 0% to 1.7% per annum of the guaranteed amount. Government guarantees are subject to an annual fee of 0.25% and a one-time fee of 0.55%, or 2.05% of the amount guaranteed, depending on the year of issue. The moderate fee covers the guarantor's administrative costs. Compensation payments under the guarantees are rather low. Over the entire period of operation of the existing guarantee programs, compensation amounted to as little as UAH 1.4 billion. The level of compensation is slightly higher for government guarantees. The annual default rate for the guaranteed portfolios of most banks is less than 1%, which is significantly lower than for the loan portfolio overall.

3.4. Retail Lending Risk

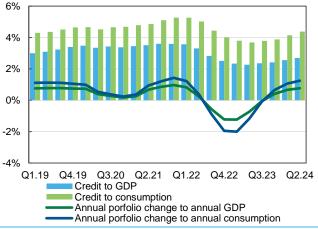
After the retail loan portfolio had reached its pre-invasion level, its growth stabilized. Consumer lending continues to be fueled by robust consumer demand, and mortgage lending – by attractive preferential terms. Increasingly more banks are returning to competition in the unsecured consumer segment, while mortgages are still dominated by the same three leading state-owned banks. Retail portfolio quality has returned to 2021 levels, but the banks remain prudent and are maintaining sufficient provisions to cover any risks that may still materialize.

Figure 3.4.1. Net hryvnia retail loans, UAH billions



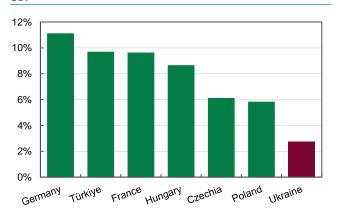
Source: NBU.

Figure 3.4.2. Ratios of net retail loans to annual GDP and consumption



Source: SSSU, NBU.

Figure 3.4.3. Ratio of gross unsecured consumer loan portfolio to GDP



Source: NBU, ECB, and national central banks.

The banks are continuing to expand their retail loan portfolios

The net retail loan portfolio is continuing to grow rapidly, by 38.5% yoy, having recently exceeded the level of February 2022. In recent months, loan growth rates have stabilized, and a phase of steady growth has begun following a period of rapid "post-crisis" recovery. All segments are growing, albeit at different paces. As before, most of the portfolio is made up of unsecured consumer loans, which grew by about a third over the past year. Mortgages grew more than twice as fast, so their share in the portfolio increased significantly: to 13.5% in October compared to 10.5% a year ago. After a long standstill, the car loan portfolio is growing at an increasingly rapid pace.

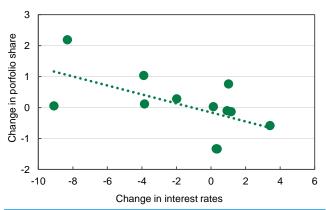
The revival in lending is driven by a steady growth in consumer demand. At the same time, credit makes a very small contribution to supporting household consumption. The growth in the portfolio – that is additional loans taken out by households – is now equivalent to only 1% of annual household consumption expenditures. That said, the use of credit cards for purchases has become common practice.

In Ukraine, the ratio of all gross retail loans to GDP is only 3.4%, while for unsecured loans it is 2.8%. Lending penetration decreased by 0.7 pp compared to 2021. It is several times lower than in EU countries. Prolonged consumer demand and rising household incomes create good conditions for further growth in the retail portfolio. The banks forecast an increase in demand for consumer loans and mortgages, according to the Bank Lending Survey.

Competition in card lending is heating up

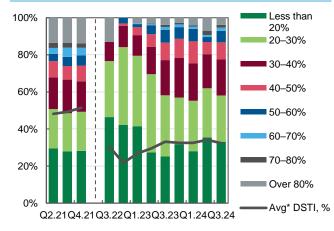
The low debt burden of households leaves the banks with considerable room both to increase loans to existing clients and to find new borrowers. Loans are currently well serviced, and high interest rates provide significant returns. Therefore, more and more financial institutions are trying to expand their unsecured loan portfolio and increase their share in this segment. According to the Bank Lending Survey, competitive pressure has even prompted banks to relax their lending standards in recent months. Financial institutions are trying to attract customers with more attractive loan terms: a variety of cashback programs, size of available limits, longer grace periods, and even loan rate affordability. A number of banks that recently moderated their interest rates have increased their share of the total portfolio. Accordingly, the share of the two banks that led in terms of loan volumes has slightly decreased since the start of the year.

Figure 3.4.4. Change in the share of banks in the total portfolio of net unsecured loans and interest rates on them, in October compared to January, pp



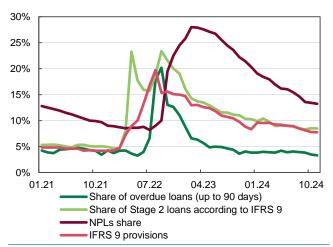
At banks with the largest portfolio volumes in October 2024. Source: NBU.

Figure 3.4.5. New mortgages distribution by DSTI



* Weighted by the volume of loans issued. Source: NBU.

Figure 3.4.6. Selected quality metrics of the retail loan portfolio



Provisioning equals the ratio of provisions to gross loans. Source: NBU.

Mortgage lending remains highly concentrated

Mortgage lending is provided primarily by three state-owned banks under the eOselia state program. Given the standardized terms of the program, the portfolio characteristics remain largely unchanged. The average loanto-value (LTV) ratio remained close to 74% during the year, slightly decreasing over time. At the same time, the ratio for almost a half of the portfolio issued during the year was close to or at the maximum allowed under the program - 80%. Mortgages are issued generally for 20 years. Thanks to low fixed rates, the debt service-to-income ratio (DSTI) is significantly lower than before 2022, at around 32%. Therefore, in the near future, the portfolio risks will remain moderate. The possibility to transfer the loans to Ukrfinzhytlo three years after their disbursement further reduces the banks' credit risks over the longer term. Despite the moderate risks, the margin offered by the program is too low to motivate a wider range of banks to actively participate in this segment. To boost mortgage lending, state support mechanisms should be transformed so that the banks can rely on market yields.

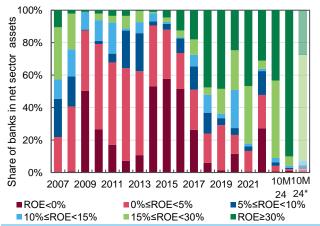
The quality of the retail portfolio is acceptable

The share of loans overdue for less than 90 days is consistently below 5%, which is even better than before the full-scale invasion. The ratio of non-performing loans, which are mostly overdue by more than 90 days, is declining as they are being written off and because of the growth in the new high-quality portfolio. At the same time, the banks are slow to reduce loan provisions under IFRS. The provisioning coverage of the performing portfolio is close to 8%. The expected losses parameters have remained almost unchanged over the past two years, despite the high quality of the portfolio. The share of loans in stage two under IFRS is much higher than before the full-scale invasion. The vast majority of these loans are neither overdue nor restructured, but given the increased risks identified in 2022, the banks are keeping them in the stage two of assessment. The banks' moderate conservatism in assessing risks is justified, as there may be an unexpected deterioration in the quality of the retail loan portfolio during the war. Financial institutions need to continue to adhere to prudent lending standards and properly assess the solvency of clients, taking into account all available sources of information. Responsible lending reduces the credit risks of the portfolio.

3.5. Profitability Risk

The banks have maintained high profitability despite another increase in income tax. Profitability remains driven by high net interest margins, which the banks have retained despite a prolonged cycle of interest rate cuts. Most financial institutions have managed to successfully rebalance their assets to increase the share of longer and more profitable instruments – domestic government debt securities and loans. This supported asset yields, while funding costs declined gradually. High interest margins and rising commissions and trading income offset a significant increase in operating expenses without worsening operational efficiency.

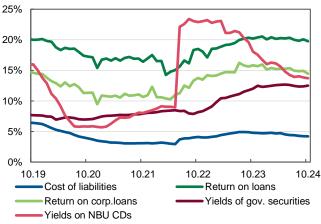
Figure 3.5.1. Distribution of ROE by the banks' shares of total assets



^{*} Assessment based on a 50% corporate tax rate.

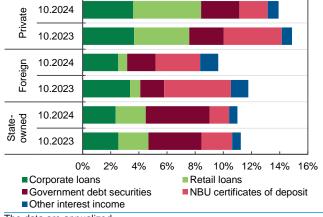
Source: NBU.

Figure 3.5.2. Return on assets and cost of libilities



Source: NBU.

Figure 3.5.3. Interest income of banks, percentage of net assets



The data are annualized.

Source: NBU.

The banks are highly profitable despite the tax increase

The banks are consistently operationally efficient and able to generate high profits. In the first ten months of the year, the average return on equity was 43%. During this period, the banks accrued and paid income tax at the rate of 25%. However, in December, the rate was hiked to 50%; it will apply retroactively to profits for the whole of 2024. Given the increased tax liabilities, the sector's return on equity will be slightly below 30% for the year. This is comparable to the previous year's level.

Returns on assets were maintained thanks to rebalancing of their structure

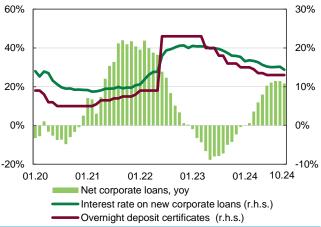
In July, the NBU completed a cycle of key policy rate cuts. Since then, commercial interest rates have changed only slightly, so the profitability of core banking operations has remained practically constant and fairly high. Currently, the banks earn the highest returns on loans to households and businesses. Yields on the portfolio of domestic government debt securities remained relatively stable throughout the year. In the last months of the year, the government cut rates on benchmark domestic government debt securities in response to strong demand from the banks. However, new placements of government bonds still have higher yields than old maturing securities. Over the past six months, the yields on certificates of deposit have changed only as the spread for three-month instruments narrowed relative to the key policy rate.

Given the rather sharp decline in the rates on certificates of deposit over the past year, most banks rebalanced their portfolios and invested in more profitable instruments with longer maturities. This made it possible for them to pass through the cycle of rate cuts with a minimal decline in return on assets. Foreign financial institutions were less successful in this regard, primarily due to restrictions on investments in domestic government debt securities that were sometimes imposed by their parent banks. The aggregate share of interest income from certificates of deposit decreased from 31% a year ago to 23%. On the other hand, the weight of interest income from loans and domestic government debt securities increased significantly, from 64% to 70%.

Market conditions are favorable for lending

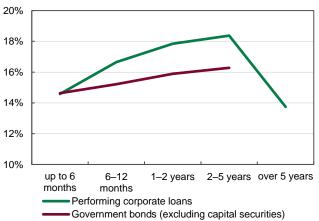
A balanced asset structure makes the banks' profitability less procyclical. Among all of the components of interest income, income from the loan portfolio is the most stable. In addition to interest, the banks generate significant ancillary income from lending. Corporate borrowers require many additional services, such as servicing their accounts and, in many cases, their employees' payroll accounts. This provides the banks with a stable source of funding. This also generates

Figure 3.5.4. Market rates and changes in hryvnia corporate loans



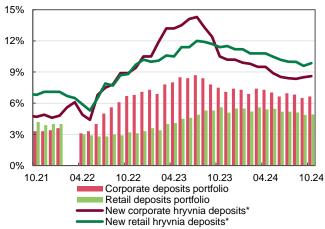
Source: NBU.

Figure 3.5.5. Yield curves of the hryvnia instruments' portfolio as of 1 November 2024, % per annum



Source: NBU.

Figure 3.5.6. Interest rate on retail and corporate deposits in hryvnia, % per annum



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

Source: NBU.

additional fee and commission income, income from currency exchange transactions, and income from cash collection. Employees of corporate clients who have payroll accounts with the banks constitute a high-quality customer base for retail lending. The banks' total income from serving businesses is significantly higher than interest payments on loans. Therefore, even in periods when interest rates on risk-free instruments temporarily exceed loan rates, the banks do not reduce corporate lending.

Net interest margin narrowed slightly

Deposit rates have not changed significantly since July, while the banks' funding costs have fallen slightly, reflecting previous rate changes. With the NBU's increase in reserve requirements in October, the stabilization of retail deposit rates was final. The recent increase in the NBU's key policy rate will support rates on deposits going forward.

A slight decline in return on assets combined with a moderate decline in funding costs kept the banks' net interest margins high and comfortable, at 7.6 pp in the first ten months of the year, down by only 0.3 pp from a year ago. The effects of the prolonged key policy rate cuts have already worn off, so short-term risks to the banks' interest margins are still minimal. The increase in the key policy rate is unlikely to have a significant impact on the banks' margins. The decrease in variation of interest margins among the banks indicates that they are successfully adapting to changing market conditions.

Fee and commission income is gradually recovering, and trading income is volatile

The net fee and commission income of the banks rose by 12% yoy over the first ten months of the year. The share of fee and commission income in operating income has been consistently close to 17%. Fee and commission income and expenses grew at a commensurate pace. The growth is fueled by an increase in client transactions, and the banks hardly ever revise their tariffs. Average monthly net fee and commission income has not yet recovered to the levels seen before the full-scale invasion. However, one explanation for this is that the banks' fees from servicing shadow flows have decreased due to stricter AML measures.

Trading income accounted for about a tenth of operating income in the first ten months of the year. This is largely due to the revaluation of securities, in particular due to lower market rates. This component of income is quite volatile. Another component of trading income is foreign exchange gains and losses. These revenues have lost weight compared to their peak values in 2022, but are quite stable.

Increased operating expenses do not threaten operational efficiency

The banks are pressed to increase their operating expenses – in the first ten months of 2024, they grew by 19% yoy. First of all, the financial institutions have to spend more on their staff's salaries. Another significant cost item is the maintenance of fixed assets. Such an increase in costs is natural given the post-crisis expansion of operations and the shortage of skilled workers. Nevertheless, the cost-to-

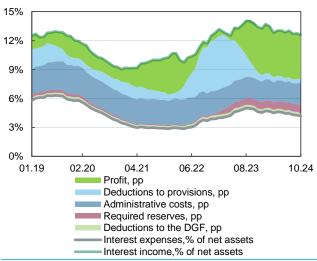
Figure 3.5.7. Net interest margin of banks



^{*} Upper and lower edges of the green rectangles represent the first and the third quartiles of the indicator distribution across the banks for the date. Dashes inside the rectangle show the median. Dot – average. Upper and lower dashes outside the rectangle show the minimum and maximum.

Source: NBU.

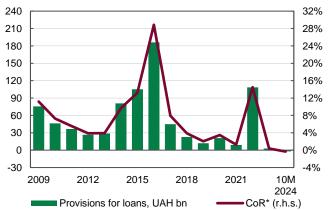
Figure 3.5.8. Decomposition of net interest margin of Ukrainian banks



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

Source: NBU.

Figure 3.5.9. Cost of risk (CoR)



^{*} Ratio of provisions for loans in respective period to net loan portfolio. Source: NBU.

income ratio (CIR) in the banking system as a whole remains very low, at 38%. The growth of operating income allows the banks to compensate for higher operating expenses with little or no deterioration in operational efficiency.

The CIR is not even across the banks, but for the vast majority of the financial institutions it is good. At the same time, eight banks make operational losses. The operating losses are due to legacy problems caused by their inefficient business models. During the period of high rates on risk-free instruments, these problems were easier to disguise. The decline in rates has brought them to light. Of the nine banks that were operationally unprofitable in 2021, two were liquidated and one voluntarily surrendered its license. Of the banks that became operationally unprofitable during the fullscale war, two were nationalized. They do not have updated business strategies and are therefore not operationally efficient. In general, the banks that fail to improve their operational efficiency for a long period often have to leave the market. The operationally unprofitable banks are small, so they have no impact on the resilience and performance of the financial sector as a whole.

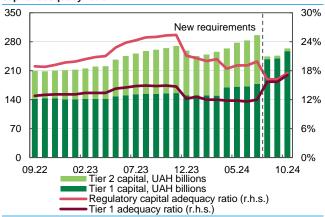
Loans do not require significant additional provisioning

As in the previous year, the quality of the loan portfolio does not require the banks to increase their provisions. In the first ten months of 2024, the banks even released a small portion of the provisions previously made for the loan portfolio. Additional provisions were made only for domestic government debt securities due to an increase in their portfolio. Based on the year's results, given the regular review of provisioning parameters, provisions may increase slightly – primarily for the loan portfolio. However, this will not have a significant impact on the banks' profitability.

3.6. Capital Adequacy Risk

The banks have successfully transitioned to a new capital structure and have maintained capital adequacy ratios at levels almost two times above minimum requirements. However, the 50% corporate income tax rate will reduce the banks' capital cushion and increase uncertainty for their future operations. The banks' internal ICAAP assessments confirm that the system's capital is adequate even in the event of materialization of adverse scenarios. The NBU will conduct a bank resilience assessment in 2025 to ensure that the system is resilient and to update the plan for further regulatory changes.

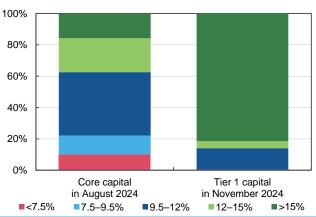
Figure 3.6.1. Components of regulatory capital and regulatory capital adequacy ratio



Up to 5 August 2024, instead of Tier 1 and Tier 2 capital, the core and additional capital are shown respectively; instead of Tier 1 and regulatory capital adequacy ratios, it shows core and former regulatory capital adequacy ratios as the closest proxies.

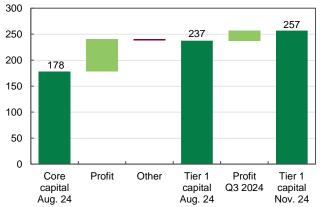
Source: NBU.

Figure 3.6.2. Distribution of capital adequacy ratios by the banks' shares of total assets



Source: NBU.

Figure 3.6.3. Transition from core capital to Tier 1 capital under the new capital structure, UAH billions



Source: NBU.

The banks meet capital requirements with a significant margin

The capital adequacy ratios of the banks significantly exceed minimum requirements. The weighted average adequacy of Common Equity Tier 1 and Tier 1 capital in the sector is 17%, and that of regulatory capital is 17.5%. All banks comply with the minimum regulatory requirements. Given the high profitability of the sector and the current ban on profit distribution for all banks except state-owned ones, the amount of capital is growing steadily. The level of capital ensures the sector's resilience to potential shocks and enables further growth in the loan portfolio.

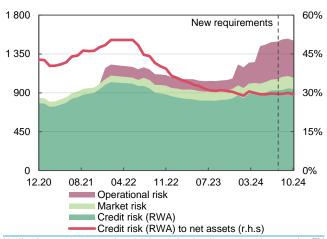
Transition to the new structure improved the banks' Tier 1 capital

In August, the banks switched to a new three-tier regulatory capital structure. This resulted in an increase in its highest quality component - Common Equity Tier 1. Under the new rules, it can include accumulated profits, which were previously mostly reflected in lower tiers of capital. In addition, under the transitional provisions, the banks may recognize interim profits in their capital before they are audited. In August, Common Equity Tier 1 was one-third higher than core capital, its closest equivalent in the old structure. Not all financial institutions fully reflect interim profits in their capital. According to the new rules, profits are included in capital only in the amount that the banks do not plan to distribute as dividends after the relevant restrictions are lifted. The banks reflect their estimates of future dividends in their dividend policy. The share of profit that the banks do not include in their capital is 45%, most of which belongs to state-owned and foreign banks. The transition to the new capital structure slightly reduced the banks' regulatory capital - by 18% in August. This is due to the deduction of payable dividends and the revaluation of securities.

The banks' capital is sufficient to cover all key risks

Simultaneously with the introduction of the new capital structure, a requirement to cover the full amount of market risk with capital came into effect. Until then, the minimum requirements had taken into account only one of its components – FX risk. Since FX risk dominates market risk, the full coverage of market risk has had almost no impact on capital adequacy ratios. The weight of market risk among all risks covered by the minimum capital requirements is as low as 8%. Credit risk accounts for 63%. Overall, since the start of the year, the size of the risk that the banks must cover with capital under the minimum requirements has increased by a quarter. The update to the operational risk calculation based on up-to-date reports has had the greatest impact. Going forward, the financial institutions will have to hold capital to fully cover all three main risks inherent in their activities –

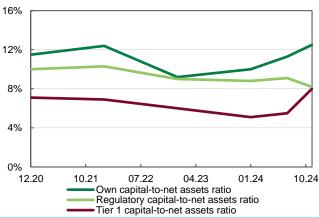
Figure 3.6.4. Equivalent of banks' risk-weighted assets, UAH billions



Until 5 August 2024, market risk comprised only one component, the FX risk.

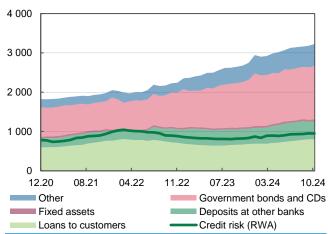
Source: NBU.

Figure 3.6.5. Capital-to-net-assets ratio of banks



Source: NBU.

Figure 3.6.6. Banks' net assets and credit risk-weighted assets, UAH billions



Source: NBU.

credit risk, operational risk, and market risk. This is in line with European requirements.

The crisis has changed the structure of the banks' assets. In particular, there have been increases in the volume and share of instruments that do not require capital to cover credit risk, such as government securities and certificates of deposit. The banks keep most of these instruments in their banking books, and thus do not need to assess market risk for them. The interest rate risk of such investments is assessed as part of Pillar II, the supervisory risk assessment of the banks, and the banks' self-assessment in the ICAAP. This year, for the first time, the banks have submitted ICAAP reports to the NBU in a test mode (see Box 5. Results of Test ICAAP for Systemically Important Banks). The estimate of the capital requirement for interest rate risk in the banking book from an economic perspective reached one-fifth of the total requirement. At the same time, the banks reported that their capital was sufficient to cover this risk, according to the ICAAP results.

Strong capitalization is evidenced by the fact that the banks maintain a fairly high ratio of Tier 1 capital to assets without weighting them for credit risks -8%. This figure is close to the leverage ratio that the banks will also have to meet later. A test period for its calculation will begin in April 2025.

Another increase in income tax for the banks will be a drag on their activity

In December 2024 there was another increase in the income tax rate for the banks - to 50%. The tax increase is retroactive, so in December, the banks will have to adjust their profits for the whole of 2024, much of which is already accounted for in their capital. Thus, these changes will result in lower capital adequacy ratios and reduce the banks' potential to grow their loan portfolios by about 20%. Although the banks will generally retain their capital cushion, some of them, including systemically important state-owned banks, will face increased risks of violating minimum capital requirements or failing to implement capitalization programs based on the results of the 2023 resilience assessment. Such banks will have the right to submit updated capitalization programs and restore their capital without facing enforcement measures from the NBU. However, lending will be extremely difficult for them. In general, the repeated increase in the tax rate, made despite assurances provided earlier, has increased market uncertainty, which may restrain the further activity of the banks.

NBU resumes regular resilience assessment

As previously announced, in 2025 the NBU will conduct a regular assessment of the banking system's resilience. It will be similar to the standard procedure that was in place before the full-scale invasion. The resilience assessment will include three stages:

The first stage is an asset quality review (AQR) by independent auditors. The auditors will verify whether the banks comply with regulatory requirements for credit risk assessment and collateral eligibility based on a sample of loans. The initial sample will include 140 debtors – individuals and legal persons. If a significant number of

Table 5. Prioritization of uses for the banks' accumulated profits Order of priorities:

Coverage of unexpected losses from risks materializing during the war

Fulfillment of deferred requirements for capital coverage of risks:

- for the full amount of operational risk (implemented)
- market risk (implemented)
- 100% risk weights for FX domestic government debt securities (taking into account adjustment coefficients, the current risk weight is 50%).

Fulfillment of new requirements to be approved in 2024–2025, in particular for:

- the updated regulatory capital structure (implemented)
- updated credit risk weights for some assets
- settlement risk
- the leverage ratio.
- 4 Building the capital conservation buffer and the systemic importance buffer
- 5 Distribution of dividends

Source: NBU.

2

- errors are found in the sample, an in-depth review of a larger number of debtors will be conducted.
- The second stage will include the extrapolation of the AQR results by the NBU, if an in-depth review was required. For smaller banks, the resilience assessment will end at this stage. For them, the required level of capital adequacy will be assessed and the need for a capitalization or restructuring program will be determined.
- The third stage involves stress testing, which the NBU will conduct under baseline and adverse scenarios for a forecasting horizon of three years. The adverse scenario will involve the materialization of the credit risk, FX risk, interest rate risk, and operational risk of the banks.

All banks will undergo the first two stages of the resilience assessment. The third stage applies only to about twenty of the largest banks, whose assets account for more than 90% of the banking system's assets.

In the autumn, the banks that are subject to higher required capital adequacy ratios based on the results of the resilience assessment will have to develop capitalization or restructuring programs. These programs will have to be implemented until the end of 2025. The requirements based on the results of the 2025 resilience assessment will replace the current ones established following previous resilience assessments.

The results of the resilience assessment will inform developing a schedule for the implementation of the further regulatory capital requirements, which are being introduced to harmonize Ukrainian legislation with EU acquis. First of all, the banks will be required to meet capital buffer requirements: the capital conservation buffer and systemic importance buffer. After that, restrictions on the distribution of dividends by the banks may be lifted. The leverage is also expected to be set as a required ratio in the near future. The minimum values of the ratio will be determined after the end of the test period. Finally, next year, the NBU will test updated requirements for calculating the minimum credit exposure and introduce requirements for the banks to cover settlement risk. However, these changes are unlikely to have a significant impact on capital needs.

Box 5. Results of Test ICAAP for Systemically Important Banks

In 2023, the NBU obliged Ukrainian banks to perform annual assessment of internal capital adequacy under the ICAAP (Internal Capital Adequacy Assessment Process). This includes self-assessment, planning, and monitoring by a bank of the adequacy of its capital, which enables the implementation of its strategy and business plan while taking into account all material risks. The banks must integrate the ICAAP in their corporate governance and risk management systems and take its results into account in their strategic planning and business decision-making. The ICAAP starts at the end of every year along with budgeting. The banks are to submit reports on the results to the NBU by May of the following year. In 2024, this process took place for the first time in test mode.

The ICAAP integrates two perspectives – the economic and the normative ones. Under the economic perspective, the banks quantify all of their material risks under normal and stress conditions. After that, the banks determine the amount of capital that is necessary to cover potential losses from risks over a one-year horizon with a high level of confidence. The capital available to a bank must be above this necessary level. Under the normative perspective, the banks assess their ability to meet regulatory requirements over a three-year horizon under baseline and adverse scenarios. Again, the available capital under all scenarios should be sufficient to ensure compliance with regulatory requirements (read more in The Internal Capital Adequacy Assessment Process (ICAAP), June 2021 FSR). The ICAAP is an important source of data on a bank's risk profile for the SREP (Supervisory Review and Evaluation Process). Below are the summarized ICAAP results of the systemically important banks.

The banks' approaches to assessing capital needs under the economic perspective are very diverse

All systemically important banks identified credit risk, market risk, operational risk, and interest rate risk in the banking book as material, which is in line with the minimum list of risks defined by the regulatory framework. At the same time, most banks also identified other risks that are material to their business model, such as strategic risk, business risk, reputational risk, and ESG risks.

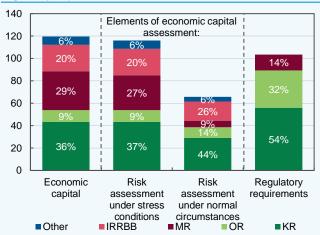
Under the economic perspective, the banks can choose their own methods of assessing the risk exposure. Scenario analysis was most often used to assess credit risk. Scenarios often assumed a certain level of credit losses with regard to assumptions macroeconomic based on observations. Alternatively, scenarios built on credit losses resulting from defaults on a number of large exposures. Some financial institutions used the Basel standards to calculate unexpected credit losses using internal models (IRB) based on probability of default and losses in the event of client default. A few banks determined the capital needed to cover credit risk based on the minimum regulatory requirement of 10% of the balance-sheet value of loans. Financial institutions rarely used VaR (Value-at-Risk) to estimate capital to cover credit risk, but quite often used it to determine the amount of market risk. VaR, or its alternative ES (Expected Shortfall), is an estimate of the level of losses that might occur with a certain low probability. The largest components of market risk were FX risk and interest rate risk. However, the banks sometimes included into the market risk the revaluation of banking book instruments (mainly domestic government debt securities), whereas it should have been an element of interest rate risk in the banking book. The banks

mostly assessed the amount of operational risk using scenario analysis based on hypothetical events or actual operational risk events they had experienced in the past. Using a database of operational risk events, the banks also built models of the distribution of the size and frequency of operational losses to further estimate their possible size with the required level of confidence. At the same time, financial institutions often used the simpler approaches provided for by the Basel standards to assess the amount of operational risk. Finally, the interest rate risk in the banking book was assessed through the Economic Value of Equity (EVE), which is the change in the present value of net future cash flows of banking book instruments, or the change in Net Interest Income (NII) from banking book instruments under various interest rate scenarios. For the other risks, the banks most often used expert judgements. Not all of the banks assessed risks under stress conditions, which is allowed during martial law.

The needed amount of capital depended more on the assumptions underlying the methods than on the choice of the methods themselves. The only notable exception was the assessment of operational risk. The statistical linkage of its size to income (as in the Basel standards) resulted in higher estimates than if a historical loss base or scenario analysis were used.

Credit risk, as expected, received the largest weight in the estimated necessary capital of the banks. The economic capital to cover this risk was generally 30% less than the NBU's minimum requirements. The estimated amount of credit risk without stress was one third less than under stress. Market risk estimates showed the most variation among the banks. Under stress conditions, the amount of market risk was five times higher than under baseline conditions, and twice as high as the minimum regulatory requirements. This was primarily due to the fact that some banks took into account the interest rate risk on securities in this component. The share of interest rate risk in the banking book (IRRBB) in economic capital is significant under both stress and baseline conditions. For the banks that identified additional material risks, their total share ranged from 2% to 16% of economic capital. The median ratio of economic capital to the minimum regulatory capital requirements of those banks that assessed their economic capital under the full stress and non-stress procedure was 117%. For comparison, according to the ECB, in 2019, it was 122% for large European banks.

Figure B.5.1. Capital necessary to cover risks under the economic perspective (economic capital) and minimum capital according to regulatory requirements, UAH billions



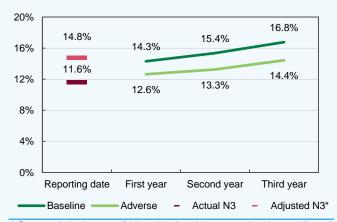
For the 11 systemically important banks that conducted risk assessments under baseline and stress conditions. MR – market risk; OR – operational risk; CR – credit risk, IRRBB – interest rate risk in the banking book; regulatory requirements – amount of capital to comply with minimum regulatory requirements as of 1 January 2024 (RR – as of 1 March 2024). Source: bank data, NBU.

Adverse scenarios under the normative perspective are too optimistic

Under the ICAAP normative perspective, the banks also have to determine a management capital buffer. This is the "safety margin" that a bank considers necessary to hold above regulatory requirements. The vast majority of banks determined the management buffer using expert judgment and estimated it to be the same for all capital tiers and all scenarios, as well as for the entire forecast horizon. On average, it amounted to 1.2% of risk-weighted assets. At the same time, according to the ECB's clarifications, the management buffer should be calibrated to take into account the expectations of stakeholders and supervisory authorities, the bank's perception of risk appetite, internal stress testing, the availability of capitalization instruments, and uncertainty.

The banks' baseline scenarios were conservative, with a number of banks' projected capital adequacy in the first year being lower than their actual capital adequacy in 2024. At the same time, the adverse scenario often had only a moderate negative impact on capital. Often, macroeconomic assumptions were too optimistic or did not lead to the materialization of all of the material risks of a bank. The average Tier 1 capital adequacy ratio of the banks decreased by a maximum of 2 pp in the first year of the forecast compared to the start of the year (under the new capital structure and taking into account operational risk as of 1 January 2024). This is significantly better compared to the results of the NBU's resilience assessments, where the maximum decline hit 7-8 pp. In the ICAAP of large European banks, the decline was about 3 pp in 2019. In the supervisory stress test held in 2018, it was 4.8 pp. Going forward, adverse scenarios in the ICAAP will require significant improvement.

Figure B.5.2. Weighted average Tier 1 capital adequacy ratio under the normative perspective



* Core capital adequacy (N3) under the old structure has been adjusted to the new structure by taking into account the profits of previous years and the full amount of operational risk.

Source: bank data, NBU.

Figure B.5.3. Decrease in Tier 1 capital adequacy under the normative perspective*, pp



* The maximum decline, regardless of the scenario, compared to the N3 ratio adjusted to the new structure as of the reporting date. ECB – weighted average decline in the ICAAP of a sample of large European banks; RA – weighted average decline in the capital adequacy of Ukrainian banks in the resilience assessment.

Source: Bank data, ECB, NBU.

Based on the ICAAP results, four systemically important banks have identified capital needs under the normative perspective and have made plans to maintain their capital. Two of them are implementing a restructuring program based on the results of the 2023 resilience assessment.

The banks have now launched the full-fledged ICAAP and will also conduct the Internal Liquidity Adequacy Assessment Process (ILAAP). The ILAAP aims at maintaining liquidity sufficient to ensure business continuity, meeting obligations, complying with regulatory requirements, and achieving business goals. Baseline assumptions, stress test results, and planned management actions in the ICAAP and the ILAAP should be coordinated with each other.

Box 6. Higher Bank Capital Boosts Financial Sector Resilience

The banks' capital cushions ensure the financial system's resilience and reduce the probability of crises. At the same time, excessive capital requirements can slow down lending and thus the economy. A research for Ukraine found that an increase in the Tier 1 capital ratio to at least 15% would have significant positive effects on the economy.

The global financial crisis has revealed how banking system vulnerabilities can quickly escalate into an economy-wide problem. Since then, regulators have tightened capital requirements for banks both to support their individual solvency and to ensure the stability of the financial system as a whole. The Basel standards and national jurisdictions have introduced requirements for capital buffers beyond the minimum requirements. For example, the total size of buffers currently varies from 2.5% to 8.5% in EU countries.

Discussions on the optimal level of capital continue. Proponents of higher capital requirements point to their benefits, such as a reduction of the probability of future banking crises and the mitigation their consequences. At the same time, there is an alternative position: stricter requirements make bank lending more expensive and discourage it, and thus decrease economic activity. There are many studies measuring both effects for different countries. ⁵This material presents the results of such a study for Ukraine.

The study estimates the benefits and losses for the economy depending on the capital adequacy ratio of Ukrainian banks. For this purpose, a cost-benefit approach is used. The benefit of the high capitalization of the banking system is a reduction in the probability of a crisis. In contrast, macroeconomic costs arise because stricter capital requirements may slow down lending and real GDP growth. The net economic effect is calculated as the difference between the expected benefits and costs of higher capitalization and is measured in terms of GDP:



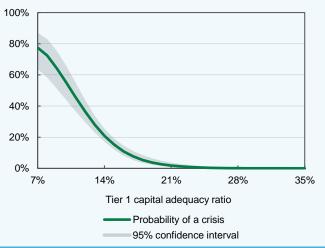
The effects of higher capitalization do not appear immediately and are prolonged. Considering this, macroeconomic benefits and costs are calculated cumulatively over a five-year horizon, taking into account time discounting.

Higher capitalization reduces the probability of a crisis, but slows down the economy

The first part of the study estimates the probability of crises depending on the Tier 1 capital adequacy ratio (for Ukrainian banks, core capital as the closest proxy in the period covered by the study), credit gap, and the VIX volatility index. The credit gap is the deviation of the private sector credit to GDP ratio from its long-run equilibrium level. High positive values of the credit gap indicate that the economy is overleveraged,

signaling both the risks of an impending banking crisis and the probability of significant losses in its aftermath. The VIX index reflects the level of stress in international financial markets, which can affect the stability of national banking systems. To estimate the probability of a crisis, panel logit models are applied to quarterly data for 2000–2020 for two samples: 28 countries (mostly OECD member and candidate countries) and Ukraine's peer countries from Europe. The results suggest that the probability of a crisis decreases when the capital of the banking system increases. However, once the Tier 1 capital adequacy ratio reaches around 20%, the positive marginal effect approaches zero. A further increase in capital no longer has positive effects.

Figure B.6.1. Probability of a crisis occuring in Ukraine in a given year for various levels of capital



Estimated on a sample of Ukraine's peer countries, using the average levels of the credit gap for Ukraine and the VIX over the entire period of the dataset.

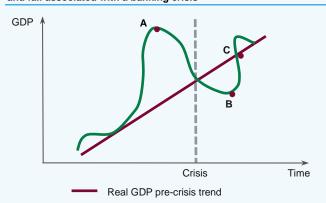
Source: NBU estimates.

Further, based on the data on the three crises during 2008–2021, an average level of GDP decline for Ukraine was calculated, which is equal to 9.8% of the pre-crisis level of real GDP. It is defined as the average of two values: (1) the decline in real annual GDP from the pre-crisis peak to the crisis minimum, and (2) the decline in real annual GDP from the pre-crisis peak to the post-crisis value, when the level of real GDP recovered to its pre-crisis trend (see schematic representation on Figure B.6.2).

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⁵ A summary of the results of Yuliya Bazhenova's research *Estimating the Optimal Capital Adequacy Level for the Ukrainian Banking Sector*, which is being prepared for publication.

Figure B.6.2. Schematic overview of the level of real annual GDP and fall associated with a banking crisis



Point A – the peak pre-crisis level of annual real GDP; point B – the minimum level of real GDP during the crisis; point C – the level of real GDP when it recovers to its pre-crisis trend.

Source: NBU estimates.

The second part of the study identifies how capital adequacy affects bank lending and economic activity in Ukraine. For this purpose, structural vector autoregression models (SVARs) are used for data from Q4 2013 to Q4 2021. Whether the banks perceive the impact of capital requirements on lending activity was determined based on the banks' responses in the NBU's Bank Lending Survey regarding the impact of bank capitalization on changes in standards for approving corporate loan applications. A higher capital need encourages the banks to raise their loan rates and tighten lending standards, which ultimately slows down lending and economic activity. The results show that a 1 pp increase in capital adequacy slows real GDP growth by 0.31 pp cumulatively over five years.

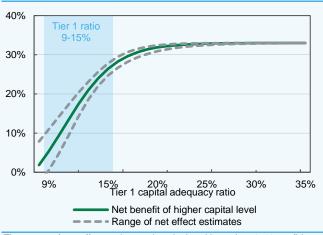
The net effect of higher capital adequacy on the economy is positive

At the final stage of the study, the expected benefits of higher capital adequacy were reduced by the costs. The calculated net effect is estimated as a percentage of GDP. Despite the quantitative assessment of the net effect, it should be understood only as a hypothetical estimate of losses that could be avoided with the higher capital adequacy of banks. According to the study, a marginal net effect of at least 10% of GDP is considered significant. For Ukrainian banks, the net effect increases significantly in the range of Tier 1 capital adequacy ratio from 9% to 15%. An increase in capital

adequacy above this level also has a positive effect on the economy, the net effect increases slightly, but less pronouncedly.

A "safety cushion" should be built up under the influence of both regulatory requirements and self-assessments of banks. For example, according to the <u>results of 2021</u> stress tests, the required core capital adequacy ratio of Ukrainian banks averaged 15%, while the minimum requirement was 7%. Capital buffers can help the banks maintain their capital at the target level.

Figure B.6.3. Net benefit of higher capital levels for Ukraine, % GDP



The range of net effect estimates is calculated based on 95% confidence intervals for the probability of a crisis occurring, Estimated on a sample of Ukraine's peer countries.

Source: NBU estimates.

Ukraine's banking system is currently well capitalized, with the Tier 1 capital adequacy ratio of around 17%. Thus, the banks have the necessary cushions, and the banking sector's profitability allows them to maintain it further. To a certain extent, the high capitalization of the banks is a consequence of restrained lending during periods of deep crisis caused by the war. As economic conditions improve, this capital cushion will support further loan portfolio growth. Accumulated capital will also contribute to the comfortable build-up of capital buffers by Ukrainian banks when they are introduced similarly to European countries. The decision to introduce a capital conservation buffer and a buffer for systemically important financial institutions will be made after the 2025 resilience assessment of the banks and the banking system.

National Bank of Ukraine Recommendations

Recommendations

Ensuring financial stability under difficult wartime conditions requires concerted efforts and the coordination of the actions of all financial market participants: the banks, NBFIs, the NBU, and other market regulators, as well as the effective interaction of state institutions. The NBU makes recommendations to government authorities and financial institutions, and communicates its near-term priorities.

For state authorities

Maintain the pace of reform under cooperation programs with partners

Stable inflows of external financing remain a key factor for macroeconomic stability in the context of the ongoing war. The authorities are maintaining a good pace of reform, which made it possible to pass the sixth review of the IMF program and continue cooperation with the EU under the Ukraine Facility. However, further transformations are needed for stable inflows of financing, including under the new macrofinancial assistance program within the ERA framework. These changes are also consistent with Ukraine's European integration efforts and contribute to progress in the negotiations.

Further implement the Lending Development Strategy

A number of Lending Development Strategy measures approved in June have already been implemented. They primarily include steps by the banks to ramp up credit support to industries prioritized while under martial law. The implementation of these steps has already yielded good results, including the greater availability of loans in the energy and defense sectors. Some of the measures envisaged by the Strategy focused on improving access to finance in the areas closest to the battle zone, which are known as "resilience areas". The NBU continues to prioritize ensuring financial inclusion and access to financial services in the "resilience areas". It takes coordinated efforts by all state institutions to achieve these priorities.

That being said, state institutions should move on to the Strategy's focuses that are next in line: developing a legislative framework to improve lending infrastructure and facilitating the resolution of NPLs.

Optimize the design of state-subsidized lending programs

Now that market conditions have improved, state support has already lost its decisive role in lending. Moreover, the operators of government programs often face a lack of funding, making it impossible to provide sustainable support. Accordingly, state lending support programs, primarily *Affordable Loans 5-7-9%* and *eOselia*, need to be revised. Ukrfinzhytlo should update its strategy and align *eOselia*'s terms with it. The Export Credit Agency also needs to revise its strategy. The strategies of these financial institutions should promote targeted lending support and meet financial sector development goals.

The underlying principles of state support should be the dominance of market-based lending mechanisms and the efficient use of resources. To this end, rates on subsidized loans should be determined by market conditions, with fixed compensation being the preferred method. The scope of subsidy recipients should be limited to clients in urgent need of assistance, subject to the importance of their role in the economy and barriers to access they face when applying for unsubsidized loans. The volume of support provided must be consistent with budget plans. Any changes to the programs should include clear implementation mechanisms and allow sufficient time for the banks to implement such changes without interrupting the programs themselves.

Recommendations for financial institutions

Banks must adjust to new regulatory requirements

The NBU continues to implement requirements for the banks, in line with EU rules. Specifically, starting in 2025, the banks will need to:

 begin calculating the leverage ratio in test mode, report on their internal liquidity adequacy assessment process (ILAAP), and, for the second time, on their internal capital adequacy assessment process (ICAAP) National Bank of Ukraine Recommendations

 ensure compliance with the regulatory capital ratio, considering the gradual increase in its minimum level to 10% in July 2025

incorporate in their 2025 business plans a 50% hike in the income tax for 2024. The banks implementing restructuring programs based on the results of the 2023 resilience assessment should evaluate the need to make changes to their programs due to the higher tax. If necessary, such banks will be allowed to update their programs.

The banks should implement appropriate systems of environmental and social management. Building the systems of environmental and social management is a priority for banks participating in state lending support programs for businesses. Since December, having such systems in place has been mandatory for participation in agribusiness lending under the Affordable Loans 5-7-9% program. Financial institutions should develop their own policies and interact with clients to assess and manage environmental and social risks. Even banks that are not engaged in government programs should start developing appropriate policies as soon as they can to avoid losing their competitive edge going forward.

Providers of non-bank financial services must meet the legal requirements, including by taking the following steps:

- NBFIs should comply with consumer protection and AML/CFT requirements, in particular pay more attention to managing relevant risks in order to comply with consumer protection and AML/CFT requirements
- insurers that are in breach of capital adequacy ratios must implement plans to restore solvency or funding
- credit unions must meet updated requirements for solvency and efficient corporate governance, effective 1 January 2025
- finance companies that are in breach of capital adequacy requirements or leverage ratios must eliminate such violations within the set time limits
- ensure high-quality, timely reporting. Starting in January 2025, finance companies and pawnshops will report a range of data on a monthly, rather than quarterly, basis.
 The shift from quarterly to monthly reporting requires the automation of internal accounting systems.

NBU Priorities

Conduct a resilience assessment of the banks and the banking sector next year

In 2025, the NBU will reinstate its business-as-usual rules for conducting resilience assessments of the banks and the banking sector. The resilience assessments will include asset quality reviews (AQRs) by external auditors and stress testing under baseline and adverse scenarios. By the end of April, the banks must provide the NBU with the results of their AQRs. The stress-testing methodology and scenarios will be published in Q2. Based on the results of the resilience assessment, the banks will be assigned required capital adequacy ratios that they will have to meet by the end of 2025. The results of the resilience assessment will inform decisions to set requirements for compliance with capital conservation and systemic importance buffers.

Continue to implement EU regulatory standards

The NBU is moving forward with efforts to improve regulatory requirements to bring them into line with EU standards. The regulator is about to finish updating the requirements for the banks to calculate the minimum amounts of credit risk and settlement risk that must be covered by capital. The timeline for their implementation will be determined on the basis of test calculations. Next year, the NBU will enhance the requirements for setting up third-party risk management systems at the banks.

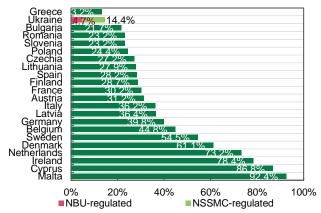
Under the NBU's updated concept for the development of sustainable finance, a White Paper on ESG policy will be drawn up next year. The White Paper will include a plan for the gradual introduction of European environmental and social risk management practices in the financial sector.

Special focus

The non-bank financial sector landscape is changing

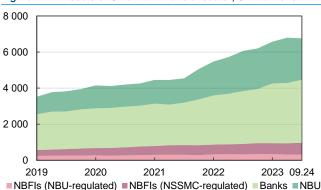
The financial sector's development is possible only when its participants are operationally and financially stable and strive to provide quality services. The banks' resilience is a result of reforms implemented over the past decade to clear the market of institutions that do not play by the rules, and to align domestic requirements with European standards. In contrast, NBFI regulation remained weak for a long time. Efforts to improve legal requirements for NBFIs began only about three years ago, during the Covid-19 crisis and the full-scale war. Various segments of the non-bank market are currently at different stages of reform, but many NBFIs are already experiencing the favorable effects of this process.

Figure 4.1.1. Non-bank market participants' assets* as a share of the financial sector's assets in Europe, June 2024



^{*} Share in total financial system assets, including central bank assets. Source: Eurostat, NBU.

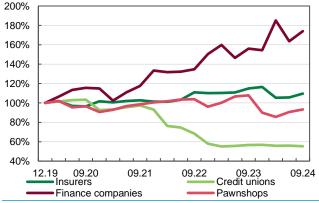
Figure 4.1.2. Assets of Ukrainian financial sector, UAH billions



Based on data on quarterly financial accounts.

Source: NBU.

Figure 4.1.3. Change in assets of NBU-regulated non-bank financial institutions, December 2019 = 100%



Source: NBU.

New rules of the game are being established in the nonbank market

Only a sustainable and efficient financial market that offers a wide range of services and financial instruments can provide the financing needed by the economy. Such a market is being built through risk-based regulation, supervision, and oversight of participants. The Ukrainian financial sector is bank-centric: the banks are its main financial intermediaries. Their assets are several times as large as the combined assets of other market participants. Banking regulation and supervision is now the most comprehensive, and is the closest to EU standards. Non-bank financial institutions (NBFIs) are much smaller by asset size and, as the full-scale invasion has shown, less resilient to crises. Up until recently, the laws governing NBFI activities were outdated, and requirements too weak. Imperfect legislation did not adequately protect investments or the rights of financial service consumers, and hindered the sector's development. NBFI assets account for just 14% of the financial sector's assets (including the NBU's). Ukraine lags far behind European countries by this indicator.

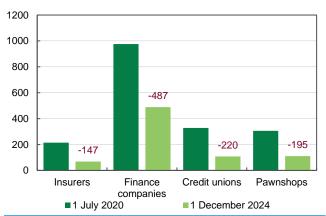
To develop the financial services market, it is necessary to implement appropriate rules of the game for all market participants. Given the stated European integration goal, such requirements should be based on European practices. For the part of the sector made up of finance companies, insurers, credit unions, and pawnshops, the starting point was the passage of key laws in 2021–2023 (see Updated Legislation for the Non-Bank Financial Services Market, December 2021 FSR). The updated laws introduced new licensing conditions and requirements for ownership structure, corporate governance, internal control systems, liquidity, and solvency.

The task of drafting appropriate legislation for the rest of the market – pension funds, construction financing funds, and collective investment undertakings – is in the NSSMC's purview. The Law of Ukraine *On Capital Markets and Organized Commodity Markets* was significantly updated this year. This law introduces new principles of regulation, supervision, and control and will help improve the state of play in this market.

New legislative amendments have made the insurance market more transparent and solvent

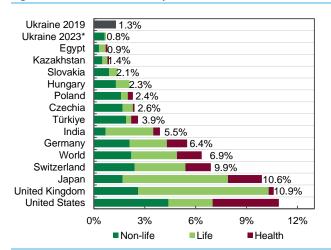
The evolution and depth of regulatory reforms in the nonbank market vary from segment to segment. In the three

Figure 4.1.4. Change in the number of financial service providers since the "split" reform launched



Figures show the change in participants' number over the period. Source: NBU.

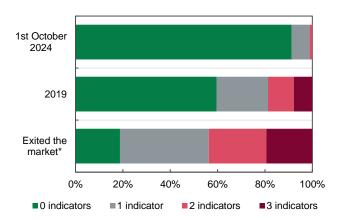
Figure 4.1.5. Ratio of insurance premiums to GDP in 2023



* Health insurance is included into non-life insurance.

Source: Allianz.

Figure 4.1.6. Share of insurance companies' assets by the number of risk indicators



Risk indicators – expert assessment by the NBU for the purposes of financial stability, including significant share of illiquid assets on insurer's balance, large volatility of current accounts, lower than average premium reserves, violations of solvency capital requirements, etc. * Insurance companies exited since 2020 or insurers voluntarily exiting the market in accordance with the agreed plan by the NBU.

Source: NBU.

years since the legislation was revised, the requirements for insurers have arguably been enhanced the most compared to other NBFIs. Changes in the insurance market have significantly strengthened its resilience and created new organic-growth opportunities for quality-oriented companies. The majority of insurers that left the market had either not made claim payments properly or specialized in "scheme" insurance to optimize their tax burdens (see Insurance Risk, December 2023 FSR). Between July 2020 and December 2024, the number of insurers fell by two-thirds, non-life insurers from 195 to 57, and life insurers from 20 to 11. The quality of insurers' assets has improved significantly, with the lion's share now comprising highly liquid components: current accounts, bank term deposits, and domestic government debt securities. The sector's solvency has increased since the requirements were updated in July 2024 to align them with the EU Solvency Directive. Requirements for maintaining a certain level of capital were supplemented by requirements for the quality of its components. To meet the new solvency capital requirements, in Q3 2024 alone insurers ramped up their eligible regulatory capital to one-and-a-half times its previous levels. In October, the median ratio of insurers' available regulatory capital to solvency capital was 138%, well above the minimum requirement of 100%. The few companies that are currently in violation of solvency requirements are implementing NBU-approved recovery plans or funding plans.

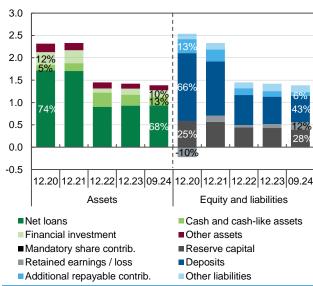
In other words, all key market indicators point to the fact that insurers are more resilient than in 2020. Then the NBU assessed the segment's risks based on a number of key indicators: the share of low-liquidity assets, the volatility of deposits in banks, the potential underestimation of premium reserves, etc. (see Solvency Risk of Non-Life Insurers, June 2020 FSR). At least one indicator of elevated risk was found in companies that together owned 41% of the segment's assets. The assets of such companies currently account for 9%.

As the market faced the fallout from the Covid-19 crisis and the full-scale invasion during this period, the ratio of insurance premiums to GDP almost halved, to 0.7% in 2023. However, the penetration of household insurance premiums edged lower by just 0.1 pp, to 0.43%. The biggest decline was in business insurance premiums, which often had non-market features. Although conditions were challenging and companies exited the market, insurers' assets grew. The sector's concentration also increased, but remains lower than in EU countries. The market's cleanup leaves room for competition and a further expansion of operations.

A number of credit unions are operating unviable business models

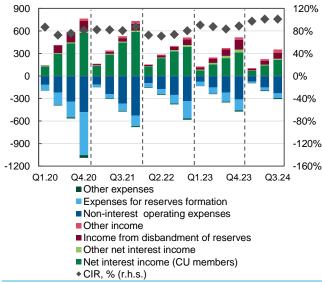
Credit union assets, totaling less than UAH 1.5 billion, make up only 0.02% of the financial sector's assets. Since 2020, the number of market players has plunged by two-thirds, to 108, down from 328. Most of the unions that left the market were small. Unlike with insurers, the fall in the number of credit unions reduced their assets by more than one-third, and deposits by three-fifths. As credit unions struggled to stay

Figure 4.1.7. Credit unions' assets, equity, and liabilities, UAH billions



Source: NBU.

Figure 4.1.8. Income and expenses of credit unions (CU) on cumulative basis, UAH millions



Source: NBU.

in business amid the hardship of the full-scale war, the regulator granted them the right to "freeze operations" by suspending the provision of services and reporting until martial law is lifted. Twenty-four unions took advantage of this opportunity.

New legislation governing credit unions took effect only in 2024. It allowed small businesses to become members of, and take out loans from, credit unions. The list of financial services that credit unions are permitted to provide has been expanded to include FX trading, providing guarantees, and rendering certain payment services. The list of capital support sources has also been expanded. But credit unions are still barely taking advantage of any of these opportunities. These NBFIs are operating a loan portfolio that has halved from its 2020 level. The main reason for the drop is that credit unions are trailing behind other lenders in digitalization and service quality. Credit unions are also simply too small to make large loans. High administrative expenses and costly funding are forcing credit unions to charge high loan rates as the only way to at least break even. Credit unions are therefore losing out to other market participants. Some of the credit unions that were located in the combat zone have lost their portfolios because of the war.

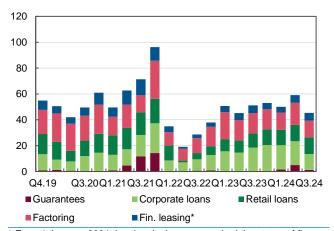
The sector has been getting a certain boost from international support from USAID, which makes preferential loans available to farmers, among others. This assistance comes through joint credit unions and is granted to efficient market participants. It enables them to ramp up transaction volumes. However, the rest of the market participants will most likely do less business going forward. Their low operational efficiency keeps them from building up capital, and their lack of transparency in assessing credit risks calls into question the safety of making deposits with credit unions. As a result, these NBFIs continue to suffer deposit outflows. The tightening of solvency requirements, effective from the beginning of January 2025, is intended to shore up the resilience of credit unions, but cannot solve the problems of inefficient business models.

Finance companies are recovering from the shocks of war

Finance companies were the largest segment by number of NBFIs in July 2020. Over the past four years and more, however, their number has halved to 489, down from 976, according to data as of 1 December 2024. This drop occurred despite the fact that all legal-entity lessors have acquired finance company status since early 2024, and that 146 new companies have received licenses since four years ago. A significant proportion of NBFIs have exited the market due to their failure to meet updated regulatory requirements. The largest of them violated AML/CFT and consumer protection requirements. Meanwhile, some market participants voluntarily gave up their licenses after abandoning the relevant lines of business.

In addition to market conduct requirements, equity and leverage ratios have been established for finance companies, starting in 2024. The new requirements should make the ownership structures and funding sources of the segment's

Figure 4.1.9. Volume of finacial services provided by financial companies by types of services (quarterly data), UAH billions



^{*} From 1 January 2024, legal entity lessors acquired the status of finance companies.

Source: NBU.

NBFIs more transparent. Over 120 of these NBFIs were in breach of equity or leverage ratios in mid-2024. A quarter of finance companies have been given until early 2025 to comply with the requirements. However, the NBU will still have to verify the real capitalization level of some of these NBFIs.

Although many participants have quit, the assets of finance companies have risen by half over this time. Lending remains their core financial service. Business loans form the basis of their loan portfolio, primarily reflecting the redistribution of funds within business groups. However, tightened regulatory requirements have significantly reduced the volume of such transactions. Lending to households continues, but portfolio volumes are still down from pre-war levels. To safeguard finance companies' clients from an excessive debt burden, the daily interest rate was capped at 1% in 2023. Going forward, the regulator will carefully assess compliance with this restriction. Market participants should focus on adjusting their activities to the new requirements and the market's best practices.

Payment licenses expand finance companies' capabilities

Payment services are a standalone business niche for finance companies. New legislation in this area has boosted the sector's development. The number of licensed NBFIs held steady at 31 over the year, but their makeup changed: two companies lost their licenses, and two gained them. Out of all companies, twenty-eight have the right only to transfer funds without opening accounts. NovaPay has a license to make almost all types of transactions and is already issuing cards. EVO (the RozetkaPay brand) has recently had its license expanded, enabling it to open and operate customer accounts. These companies are members of business groups and seek to expand their core business by providing financial services. Ukrposhta, in addition to transferring funds without opening accounts, has a license for acquiring payment instruments (accepting payments terminals).

The average monthly volume of transactions by non-bank payment service providers is currently just over UAH 100 billion. The main types of transactions are transfers that are either credited to individuals' accounts or paid out in cash, and payments for goods. For non-bank payment service providers, compliance risk and other components of operational risk remain significant. In 2024, the NBU applied enforcement measures in the form of fines to ten such NBFIs – mainly for non-compliance with AML/CFT legislation.

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Abbreviations and Terms

This FSR, unless otherwise stated, shows data for the banks that were solvent for 1 November 2024, in chapters 3.2, 3.5, and 3.6 – for the banks that were solvent at each reporting date.

War, invasion	Full-scale russian invasion to Ukraine since 24 February 2022	IFRS	International Financial Reporting Standards
Pre-war	Before the full-scale invasion	IMF	International Monetary Fund
5-7-9%, 5-7-9% stat program	te State program Affordable Loans 5-7- 9%	HQLA	High-quality liquid assets
AML / CFT	Anti-money laundering and	LCR	Liquidity coverage ratio
AIVIL / CI I	combating the financing of terrorism	LGD	Loss given default
AQR	Asset quality review	LTV	Loan-to-value
BDF	Business Development Fund	SMEs	Small and medium enterprises
CD	Certificate of deposit	NBFI	Non-bank financial institution
CIR	Cost-to-income ratio	NBU	National Bank of Ukraine
CoR	Cost of risk	NSSMC	National Securities and Stock Market Commission
COVID, COVID-19	Coronavirus disease 2019	NFC	Non-financial corporations
CPI	Consumer price index	NPE/NPL	Non-performing exposure / loan
DGF	Deposit Guarantee Fund	OECD	Organization for Economic Cooperation and Development
DSTI	Debt service-to-income ratio	OPEC	Organization of the Petroleum
EBA	European Banking Authority		Exporting Countries
EBITDA	Earnings before interest, taxes, depreciation and amortization	o/w	Of which
EIB	European Investment Bank	PD	Probability of default
EBRD	European Bank for Reconstruction and Development	Regulation No. 351	Regulation of the NBU of 30 June 2016 No. 351 approving Regulation on credit risk
ECB	European Central Bank		calculation by Ukrainian banks
EIB	European Investment Bank	ROE	Return on equity
eOselia	State program of affordable housing	RWA	Risk-weighted assets
ESG	lending Environmental, Social, and Governance	SMEs	Small and medium-sized enterprises State Statistics Service of
EU	European Union	SSSU	Ukraine
FSR	Financial Stability Report	STSU	State Treasury Service of Ukraine
FX	Foreign currency/exchange	T-bonds	Domestic government debt securities
G7	Group of Seven	UFHC, Ukfinzhytlo	Ukrainian Financial Housing
GDP	Gross Domestic Product	•	Company Ukrainian Index of Retail Deposit
HQLA	High quality liquid assets	UIRD	Rates
ICAAP	Internal Capital Adequacy Assessment Process	UK	United Kingdom of Great Britain and Northern Ireland
ILAAP	Internal Liquidity Adequacy Assessment Process	U.S.	United States of America
IFI	International Financial Institutions	w/o	without
bn	billion	VOV	year-on-year
mln	million	yoy	Number of times
		X	Number of times
sq. m	square meters		
EUR	euro	r.h.s.	right hand scale
UAH	Ukrainian hryvnia	Н	half of a year
USD	US dollar	Q	quarter
USD eq.	US dollar equivalent	M	month
pp	percentage points		

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