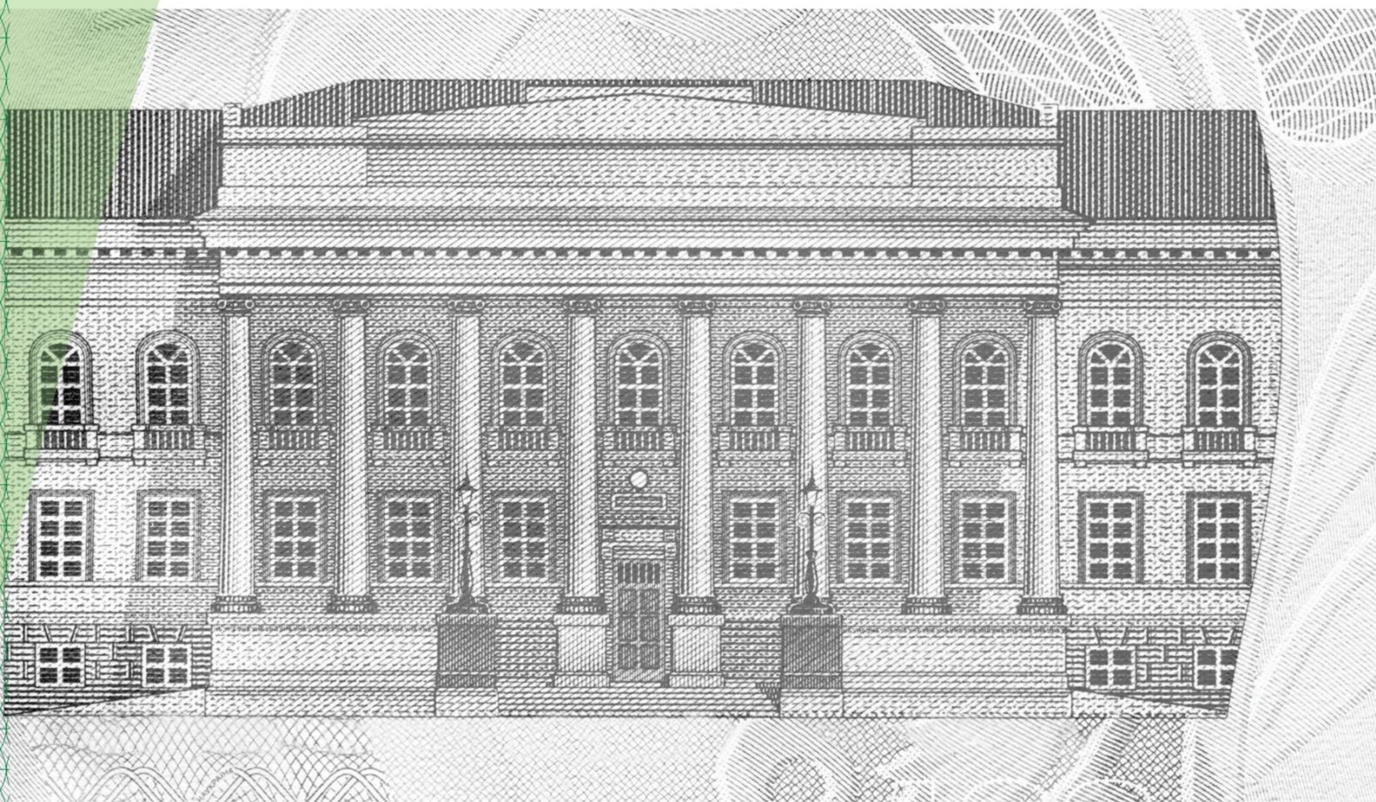
National Bank of Ukraine

Financial Stability Report

December 2021



The Financial Stability Report (hereinafter the report) is a key publication of the National Bank of Ukraine. It aims to inform about existing and potential risks that can undermine stability of Ukraine's financial system. The report discusses lending recovery, plans for further regulatory changes, and risks for the banking sector. The report also makes recommendations to the authorities and financial institutions on measures to mitigate risks and to enhance the resilience of the financial system to those risks.

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

The Financial Stability Committee of the NBU approved this report on 17 December 2021.

Contents

Summary

A number of risks to the Ukrainian economy and financial system materialized at the end of the year, namely the escalation of the conflict by Russia, a surge in energy prices, and the spread of a new coronavirus variant. Combined, these factors lowered expectations for economic development and resulted in higher risk premiums on investing in Ukraine. This worsened conditions for public and private sector borrowing from external markets. In this regard, cooperation with international financial institutions remains essential for managing macroeconomic risks in the proper way. At the same time, the economy is resilient enough to withstand the said threats. Fiscal policy has remained conservative, the state budget deficit is moderate, and public debt continues to decrease as a share of GDP. International reserves now exceed 90% of the IMF's composite measure, and are sufficient to smooth out potential fluctuations on the FX market. The financial system is perfectly sound: it is resilient, well-capitalized, and liquid.

The economic recovery is slower than expected, restrained by investment being still insufficient, and by higher energy prices. The deficit of the current account of the balance of payments will widen significantly next year on the back of the gradual correction of the prices of Ukraine's main exports and fuel prices, which will still remain high. Inflows of capital are needed to cover the deficit, especially inflows of investment. More investment, both domestic and foreign, is required to increase Ukrainian producers' capacity and boost their competitiveness. So far, investment has been more active in the public sector. Economic growth is supported by sustained consumer demand, which is fueled by the rapid growth of household income. High consumer spending and global pro-inflationary factors, including more expensive raw materials, pushed up consumer prices to double-digit levels. In line with the central banks of the majority of emerging markets, the NBU has responded to these challenges and raised its key policy rate.

Following a drop caused by the crisis, businesses in many sectors raised their profits, primarily due to high selling prices. This improved their solvency and reduced their debt load. Their margins may narrow in the future due to high energy prices and the expected correction of global prices for Ukrainian exports. Persisting global logistical problems pose another challenge.

Favorable price conditions, robust domestic demand, and the overall decrease in interest rates have contributed to businesses' strong demand for loans. The banks' hryvnia corporate loan portfolio has been growing by more than 40% yoy. Lending to micro-, small-, and medium-sized enterprises grew the most rapidly. Banks are interested in this sector mainly due to its low leverage and the opportunity to diversify the portfolio. To some extent, the growth in lending volumes was fueled by the "5–7–9" state support program, but the majority of new loans were issued outside the program. The quality of the corporate loan portfolio is improving compared to 2020: borrowers' default rates are declining, and volumes of nonperforming loans are decreasing. New loans are granted to borrowers with good financial metrics.

Retail lending is also very active: consumer lending has returned to its pre-crisis growth rates, and mortgage lending is growing by almost 60% yoy. Retail lending is segmented and concentrated, with the largest share of portfolio growth across all segments coming from four to five banks. The financial institutions that offer the best services and IT solutions are taking the lead in consumer lending. Interest rates on consumer loans do not influence households' demand, so the banks keep them high. The segment's high yields attract investors. In particular, several international banking groups have shown interest in entering the Ukrainian market. The banks that were the first to build up their mortgage portfolios lead the market segment. Many banks are not expanding their mortgage lending business due to the current risks, such as the lack of regulation of the primary real estate market and insufficient protections of creditors' rights. The banks are gradually improving their assessments of the retail portfolio credit risk. However, their assessments are rather mixed. On 1 January 2022, risk weights for unsecured consumer loans will increase to 150%, which will create an additional capital cushion to cover potential losses, in particular losses caused by adverse events.

Bank funding is sufficient to continue lending. Despite the large share of demand deposits, these resources are quite stable. At the same time, the banks are more actively trying to incentivize customers to keep their money on term deposits for longer periods. The increase in the NBU's key policy rate along with stronger competition for longer-term funding will push the banks to raise rates on term deposits. Term premiums on retail deposits are rising. The banks that offer higher rates have the largest inflows of term deposits. The share of external debt in banks' funding is extremely low, which means that an increase in the cost of external borrowing poses no risks to these financial institutions.

Overall, the cost of funding remains low for banks due to the large share of non-interest-bearing current accounts. Loan interest rates have been mainly declining over the year, especially the rates on mortgages and loans to micro-, small-, and medium-sized enterprises. Thus, the banks' net interest margin has narrowed moderately, and this trend is set to continue. On the other hand, the growth in loan portfolios has led to an increase in net interest income, and large volumes of transaction business have pushed up net fee and commission income. Together with low provisioning expenses and restrained administrative expenses, this has brought the sector's profitability to a record high.

The banking sector's current profits and large capital cushions will enable the banks to meet the new capital requirements that are to be introduced from the beginning of 2022. These include the requirement to cover 50% of the calculated amount of operational risk with capital and the increase in risk weights for unsecured consumer loans and foreign-currency government securities. The 2021 stress tests of the largest banks revealed that the capital risks of the banks have decreased compared to the 2019 stress tests. Capital needs under the adverse scenario halved. Interest risk is the key risk for the banks right now, including the risk of a decline in the value of securities due to changes in their expected yields. The banks that were identified as having significant risks are already working to minimize these risks through restructuring plans.

Meeting minimum capital requirements is not sufficient to ensure the resilience of the banking system. In accordance with Basel standards, the banks must constantly maintain a capital conservation buffer and a systemic importance buffer. The NBU deactivated these buffers in Ukraine in 2020, at the start of the crisis. Taking into account the record-high profits of the banking sector, the NBU can now re-activate these buffers. However, they will be introduced in phases in order not to hinder lending. From 1 January 2023 onward, the banks will be required to have the full capital for the systemic risk buffer but only half of the capital for the capital conservation buffer. The banks will have to build the capital conservation buffer in full by 1 January 2024.

Requirements for the banks will evolve depending on changes to banking laws. The NBU is starting to develop approaches for calculating higher bank-specific requirements based on their risk profiles. The new regulatory capital structure will be introduced for the banks in less than three years. The regulation of non-bank financial institutions will also change. The changes are set forth in new laws *On Financial Services and Financial Companies* and *On Insurance* adopted by the parliament late this year, and in the draft law *On Credit Unions.* The laws envisage tighter requirements for the solvency, risk management framework, corporate governance, and market conduct of non-bank financial institutions. Their adoption will raise trust in financial services providers and boost the development of the financial market.

Financial Stress Index

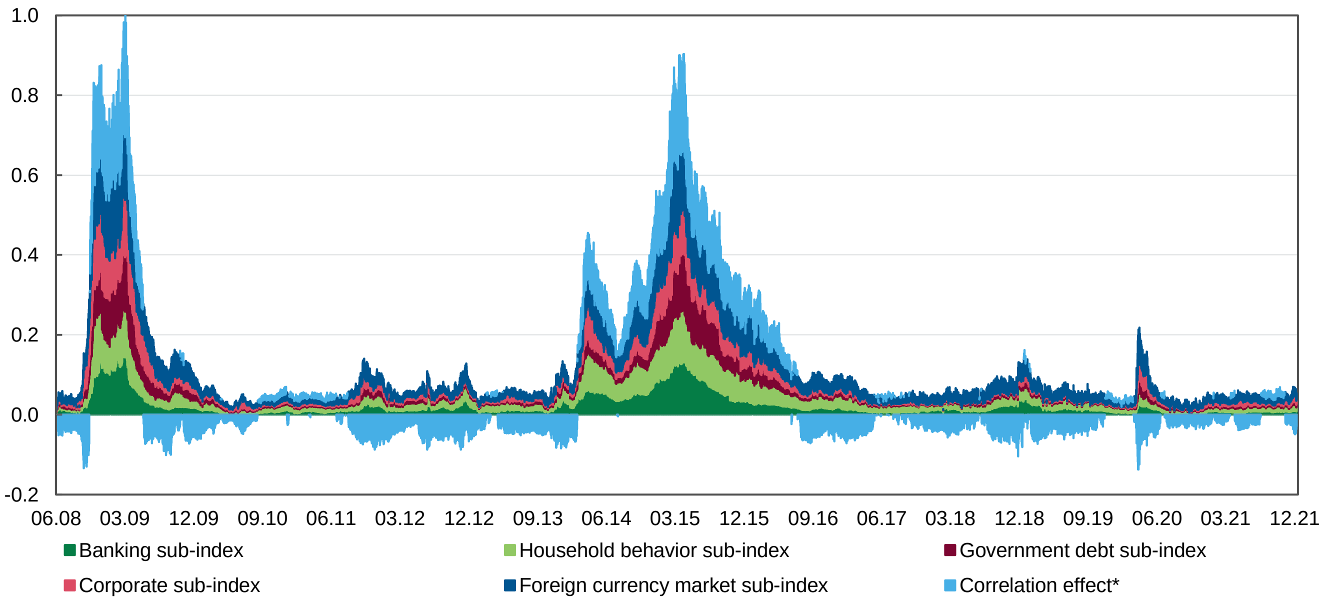
The Financial Stress Index (FSI) has remained volatile. Risks were rising in various individual segments of the financial sector on occasion, but not simultaneously. The correlation between them remained moderate, which means there is no systemic stress. The buildup of Russian troops close to Ukrainian borders has caused a local shock to the market of government and corporate securities. In particular, prices of credit default swaps and yields on Eurobonds increased. The FX market sub-index has declined markedly over the last six months. The slight increase it has seen at the end of the year has been driven by a temporary rise in exchange rate volatility and the need for NBU foreign exchange interventions. The banking sector sub-index remains at an all-time low.

The FSI only reflects current conditions in the financial sector. It does not indicate any future risks in either the short or long run.

Figure FSI1. Financial Stress Index

Source: NBU.

Figure FSI2. Financial Stress Index decomposition



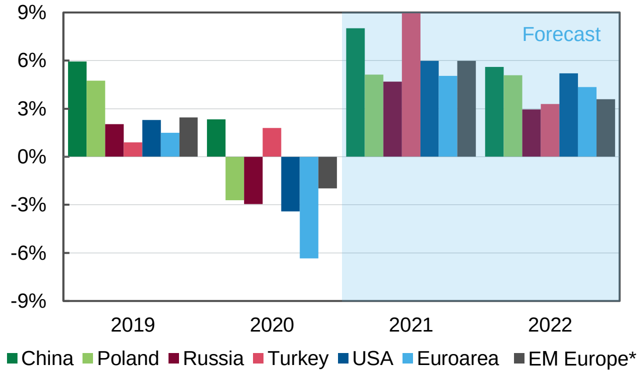
* Correlation effect is net effect of the time-varying correlation (excluding the average correlation for the entire observation period).
Source: NBU.

Part 1. External Conditions and Risks

1.1. External Developments

Global economic growth is decelerating. The emerging markets (EMs) are expected to grow at a slower pace. Risks of more losses persist as the coronavirus mutates. High inflation is forcing central banks to phase out monetary stimuli; fiscal support is decreasing. The anticipated growth in yields on risk-free assets and a potential increase in risk premiums will require EMs to raise yields on their instruments. A surge in energy prices and the concurrent correction of steel and iron ore prices are new challenges. The threat is rising of a massive invasion by Russia, which is increasing its pressure by means of "gas diplomacy".

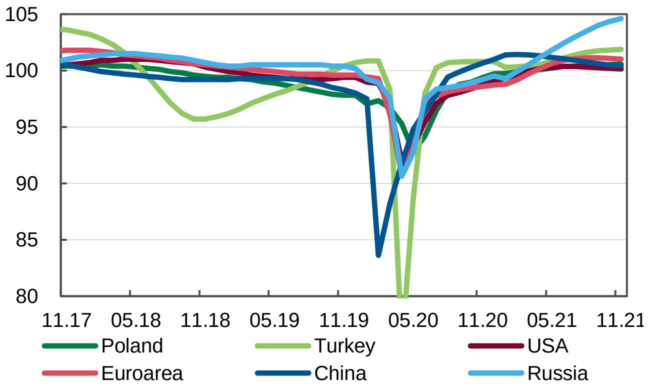
Figure 1.1.1. Real GDP of Ukraine's main trading partners



* Belarus, Moldova, Poland, Russia, Romania, Turkey, Hungary, Ukraine, and six countries of the Western Balkans.

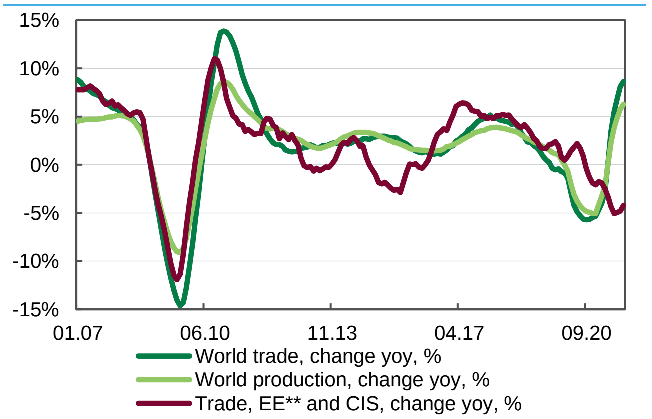
Source: IMF, World Economic Outlook, October 2021.

Figure 1.1.2. OECD composite leading indicators (CLI) for Ukraine's main trading partners



Source: OECD.

Figure 1.1.3. Global trade and industrial production, trailing twelve months*



* Volume of global trade; seasonally adjusted. ** Eastern Europe.

Source: Centraal Planbureau (CPB), the Netherlands.

Economies of partner countries continue to recover, but the recovery has slowed due to the pandemic

The global economic recovery is slower than expected. Large aggregate demand, supported by anti-crisis and monetary stimuli, is one of the main growth drivers. Global trade is growing, having exceeded the pre-pandemic level in H1 2021 (merchandise trade). The WTO estimates the growth in global trade will surpass 10% this year, but that this growth rate will halve next year. The prospects for global trade policy are becoming less uncertain thanks to the start of talks between the United States and China.

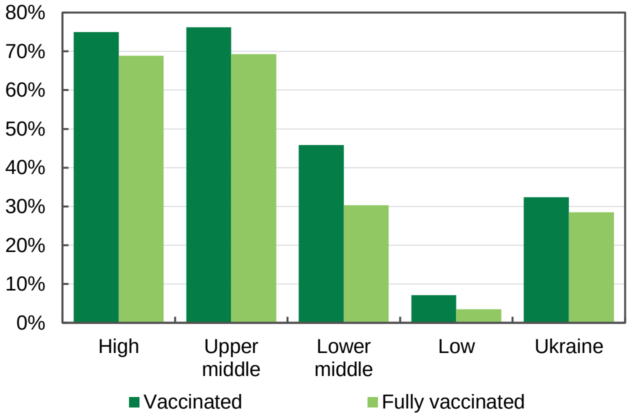
On the other hand, supply often lags behind demand. Supply disruptions and the structural problems faced by a number of economies are restricting economic growth. The pandemic is continuing to affect economic activity. The IMF has thus downgraded its growth forecasts for 2021 for the U.S. (by 1 pp) and Germany (by 0.5 pp) compared to its summer predictions, in particular due to disruptions in the supply system. EMs (excluding Asian countries) are projected to grow more slowly than advanced economies for the first time since the start of the century. The Chinese economy is also growing more slowly than expected – among other things due to structural problems in the real estate sector that have spread to other sectors. The growth forecasts of energy exporting countries, including Russia, have improved.

Advanced economies have ensured high levels of vaccination among their populations and, until recently, have been resuming economic activities across all sectors. In the rest of the world, insufficient vaccination rates have led to the emergence of new virus variants, such as Omicron. Fears are rising that hazardous mutations might reduce vaccine efficiency. Even the advanced economies have responded by returning to tight quarantine measures. So, global vaccination is becoming increasingly important to mitigate the impact of the pandemic. The UN plans to achieve a vaccination rate of 70% of the global adult population only in mid-2022.

Monetary policies are normalizing in leading countries and are tightening in EMs

High demand and limited supply, supply distortions, and large-scale anti-crisis monetary and fiscal measures have caused a record-high surge in global inflation. In particular, inflation in the U.S. in November was at its highest since 1982. In the majority of advanced economies, it is to reach its highest since the onset of the 2008 financial crisis. Central banks are increasingly pointing to fundamental inflationary pressures, rather than temporary ones, as they did before.

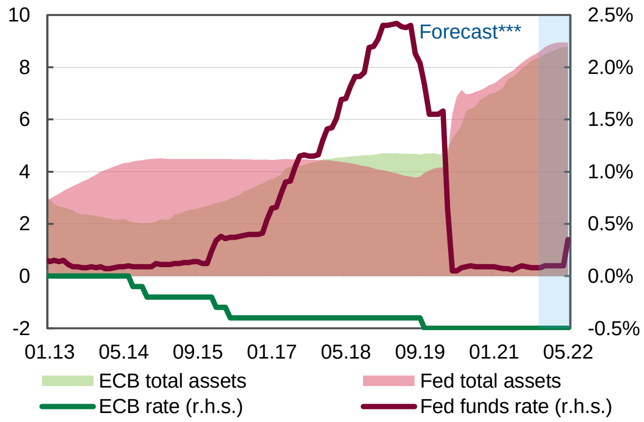
Figure 1.1.4. Vaccinations in countries by income groups, % of population



As of 10 December 2021.

Source: Our World in Data.

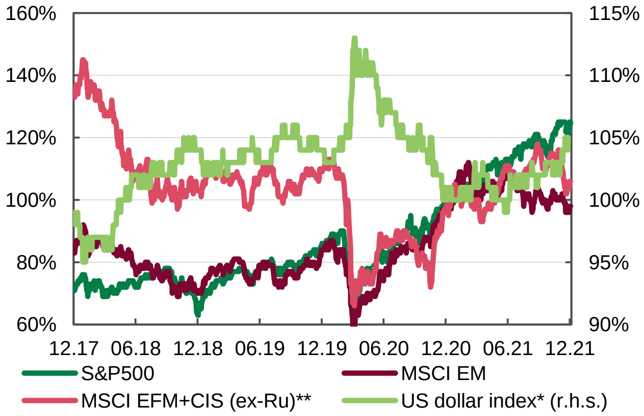
Figure 1.1.5. Fed's and ECB's total assets* and key rates**



* In trillions of U.S. dollars for the Fed and in trillions of euros for the ECB. Monthly averages.
** The federal funds rate for the Fed and the deposit rate for the ECB.
*** Assuming that announced changes in quantitative easing programs are the only factor in the change in assets, and assuming that the Fed's key rate increases to 0.9% in 2022 as projected by the Fed's staff, with the first hike in May (according to the December 2021 projections).

Source: Fed, ECB.

Figure 1.1.6. Changes in US and EM stock market indices and US dollar index, 1 January 2021 = 100



* Weighted by trade in goods and services, Fed.
** Index of bordering economies of Europe and CIS, excluding Russia (includes Estonia, Kazakhstan, Lithuania, Romania, Serbia, Slovenia, and Croatia).

Source: Federal Bank of St Louis, Morgan Stanley, Fed.

Inflation is prompting the leading central banks to end the monetary policy easing cycle. The ECB is reducing its purchases under the pandemic emergency purchase program (PEPP). The Fed announced it would decrease its bond purchases by USD 30 billion per month from the current level of USD 105 billion. Next year, the interest rates may gradually rise from zero. So far, only a gradual decrease in monetary stimuli is expected: the Fed's policy rate will remain below 1% and negative in real terms, the ECB's rates will remain close to zero, and their balance sheets have stopped growing but are not starting to shrink.

On the other hand, EM central banks are already hiking their interest rates. The majority of EMs are also continuing to phase out anti-crisis fiscal policy measures. These policies remain in place in the advanced economies. In particular, the United States approved a large-scale infrastructure rebuilding program. However, the stimuli are becoming more targeted. The measures taken since the start of 2020 have led to growth in public debt, which is becoming a serious long-term challenge.

Financing conditions will worsen for EMs

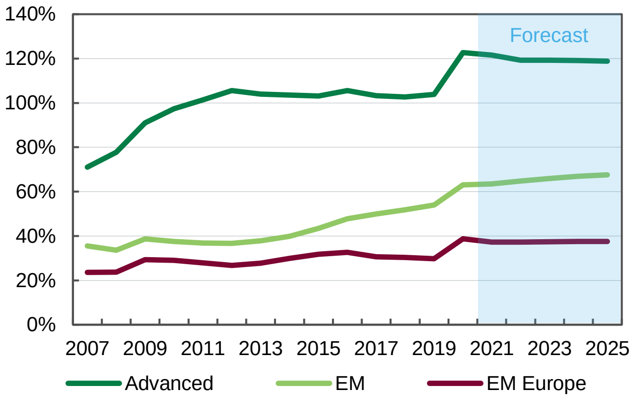
Yields on U.S. government bonds have been on the rise since late summer. Yields on the bonds of other advanced economies are also growing. The U.S. dollar is strengthening against other currencies. This reflects expectations of monetary policy tightening by the leading central banks. Such expectations coincided with a downward revision of economic growth forecasts, especially for EMs. This creates additional uncertainty for investors, thus pushing risk premiums up. Therefore, yields on EM debt instruments should increase in future. The current record-low risk spreads on junk securities point to a potential rise in risk premiums. The increase in the yields on EM bonds will also be driven by the announced reduction in asset purchase programs, which will limit the supply of liquid funds. For Ukraine, expectations of securities yields will be pushed up by specific risks, such as the risk of military aggression by Russia.

The rise in energy prices becomes threatening

In Europe, natural gas prices have surged fivefold since the start of the year, fueled by high demand, abnormal temperatures, low inventories, and limited supply (in particular, from Russia in autumn). Having reached historic highs in September–October, gas prices have decreased somewhat, but they have remained high and volatile. Rising energy prices speed up global inflation. Many EU countries plan to take measures to protect consumers from the impact of high gas prices, which primarily include reducing energy taxes and increasing transfers to more vulnerable population groups. This will create some fiscal risks in Eastern and Central Europe. The EU Agency for the Cooperation of Energy Regulators expects natural gas prices to decrease only in spring 2022, when the cold season ends and supply increases from Norway and Russia.

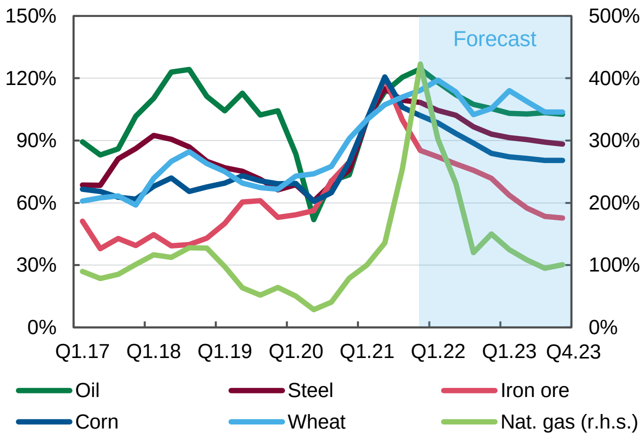
Crude oil prices are growing on the back of higher natural gas prices and the economic recovery, despite the increase in production by OPEC countries. Oil prices are expected to decline gradually later on, particularly because of fears of a

Figure 1.1.7. Public debt by groups of economies, % of GDP



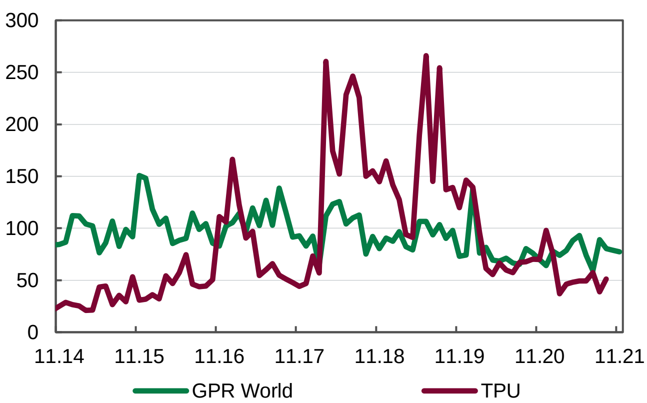
Source: IMF, World Economic Outlook, October 2021.

Figure 1.1.8. Global commodity prices*, 1Q 2021 = 100%



* Brent oil; natural gas in terminals in the Netherlands; steel square billets; iron ore concentrate, China; wheat and corn, quarterly global average.
Source: NBU, October 2021 Inflation Report.

Figure 1.1.9. Geopolitical Risk (GPR) Index* and Trade Policy Uncertainty (TPU) Index**



* Based on the updated methodology.
https://www.matteoiacoviello.com/gpr.htm
** https://www.matteoiacoviello.com/tpu.htm
Source: Dario Caldara and Matteo Iacoviello.

decrease in demand due to new coronavirus variants. Steel prices have grown significantly since the start of the year and will be supported by high demand driven by large-scale infrastructure projects. Iron ore prices dropped in H2, among other things due to lower demand from China. A resumption of supply will push iron ore prices further down. Wheat prices rose to their highest levels in over a decade as a result of poor harvests in the main producers. On the other hand, strong global harvests dampened corn prices.

Russia's "gas diplomacy" remains a threat to Ukraine

In autumn, Russia reduced natural gas transit through Ukraine to below its contractual level (daily volumes). Gas supplies to Europe via other channels were also limited, causing gas shortages in the region. By using such methods, Russia and interested parties are promoting the launch of the Nord Stream 2 undersea gas pipeline. However, in November, the German energy regulator suspended certification of the pipeline and said that it would not be completed in H1 2022. Germany's government coalition agreement does not mention the pipeline directly, but contains a requirement that such pipelines be registered in compliance with the EU norms, which Ukraine has urged for. Bringing the operation of pipelines into compliance with EU norms will weaken Gazprom's monopoly. The U.S. has imposed new sanctions against companies and vessels related to the pipeline, which might complicate its commissioning. The IMF estimates that the launch of Nord Stream 2 will slash Ukraine's income from transit by more than a half, to USD 1.2 billion per year by 2024. In September, Hungary concluded a new long-term agreement with Gazprom to bypass Ukraine using supplies from Nord Stream. Taking into account Russia's actions, the transit through Ukraine might continue to decrease. This gives rise to both fiscal and security risks.

Risks of Russian aggression against Ukraine has risen

Russia since late October has again been building up military forces near Ukraine's borders. The intelligence services of Ukraine and the United States see a rising threat of a massive invasion in early 2022. Russia continues to reinforce its control over the occupied areas of Donetsk and Luhansk oblasts. The latest step included official decisions to increase the turnover of goods. International platforms supporting dialogue to solve the conflict, including the Normandy Format talks, have proven ineffective. Russia's confrontation with the West is becoming one of the main geopolitical risks, alongside the tensions between the United States and China. Bosnia and Herzegovina could become a new front in the confrontation between Russia and the West in Europe. Russia is also consolidating its influence and military control in Belarus. Belarussian authorities are provoking tensions at the borders of Ukraine and neighboring countries, creating migration pressures and deploying its military.

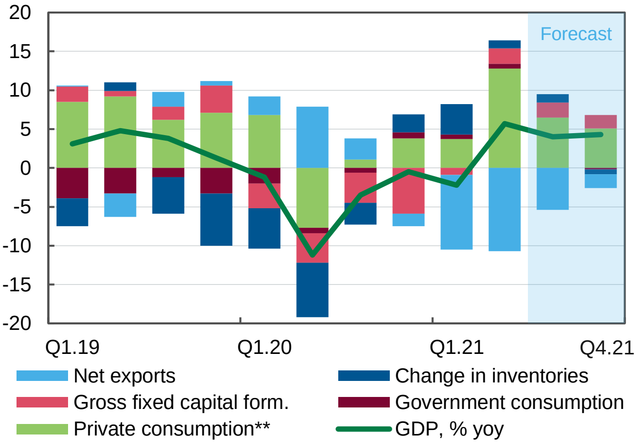
The litigation of Ukraine against Russia in the case of the so-called "Yanukovych debt" to Russia (USD 3 billion) is drawing to an end. The High Court in London may pass its ruling as soon as the end of the year.

Part 2. Domestic Conditions and Risks

2.1. Macroeconomic and Fiscal Risks

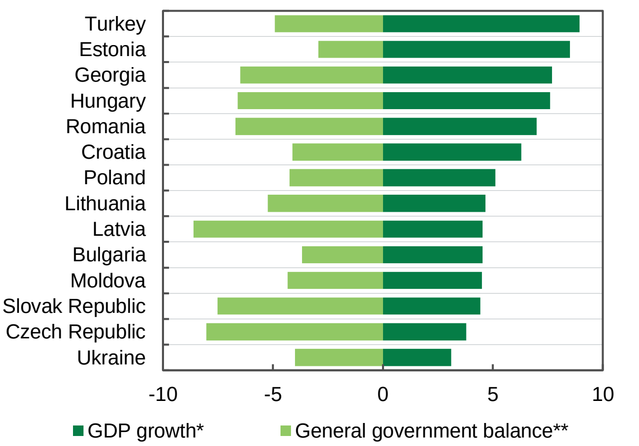
Macroeconomic and fiscal risks remain moderate. Sustained favorable terms of trade, a balanced foreign currency market, sufficient international reserves, and a prudent fiscal policy are making the economy more resilient. The acceleration of economic growth will depend on the ability to increase private investment, the risk of new COVID-19 waves, and quarantine restrictions due to still weak vaccination. The level of uncertainty may increase next year, especially in the energy sector and on the foreign capital markets. Continuing cooperation with the IMF and other international financial institutions (IFIs) will secure Ukraine's access to external financing and will contribute to faster economic growth.

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



* Forecast for Q3–Q4 made in October 2021 (to be updated in January).
** Together with non-profit organizations that serve households.
Source: SSSU, NBU estimates.

Figure 2.1.2. Forecast of GDP growth and the general government deficit to GDP in 2021, %



* Data for Ukraine – NBU forecast.
** Data for Ukraine – consolidated budget balance.
Source: NBU, IMF (WEO, October 2021).

The economic recovery is slow

According to preliminary data of the State Statistics Service of Ukraine (SSSU), real GDP grew by only 2.7% yoy in the Q3. Economic growth is held back by limited production capacity, still-low level of private investment, rising energy prices, and a slow recovery in the services sector. The economy has adapted to the new environment, but the negative impacts of quarantine restrictions have persisted. The NBU estimates the restrictions led to a loss of around 0.8 pp of GDP growth in 2021. On the other hand, sustained consumer demand, a revival of investment activity, particularly in the public sector, and record harvests are supporting economic recovery. According to the NBU's October forecast, the economy will grow by 3.1% this year.

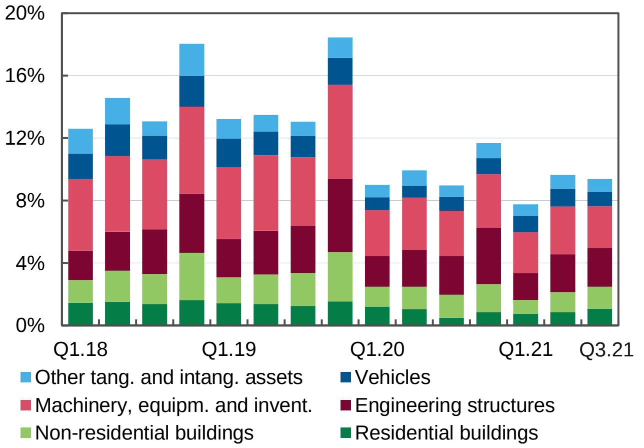
As expected, domestic demand will remain the key factor in GDP growth next year. An increase in the pace of vaccination and further adaptation of businesses and households to working under the quarantine will minimize the negative impact potential new restrictions may have on the economy. High energy prices will slow down economic growth. This might cause an increase in production costs, slower disinflation, a decline in the output of energy-intensive industries, and higher budget expenditures on subsidies and support for energy companies. As a result, the Ukrainian economy will grow by 3.8% in 2022, according to the NBU's estimates.

Growth in investment is needed for faster economic growth

The public sector has been quite active in capital expenditures in recent years. Several hundred projects have been completed or started under the *Big Construction* program, above all large-scale road construction work. In the coming years, public investment will not grow as quickly.

Stable and high GDP growth rates require a significant increase in private investment. Although private investment picked up somewhat, it is still low. This reduces the competitiveness of domestic production. An unwelcoming investment climate and pessimistic business sentiments hinder investment. In November, for the first time in seven months, the Business Activity Expectations Index fell below its neutral level: top managers' assessments of their companies' economic condition deteriorated. Provided that investment demand recovers, the financial sector will be able to meet the need for loans. Foreign direct investment should also rise more rapidly. So far, its dynamics are almost entirely

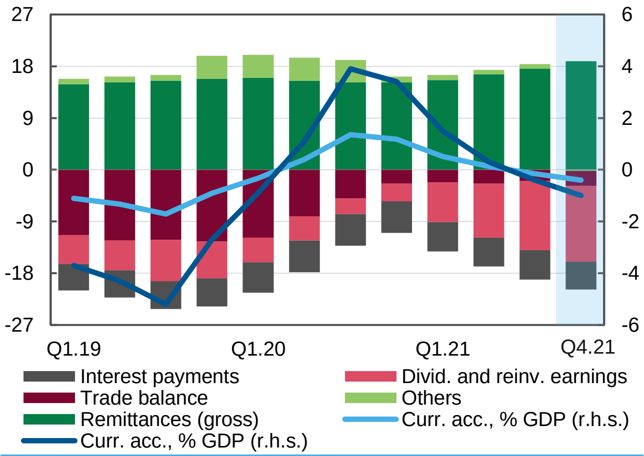
Figure 2.1.3. Capital investment by asset type in 2018–2021,% of GDP*



* Excluding the temporarily occupied territory of Crimea, the city of Sevastopol, and the temporarily occupied territories of Donetsk and Luhansk regions.

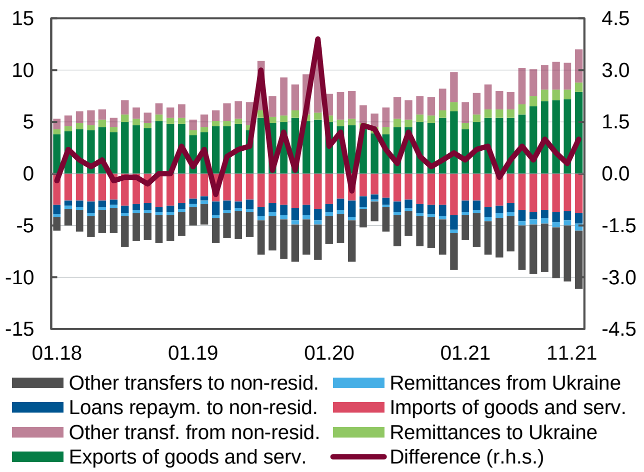
Source: SSSU.

Figure 2.1.4. Current account balance, trailing four quarters, USD billions



Source: NBU.

Figure 2.1.5. Volumes of cashless FX transactions, USD billions equiv.*



* According to statistical reporting data provided by banks.

Source: NBU.

determined by the reinvestment of income by companies with foreign capital. Continuing structural reforms, improving business conditions, and strengthening the protection of the rights of investors and creditors are required to attract new investments.

Bringing inflation down to the target may take longer

In November, consumer inflation reached 10.3% yoy, which was higher than in previous NBU forecasts. It may remain in two-digits at the end of the year. High global prices for energy and agricultural products, rapid growth in production costs, robust consumer demand, and rising inflation in Ukraine's partner countries remain important pro-inflationary factors. Considering this, the NBU raised its key policy rate to 9% in early December. Nevertheless, bringing inflation down to the target may take longer. This will reduce the purchasing power of households and increase the cost of government debt. In response to changes in monetary conditions, the cost of bank funding stopped declining. Banks will gradually raise their deposit rates, in particular to attract more long-term deposits.

The current account deficit is within safe limits

Despite a slight deterioration in the terms of trade, global market conditions remain favorable for key export sectors, in particular for the trade in grain and metal products. This reduces risks to the balance of payments, even despite rising prices in the energy sector, which account for around a quarter of Ukraine's imports on average. The current account deficit at year-end 2021 will be close to 1% of GDP. The NBU forecasts it will widen significantly in 2022 due to further growth in imports and lower export prices, but will still be within acceptable limits. The current account deficit will be offset by the inflow of investment and debt capital. Considering the expected deterioration in the conditions for raising funds on the global financial markets, IFI funds will remain an important source of financing. After recording a deficit next year, the consolidated balance of payments will turn positive in 2023.

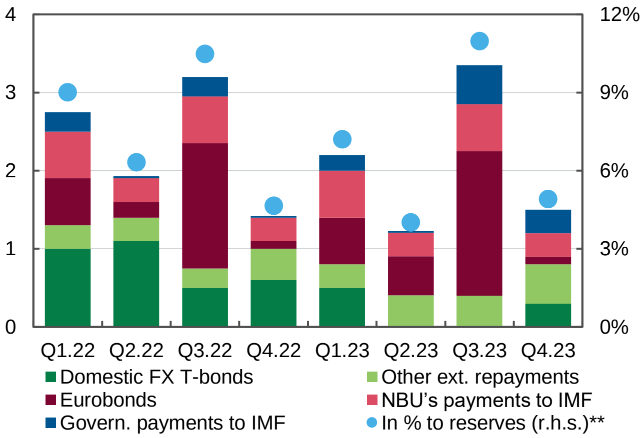
The probability of long-term imbalances in the FX market remains low. Thanks to the floating exchange rate regime, the hryvnia is flexible in its response to changes in macroeconomic and financial conditions, and the NBU is ready to smooth out any sharp fluctuations, which may arise, among other things, due to increasing geopolitical risks.

The debt burden is declining, but the cost of new government borrowing may increase

Having grown to 60.9% last year, state and state-guaranteed debt will continue to decrease as a percentage of GDP. It is projected to reach 52% at year-end 2021 and 51% at year-end 2022 according to the NBU's baseline scenario. The main factors in the decline in the debt burden in 2021–2022 are the rapid growth in nominal GDP and the absence of FX shocks.

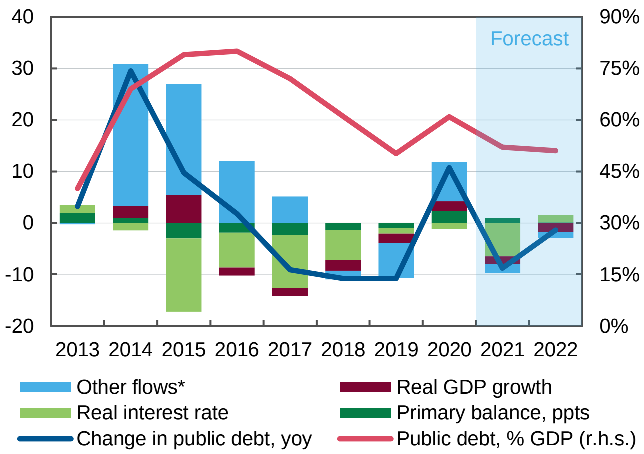
After a significant delay, in late November Ukraine received another tranche of around USD 700 million from the IMF, and extended the current Stand-By Arrangement until the end of June 2022. The USD 2.7 billion received in August from the SDR allocation, and foreign currency accumulated by the

Figure 2.1.6. FX payments of the government and the NBU, USD billions equivalent*



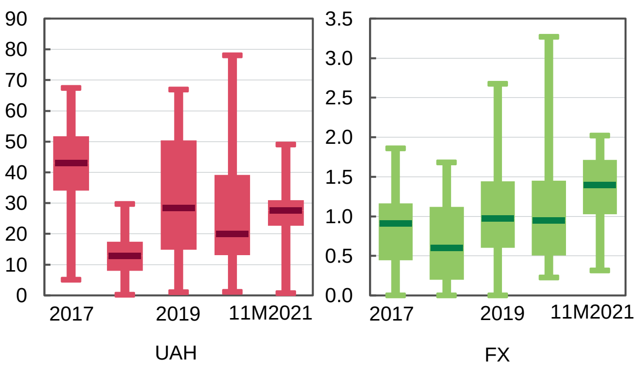
* Including interest.
** The ratio of estimated repayments in the respective quarter to Ukraine's gross international reserves as of 1 December 2021.
Source: Ministry of Finance, NBU.

Figure 2.1.7. State and guaranteed debt to GDP (%) and change factors (pp)



* Other factors include the total contribution of changes in the volume of guarantees, assets and exchange rate fluctuations.
Positive values show an increase in the ratio of debt to GDP, while negative values indicate a decrease. The contribution of factors is calculated taking into account the main assumptions of the baseline macroeconomic scenario, which was developed in October 2021.
Source: NBU estimates.

Figure 2.1.8. Daily balances of the State Treasury in UAH and foreign currency (USD equiv.) in 2017–2021, billion units*



* Faces of the rectangle show the first and third quartiles of the distribution. The line inside the rectangle is the median. The lines above and below the rectangle indicate the maximum and the minimum.
Source: STSU, Ministry of Finance, NBU.

government, helped Ukraine increase its international reserves and successfully repay a large amount of debt in September. Currently, gross reserves exceed 90% of the IMF's composite measure (ARA).

The gradual phasing-out of monetary stimuli by leading countries, higher yields on risk-free instruments, and stronger global competition for financial resources will raise the cost of external borrowing for the government. Cooperation with the IMF remains one of the key conditions for maintaining full access to external financing. Taking into account the large debt repayments due in the coming years, it is extremely important for Ukraine to maintain access to IMF financing. In addition, IMF cooperation provides additional comfort, because of growing investors' concern over Russia's provocative actions at the border.

Prudent fiscal policy is important for keeping risks under control

The NBU estimates the state budget deficit in 2021 will be significantly below the 5.5% of GDP projected at the start of the year. The state budget deficit was approved at 3.5% of GDP for 2022. Fiscal policy remaining conservative contributes to a further decline in the debt burden, more stable levels of public debt, and weaker inflationary pressures. At the same time, it is sufficient to support the economy, protect socially vulnerable groups, and combat the spread of COVID-19.

Volumes of government guarantees for lending to state-owned and private companies increased markedly in 2021. In 2022, they should not exceed 3% of planned revenues of the general fund of the state budget. This level is in line with the norms of the Budget Code and the commitments made under the memorandum with the IMF.

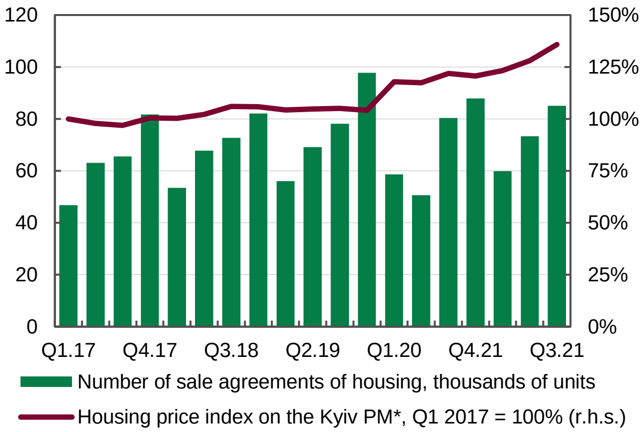
As the government postpones bringing prices for utilities and energy to market levels, the financial conditions of state-owned companies are worsening, which may lead to additional budget expenditures in the future. It also increases the likelihood of a shortfall in the budget revenues that come from dividends and income tax. The government will avoid increasing the quasi-fiscal deficit to comply with its commitments under the IMF memorandum. However, in the wake of the recent sharp rise in natural gas prices, additional budget support may be needed to provide subsidies to households and ensure uninterrupted gas supplies during the 2021–2022 heating season.

In order to control liquidity risks, the balance of the single treasury account should be maintained at a sufficient level. This requires more prudent forecasting of cash flows and increasing the forecast horizon for the single treasury account to 3–6 months. Another step could also be to raise the transitional balance at the end of the year.

2.2. Real Estate Market and Mortgage Lending

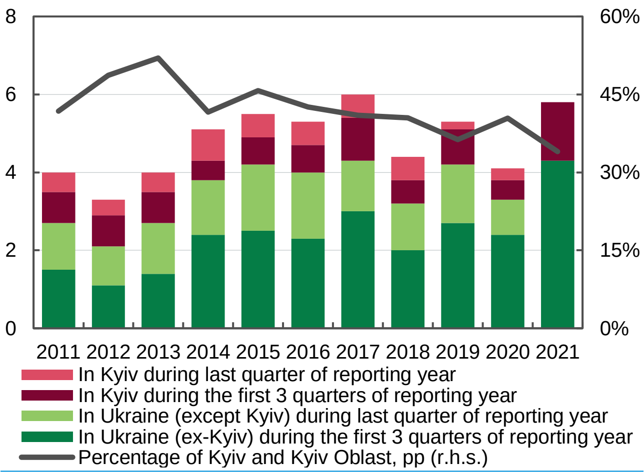
The housing market is heating up: prices are rising under pressure from higher costs, growing demand and increased mortgage lending. But the rate of increase in residential real estate prices is not high enough to raise concerns. The supply of new housing has ticked up a notch from last year, but is still at risk of slowing amid a stalled reform of the sector's system of controls. Mortgages are rapidly rising from a very low base, but the pace could be higher in a less constrained environment. Among the obstacles are the unregulated primary real estate market and inadequate protection of creditor rights. The market for retail commercial real estate is growing at a notable rate, while the market for office space has been slow to recover.

Figure 2.2.1. Housing market activity



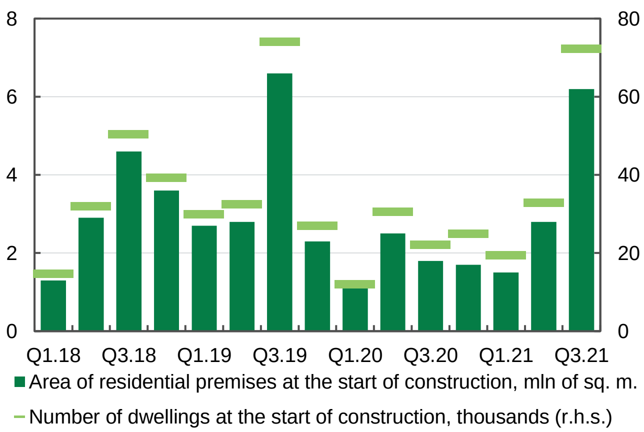
* Primary market.
Source: Ministry of Justice of Ukraine, real estate agencies, NBU estimates.

Figure 2.2.2. Commissioned residential property in apartment blocks, million sq. m



Source: SSSU, NBU estimates.

Figure 2.2.3. Apartment housing starts in Ukraine



Source: SSSU.

Demand for housing continues to grow

The number of transactions conducted in the real estate market in Q3 2021 rose by 6% yoy. Demand is being fueled by steady and brisk increases in nominal incomes and deteriorating inflation expectations. The latter reflect households' concerns about both the overall depreciation of money and the future growth of housing prices. Revived mortgage lending is gradually becoming an additional driver of demand. Significantly amplifying the demand for housing from well-to-do households with lots of savings is the low return on deposits, and therefore the relatively higher appeal of investing in alternative assets. These factors will continue to have an effect, sustaining the demand for housing.

Creation of new housing supply has picked up

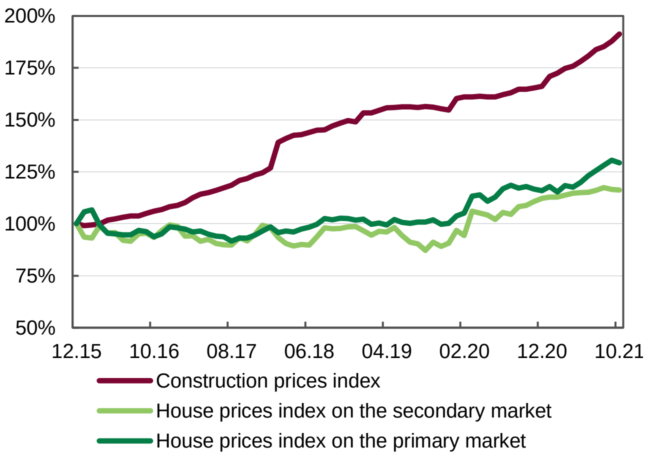
In the first nine months of 2021, the commissioning of new apartment housing in Ukraine increased almost twofold compared to the average over the same period for the past five years. New construction in Ukraine's large cities is gradually gaining pace. In Kyiv, commissioning almost tripled from last year and doubled compared to its historical average. The rapid pace of the launch of new housing in both the capital and other regions in the first three quarters of 2021 was partially due to the effect of last year's delays in the commissioning of housing stock. The commissioning of housing last year, especially in Kyiv, was delayed by the reform of the State Architecture and Construction Inspection of Ukraine (SACIU), which was officially completed only this fall. This significantly slowed down the starting and completion of new apartment buildings.

In the future, the pace of housing commissioning may be partly limited due to the small volume of construction that began last year. The limited supply may increase price pressures going forward. However, the number of housing starts materially increased in 2021. During the first three quarters, the construction of over 120,000 apartments started in Ukraine. This is almost twice the level of the same period last year and 7% higher than the pre-crisis level. This can compensate for fewer building starts last year, albeit with a lag.

Market is heating up, but not enough for a housing bubble

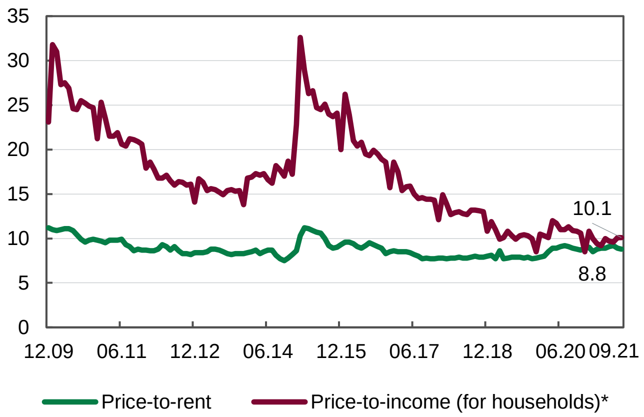
Hryvnia prices for real estate in new buildings grew by 10–15% yoy this fall. Housing prices in the secondary market are growing several percentage points faster, on average. Prices for housing purchased on credit in Q3 were 14% higher than a year ago, a mortgage lending survey has shown. This increase was due to a set of factors that differ slightly across segments of the real estate market.

Figure 2.2.4. Construction and housing price index, December 2015 = 100%



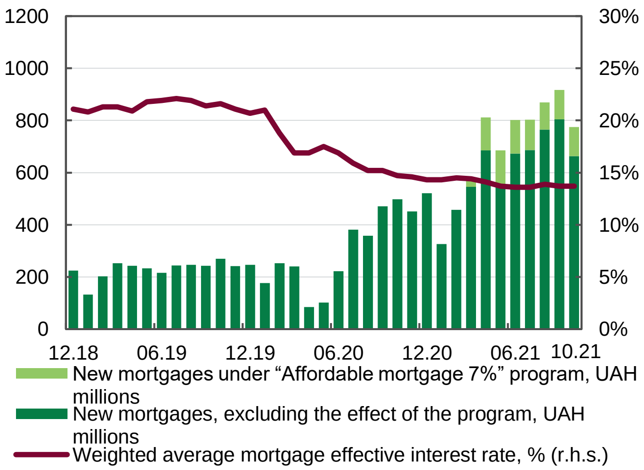
Source: SSSU, real estate agencies, NBU estimates.

Figure 2.2.5. Price-to-income and price-to-rent ratios in Kyiv's primary market for housing



* Calculated based on the average number of workers in a household.
Source: SSSU, real estate agencies, NBU estimates.

Figure 2.2.6. New mortgage disbursements and interest rates



Source: banks' data.

In the primary real estate market, the key driver of price growth was construction costs. In October, the housing prices rose by 16% yoy. Those prices have also been continuously outpacing construction costs. There has long been a gap between the growth in construction costs and housing price dynamics. This was primarily due to the market being sluggish during the crisis. Developers were unable to shift their increased costs to consumers due to weak demand, and had to operate with low margins. Some recovery in demand allowed developers to respond to the cost increase with the higher price of housing.

Secondary market prices move in parallel with prices for new housing and exceed them due to the "premium" for housing readiness, which is associated with lower risks and higher liquidity. Demand and the expectation of its expansion are currently the main drivers of prices in the secondary real estate market. Mortgage lending is an additional driver of this segment. Access to credit is certainly fueling purchasing activity. As long as the share of housing purchases financed by loans is small, mortgages do not directly affect price dynamics. However, the correlation between housing prices and the volume of loans has strengthened significantly since the start of active mortgage lending in mid-2020.

Housing remains affordable by historical standards

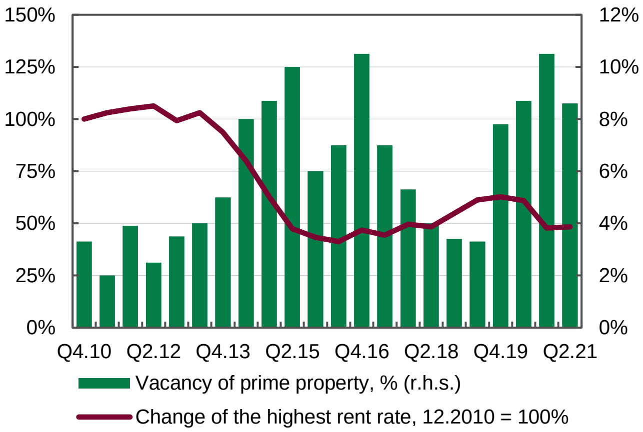
Although housing prices are rising, the price-to-annual-income ratio is quite stable. As of the end of September, this ratio had declined by 1 pp from a year ago and remains at an all-time low. This is because nominal incomes are growing faster than housing prices. The price-to-rent ratio has not changed over the year and is generally low by historical and global standards.

Mortgages are reviving, but the growth is limited

The volume of the mortgage portfolio is currently very small. The mortgage-to-GDP ratio remained unnaturally low at 0.55% as of the end of Q3. However, the volume of new mortgages issued during the first nine months of 2021 was almost three times the level of last year. Low interest rates have been the main catalyst for mortgage lending. The Affordable Mortgage program has also contributed to this recovery. However, only UAH 1 billion in mortgages was issued in the first nine months of the program, which is just 20% of the program's annual budget. Up until recently, lending under the program was limited by strict criteria for mortgaged housing. These have recently eased, meaning that lending under the program may intensify in the coming months. Given the price dynamics, the banks have to be careful when assessing the collateral.

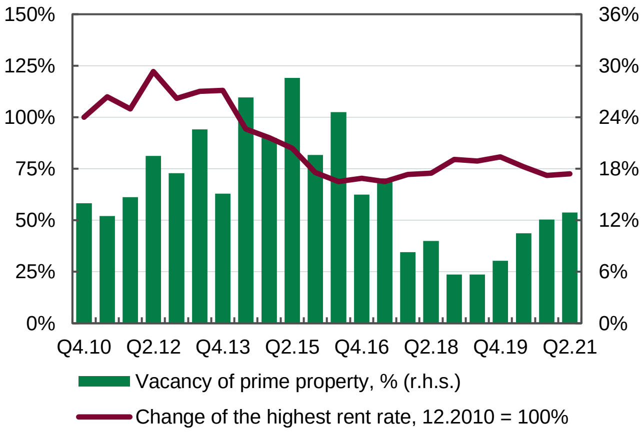
Mortgages are now primarily growing through secondary market lending. Only one-tenth of new mortgages in 2021 were issued for the purchase of newly built housing. The main obstacles to active mortgage lending are still the opacity and the lack of regulation of the primary market, as well as the low level of protection of creditor rights. If passed, a draft law designed to streamline the primary housing market will partially remove one of these obstacles. The lifting in September this year of the more than seven-year-long

Figure 2.2.7. **Performance indicators of the retail property market**



Source: consultancies, NBU estimates.

Figure 2.2.8. **Performance indicators of the office property market**



Source: consultancies, NBU estimates.

moratorium on foreclosure under FX mortgages has improved creditor rights protection.

Commercial real estate market recovering

Thanks to the growth in household income and consumption, the market for retail space has been rather active. Sales turnover is growing, as is demand for shop space. At the same time, the rent rates, which normally depend on the retailer's income, are slowly getting higher. The situation in this segment depends on quarantine restrictions, but their impact has been moderate. The milder quarantine this year posed little difficulty for market development. Space owners are gradually regaining market power: discounts are becoming rare and only apply if there is a significant drop in turnover. The new supply of space in the market in H1 2021 was limited. Coupled with relatively strong demand, this reduced vacant space.

The situation in the office space market remains tense, but there has also been an improvement relative to last year. Demand has increased, driven primarily by the low base effect. Having fallen for nearly a year, rental rate dynamics have finally stabilized. Most business center tenants are operating in hybrid presence mode, which has become the new norm since the pandemic broke out. The segment is thus still dominated by tenants. At the same time, new real estate is actively entering the market. In the first six months of 2021, 4% of currently existing areas in Kyiv were commissioned, which is almost three times the five-year average for the period. This only slightly increased vacant areas, as almost all new areas had been booked by tenants in advance.

As the economy gradually recovers, the office space market will continue to pick up slowly, and the retail space market will keep growing. The market's quarantine-driven volatility is not a threat to the financial sector, as the share of shopping malls and business centers in the operating corporate portfolio of banks remains negligible.

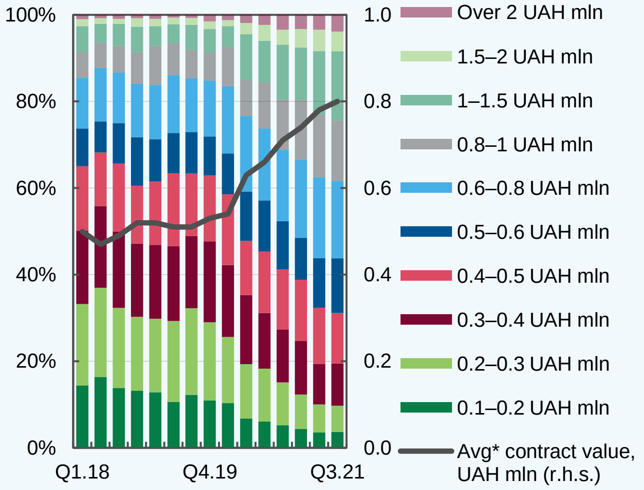
Box 1. Mortgage Lending Survey Findings

Mortgage lending standards remain moderately conservative – loan-to-debt ratios are low, while debt burdens are rather high. Although the banks plan to expand their hryvnia mortgage loan portfolios, there are several obstacles hindering the active development of the market.

In November 2021, the NBU conducted its annual mortgage lending survey of banks. Responses were given by 26 banks that accounted for 99% of new mortgages issued over the first three quarters of 2021.

Over the first nine months of 2021, respondent banks issued about 2.5 times more mortgages than in the same period in 2020. The share of mortgages issued to purchase residential housing in Kyiv is rising, as Kyiv continues to lead among the regions. The banks continue to keep away from the primary market – only slightly over one tenth of all mortgages were issued to buy newly-built property over the first three quarters of 2021. This share has contracted steadily over the past three years. These also include loans issued in partnership with developers. The number of these loans is also declining.

Figure B.1.1. Loan distribution by principal

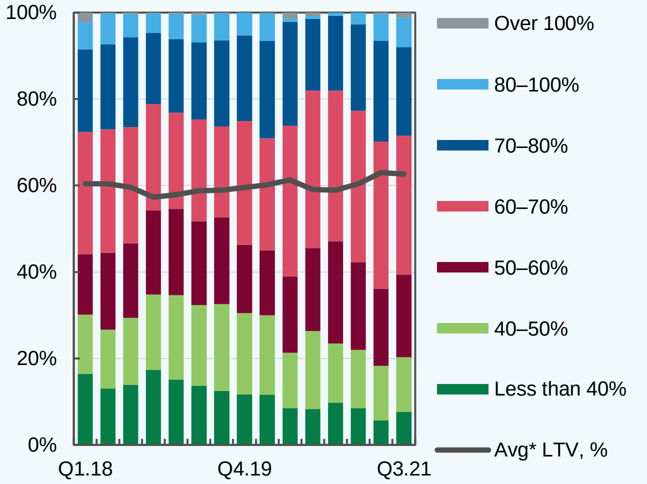


* Weighted by the number of issued loans.
Source: banks' data.

The average mortgage grew by 20% over the year, totaling about UAH 800,000 in Q3. This growth was mainly attributed to higher housing prices. The average value of collateral also increased, to slightly less than UAH 1.5 million. The average size of mortgaged property was 68 square meters, almost on the same as last year.

Mortgages are issued on average for 15 years. However, the actual term is much shorter. The average lifespan of the mortgages that were repaid in 2021 was about ten years. This was one year more than the average lifespan over the last five years. The average age of borrowers remained unchanged over the year, standing at 38 years. The average income of borrowers increased by one third. Half of the mortgages were issued to borrowers who earned UAH 30,000 or more per month. Only about one tenth of the mortgages were issued to borrowers with official income of less than UAH 10,000.

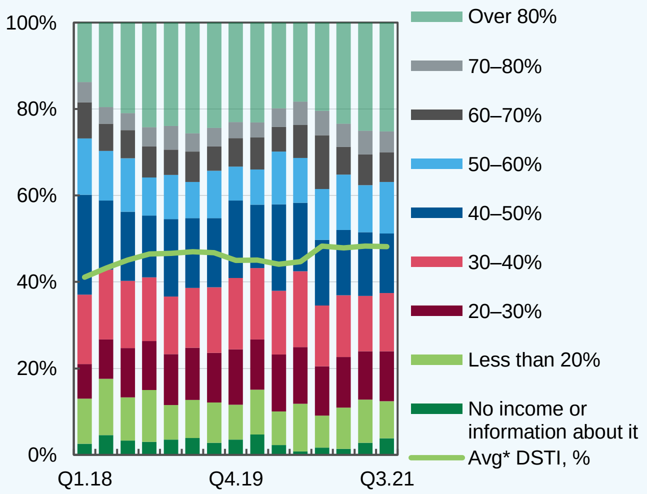
Figure B.1.2. Loan distribution by LTV



* Weighted by the volume of loans issued.
Source: banks' data.

The average loan-to-value ratio (LTV) was 63% in Q3, being a rather conservative indicator. Meanwhile, the debt service-to-income ratio (DSTI) grew slightly over the year, hitting about 48%. This figure shows that the debt burden of borrowers is rather high. However, this ratio only reflects clients' official income. Although the banks will not usually lend to clients who have no official income, they are ready to factor in other income sources.

Figure B.1.3. Loan distribution by DSTI



* Weighted by the volume of loans issued.
Source: banks' data.

Next year, the banks plan to double the amount of new loans they issue. At the same time, there are several obstacles on the market that prevent mortgage lending from becoming widespread. The banks see the main problems as being the lack of solvent borrowers, the unregulated primary real estate market, and the poor protection of creditors' rights.

Box 2. Results of mandatory FX mortgage restructuring

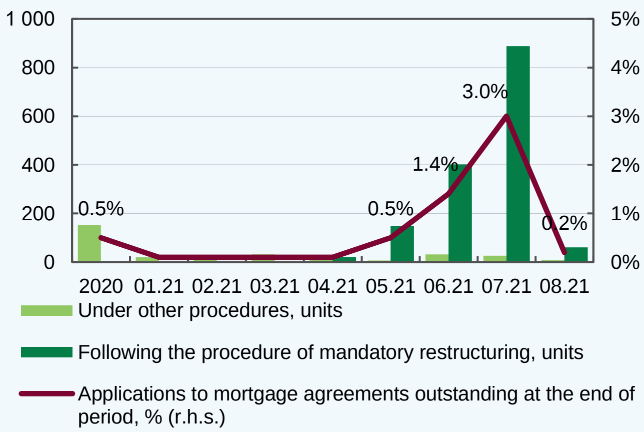
A law was passed in the spring of 2021 that introduced a temporary mechanism for the mandatory restructuring of legacy foreign currency mortgages on preferential terms for borrowers. But even this step did not encourage debtors to resolve the issue of legacy NPLs. Only about 5% of borrowers under existing agreements applied for restructuring when the mechanism was in effect. Now that the moratorium has been lifted, banks will start to foreclose on collateral for the remaining loans. This will effectively put an end to FX mortgages.

Impaired FX mortgages have been a burden on Ukraine's banking system for more than a decade. Multiple attempts have been made to address this issue and implement effective debt resolution tools. A law was passed in April 2021 that introduced a mechanism for mandatory restructuring of FX mortgages. It stipulated very favorable conditions for borrowers. Debtors could apply for restructuring under this mechanism from April through July.

Banks have received about 1,500 applications to resolve bad debts since the law came into effect. This is 10 times last year's level. Almost all of those were requests for restructuring under the law. However, the total number of applications accounted for only 5.1% of the number of loan agreements, which is insignificant compared to the volume of mortgages.

Banks had almost UAH 13 billion in FX mortgages in late August 2021. The FX mortgage portfolio declined by UAH 4 billion in the first eight months of 2021. Only about one-tenth of this reduction was due to restructuring, banks reported. The cleanup of banks' balance sheets was thus again primarily done by writing off debts or selling them at significant discounts.

Figure B.2.1. Number of restructuring applications submitted

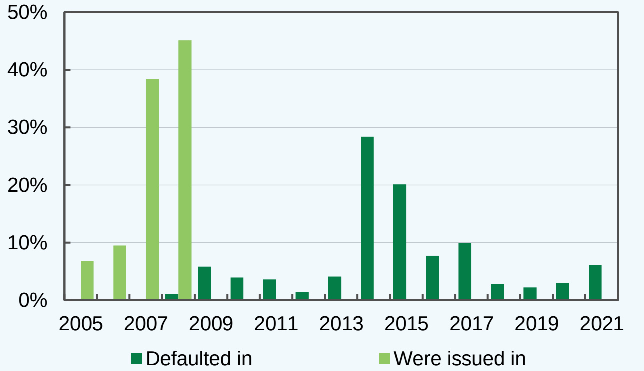


Source: banks' data.

H The NBU surveyed banks about their FX mortgage restructuring efforts during April through August. The central bank compiled and reviewed a sample of 499 FX mortgages for which banks had received and either approved or rejected restructuring applications during the period covered by the poll.

The vast majority of mortgages for which restructuring applications were made had been held on the banks' balance sheets. Almost half of these mortgages were issued in 2008. The average initial loan term was 20 years. Almost all mortgages were denominated in U.S. dollars. The average mortgage amount at the time of origination was about USD 50,000. The loan rate averaged 12% per annum. The loan-to-value ratio averaged 75% at the time of issue. Most mortgages ceased to be serviced in 2014–2015.

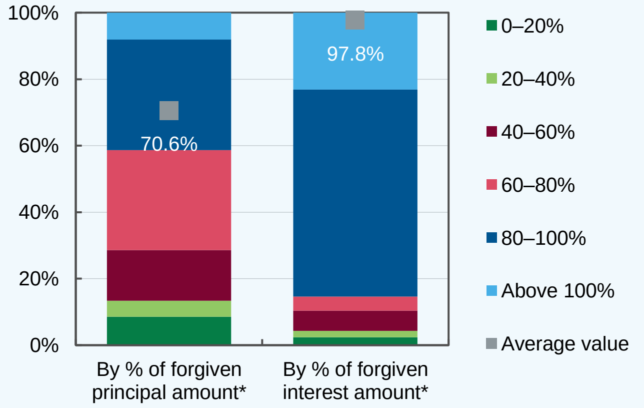
Figure B.2.2. Loan distribution by year of issue and year of default



Source: banks' data.

By law, banks were forced to restructure on extremely unfavorable terms. Restructuring applications came from borrowers that had on average repaid only 40% of the principal amount of initial debt. As a result of restructuring, an average of 70.6% of the outstanding principal amount and almost all accrued interest was forgiven, banks said. However, this made the financial performance of banks only slightly worse, as appropriate loan loss provisions for FX mortgages had long since been recognized.

Figure B.2.3. Loan distribution by debt forgiveness ratio



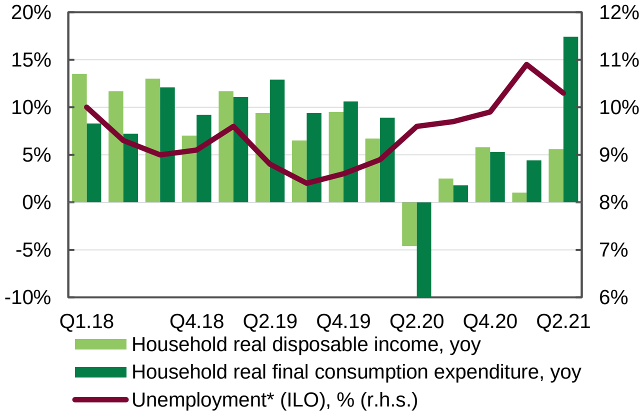
* Relative to the relevant balance at the time of restructuring.
Source: banks' data.

Another attempt to resolve the problem of legacy FX mortgage portfolios through the new restructuring mechanism did not produce the desired outcome. At this time, however, nothing is stopping banks from completely resolving their NPLs, in particular by foreclosing on collateral. The value of collateral not foreclosed within two years will gradually cease to account for the reduction of prudential provisions.

2.3. Households and Related Risks

Household disposable income continues to grow. However, real income growth decelerated markedly because of inflation. This growth is driven mainly by rising wages on the back of an increasingly favorable labor market and higher employment. Higher prices are encouraging households to spend their savings more actively, including on large purchases. Therefore, consumer demand remains robust, pushing up consumer lending and mortgages. That said, the debt burden of households remains low, meaning that there is room for a further increase in lending. Households' propensity to save has been decreasing after the crisis. The growth in demand deposits came to a halt. Meanwhile, term deposits are gradually rising.

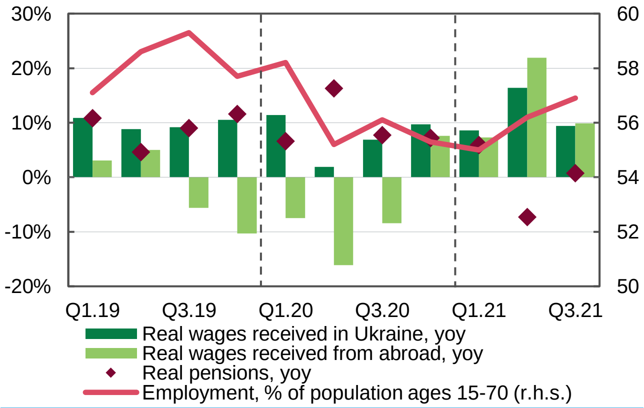
Figure 2.3.1. Change in real disposable income, consumer spending, and the unemployment rate



* Percentage of the economically active working-age population.

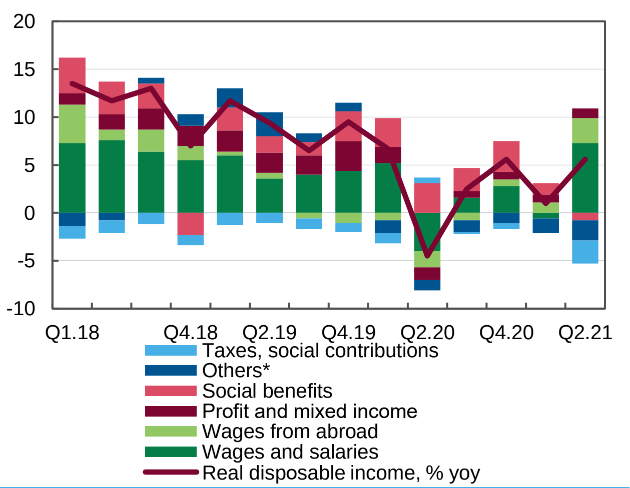
Source: SSSU, NBU estimates.

Figure 2.3.2. Change in real wage, pensions and employment



Source: SSSU, NBU estimates.

Figure 2.3.3. Drivers of real disposable income growth, pp



* Including property income and other current transfers received, excluding paid transfers.

Source: SSSU, NBU estimates.

The growth in real disposable income slowed because of inflation

The continued recovery of the labor market in 2021 fueled growth in disposable income. In H1, this income grew by 12% yoy. However, the annual growth of real income was more moderate, at only 3.3%, due to accelerating inflation. This figure was significantly below pre-crisis levels. The growth in the wages received in Ukraine is becoming a more important contributor to household income. The wage growth was driven by higher demand for qualified labor. Since March 2021, the number of vacancies, mainly in the services, trade, transport and industrial sectors, has been rising. As a consequence, the employment rate increased noticeably.

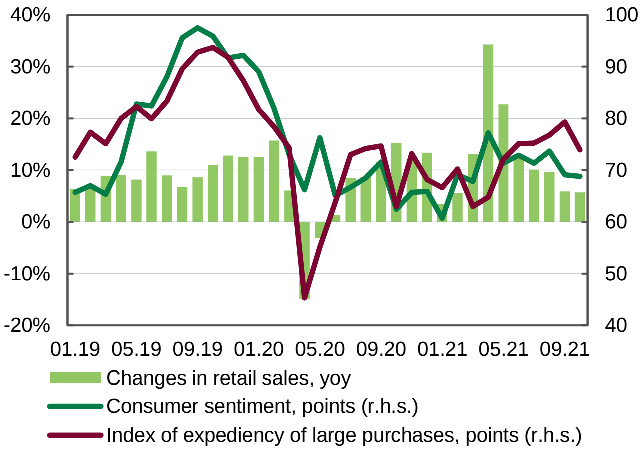
Another important source of income growth comes from more active labor migrations and the resulting growth in real wages received from abroad. At the same time, social benefits played a significantly less important role in household income growth. These benefits were practically unchanged in real terms. The real income of sole proprietors is also rising slowly. A survey held by the European Business Association in September 2021 showed that almost one third of sole proprietors had failed to restore their pre-crisis income levels.

Following a post-crisis rebound, the growth in real household income slowed, as expected. Wage growth will decelerate on the back of sluggish economic growth and the increasingly stronger pressures of wage costs on companies. Conversely, more intense migration will be another contributor to the wage growth in Ukraine. The greater roll-out of the vaccination campaign and persisting current flexible quarantine restrictions will prevent further staff cuts, while also enabling sole proprietors to recover their income.

Households' propensity to consume has risen and has fueled lending

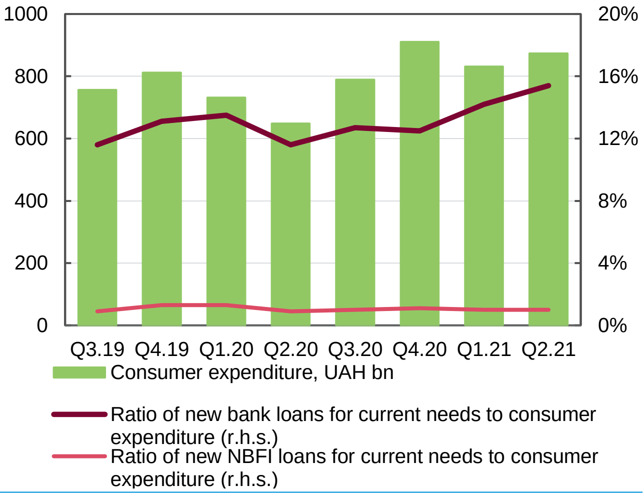
The rise in income somewhat improved households' perceptions of their well-being. According to Info Sapiens, the percentage of households who consider their income medium or high increased in by 2 pp over six months, to 61% in September. At the same time, accelerating consumer inflation and worsening inflation expectations are significantly affecting the behavior of households. All these factors have stimulated purchasing activity. As a result, the growth of real consumer spending in Q2 markedly exceeded that of real disposable income. A rebound in consumer demand is evidenced by the index of the expediency of large purchases, which in September rose to a high not seen since the pandemic began. However, declining real income growth will also slow consumption.

Figure 2.3.4. Consumer sentiment and change in retail goods turnover



Source: SSSU, Info Sapiens.

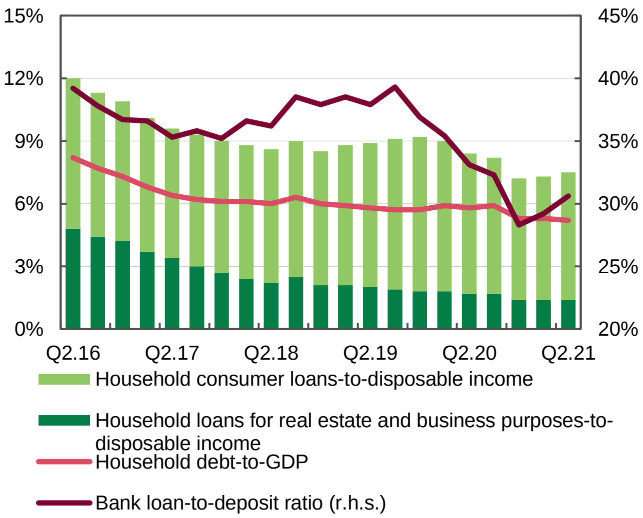
Figure 2.3.5. The ratio of consumer lending* to consumer spending



* Including gross consumer loans issued by solvent banks.

Source: SSSU, NBU estimates.

Figure 2.3.6. Household debt burden



Source: SSSU, NBU estimates.

Rebounding consumption, as has already become the case, promoted household demand for loans. The ratio of new bank consumer loans to consumer spending is on the rise, reaching a record high of 15%. Despite being more modest, at 2%, the ratio for non-bank lending is also increasing. Lenders are ready to meet higher demand.

Another factor behind the pick-up in consumer lending is a change in consumer habits – the more active use of payment cards and a shift to online transactions. Even those who had been apprehensive of using electronic services had to use them because of quarantine restrictions. As a result, the amount of households' transactions with payment cards has increased since the start of the pandemic, with payments in the retail network accounting for a large number of these transactions. The range of potential borrowers is expanding accordingly.

Mortgage lending is growing rapidly. Investment in real estate is becoming more attractive because of the overall rise in prices. Lending still has no major impact on the housing market, with bank loans financing just 5% of all purchases. However, mortgages will rise in future.

The debt burden of households is still low

The ratio of households' debt to their disposable income is at a historic low – below 8%, while the ratio of household debt to GDP is 5%. In the latest lending survey, the banks said that the debt burden of borrowers was falling, being the lowest since the surveys began in 2016. That is because household income is rising faster than loans. A retail lending survey of banks that the NBU conducted in May 2021 also shows that the debt burden of borrowers did not deteriorate during the crisis. The number of borrowers increased in particular among those with medium or higher incomes. The rather low debt burden of households compared to that in advanced economies indicates there is significant lending potential.

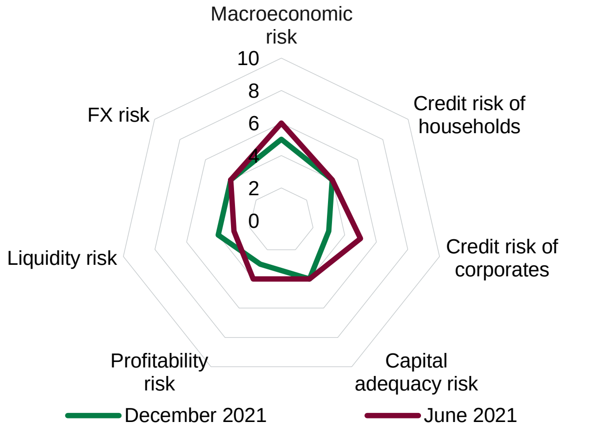
Excessive savings during the crisis are giving way to consumption

Robust consumer demand decreased the propensity to save. Households were gradually spending the savings they had built up during the crisis. Savings held in current accounts shrank noticeably in Q3. These changes in savings were in line with those seen before the crisis and showed that household behavior was coming back to normal. That said, higher income is promoting further growth in hryvnia term deposits.

Part 3. Conditions and Risks in the Banking Sector

3.1. Financial Sector Risk Map

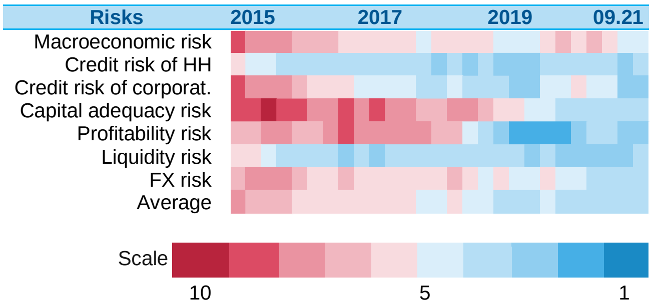
Figure 3.1.1. Financial Sector Risk Map*



* The NBU assesses risks on a scale from 1 to 10, with 1 being the lowest level of risk, and 10 the highest. The assessment reflects the outlook for the next 12 months.

Source: NBU estimates.

Figure 3.1.2. Financial sector risk heatmap



Source: NBU estimates.

Description:

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

Macroeconomic risk decreased

Macroeconomic risk decreased and became moderate in Q3. While the assessment of this risk was worsened by weak GDP growth, it was improved by a decreased budget deficit and a lower ratio of public and foreign debt to GDP.

Retail credit risk: unchanged

This risk has remained moderate. On the one hand, large banks somewhat downgraded their expectations of the quality of their loan portfolios, while households downgraded expectations of their economic standings. On the other hand, the share of past due loans decreased.

Corporate credit risk declined

The state of the corporate sector has improved. Companies' profits rose, while interest rates on loans remained low. This reduced the debt burden of companies. The banks are improving their assessments of loan portfolio quality.

Capital adequacy risk: unchanged

Capital adequacy risk remains unchanged. Although the rise in lending somewhat decreased capital adequacy ratios, these ratios still significantly exceed minimum requirements. At the same time, the ratio of the banks' core capital to their assets – the leverage ratio equivalent – has increased.

Profitability risk has decreased

Rising income and improved operational efficiency have pushed up the banks' returns. This, together with lower provisions, enabled the banks to make record-high profits.

Liquidity risk has risen

Liquidity risk increased somewhat in Q3 2021, but remained moderate. The assessment of this risk was negatively affected by the deterioration of the banks' liquidity risk assessments, a drop in the liquidity coverage ratio, and an increase in the loan-to-deposit ratio. Household deposits continue to rise, albeit at a slower pace.

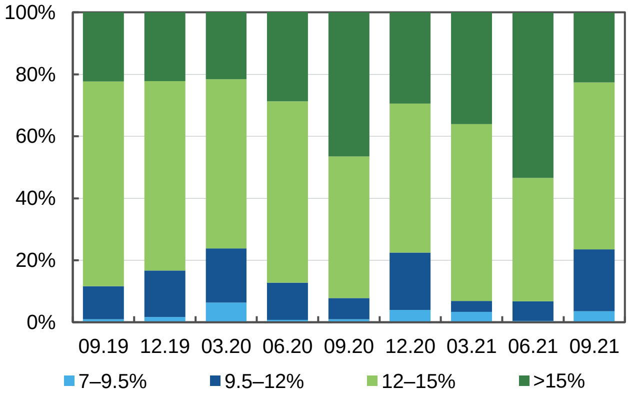
FX risk: unchanged

FX risk has remained moderate since Q2 2020 due to the low volatility of the exchange rate, sufficient international reserves, and the low depreciation expectations of households and businesses. The dollarization rate of the banks' balance sheets continued to decrease.

3.2. Capital Risk and Stress Testing Results

The banks continue to have substantial capital cushions that exceed minimum requirements. The 2021 stress tests showed that the risks to the banks' capital had fallen over the last two years, with credit risk decreasing probably most notably. That said, interest rate risk – in particular the risk of investing in securities – is becoming increasingly more pronounced. In order to enhance their resilience, the banks should meet the capital requirements set by the NBU. At present, the banks are not only ready to meet the capital requirements that will be introduced from the start of 2022, but are also able to start building their capital conservation and systemic importance buffers. The sector's large profits indicate that the banks will be able to build these buffers by 1 January 2024.

Figure 3.2.1. Distribution of core capital adequacy ratios by banks' assets



Source: NBU.

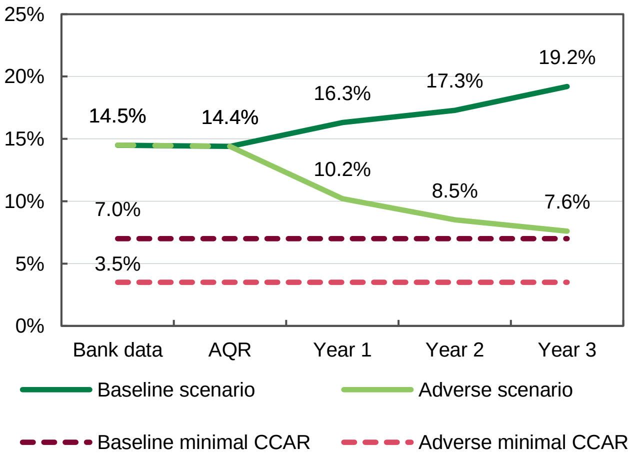
Table 1. Stress test scenario parameters, increase in %

Indicator	Baseline scenario			Adverse scenario		
	2021	2022	2023	2021	2022	2023
Real GDP	3.8	4.0	4.0	-2.2	-1.7	0.1
CPI	8.0	5.0	5.0	8.6	7.5	7.3
FX rate*	-3.6	-2.8	-1.0	-16.4	-7.7	-4.9

* UAH/USD exchange rate; under the baseline scenario, as estimated by Focus Economics.

Source: NBU, Focus Economics.

Figure 3.2.2. Weighted average estimates of the core capital adequacy ratio (CCAR) based on stress-test results*



* Weighted by risk-weighted assets in each year. AQR - asset quality review.

Source: NBU.

The banking system is sufficiently capitalized

The capital adequacy ratios of most banks continue to significantly exceed the minimum requirements. The core capital adequacy ratio in the system is more than 15%. This figure dropped somewhat in 2021 due to intensive lending, as the new loans increased risk-weighted assets. The banks augmented their capital through reinvested earnings and through raising funds from shareholders. The banks raised additional capital from shareholders mainly to develop their business.

The NBU has resumed the practice of stress testing

Meeting the minimum capital adequacy requirements does not fully guarantee resilience in times of stress. Stress tests aim to assess the ability of banks to absorb losses when shocks materialize. In 2021, the NBU reintroduced the practice of stress testing after a year's hiatus due to last year's crisis. Thirty large banks accounting for about 93% of the sector's assets were stress tested.

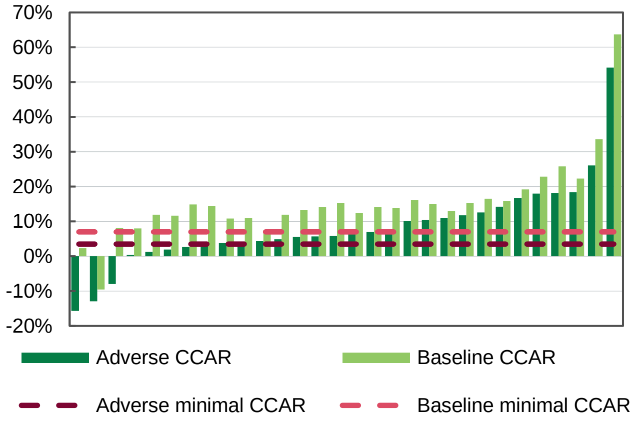
As usual, the stress tests included two scenarios – the baseline and adverse ones. The baseline scenario grounds on the NBU's macroeconomic forecast. The adverse scenario assumes the onset of stress conditions under which the main financial risks – credit and market and in particular interest rate risks – materialize. For the first time, the stress tests assessed potential losses that the banks could suffer from a fall in the value of government securities. Based on the experience of the crisis in 2020, the NBU slightly alleviated adverse scenario assumptions. Among other things, the fall in GDP, the decline in the output of key economic sectors and the weakening of the hryvnia were more moderate compared to previous stress tests. The 2021 stress tests also factored in planned regulatory changes.

For the most part, the banks are prepared for a crisis

The baseline scenario is mostly favorable for the banks – the adequacy ratio of their core capital rises on average by 4.8 pp over three years. This effect resulted from the assumption that the banks reinvest all of their profits and that their portfolio remains unchanged – the assumption that their balance sheets remain static. However, higher required capital adequacy ratios were set for nine banks even under the baseline scenario. As of 1 January 2021, the equivalent of their capital needs totaled about UAH 5 billion. This was almost eight times less than in 2019.

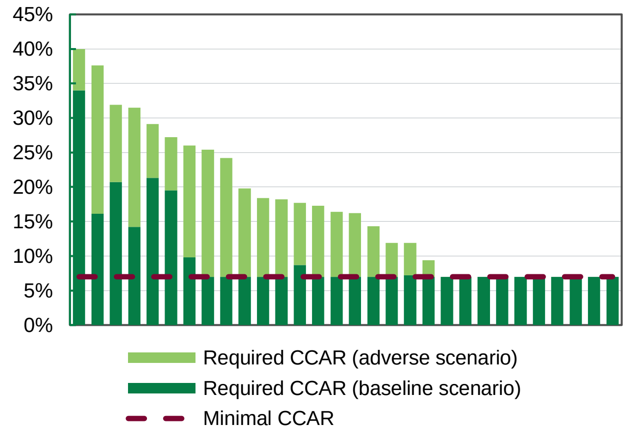
Under the baseline scenario, the continued deduction of the value of noncore assets from the banks' capital is a threat to

Figure 3.2.3. Core capital adequacy ratios in the first year that stress tests were carried out (bank-by-bank breakdown)



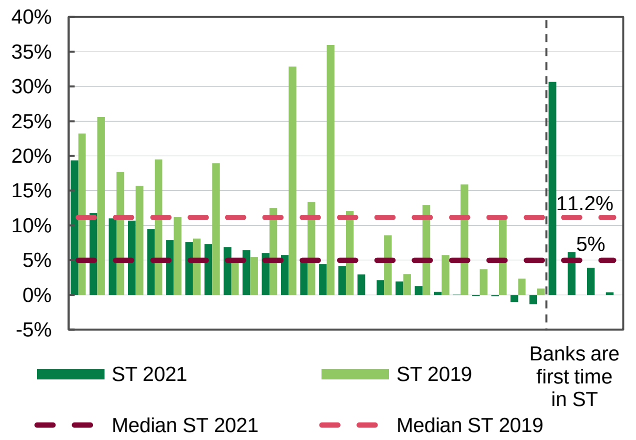
Source: NBU.

Figure 3.2.4. Required core capital adequacy ratios according to the stress test findings (bank-by-bank breakdown)



Source: NBU.

Figure 3.2.5. Increase in credit risk from large borrowers under the adverse scenario (bank-by-bank breakdown)



Source: NBU.

their solvency. In 2021, the banks made some progress in selling noncore assets. However, some banks still hold excessive amounts of such assets.

Under the adverse scenario, the adequacy ratio of the banks' core capital drops by 6.8 pp over three years. Based on the results of this scenario, the NBU set capital requirements in excess of the minimum capital adequacy ratio for two thirds of the banks. As of 1 January 2021, the equivalent of the capital needs of these banks totaled UAH 41.7 billion, which was two times lower compared to the 2019 stress test results. The banks that would require additional capital under the adverse scenario account for 41% of the sector's assets. 64% of these banks in terms of assets are state-owned banks

The banks are in control of their credit risk

The possible materialization of credit risk was the greatest fear of the banks and the NBU at the onset of the coronavirus crisis. These apprehensions were reflected in the assumed migration of loans to NPLs under the adverse scenario: 14% to 20% of the portfolio, depending on the segment. Overall, the materialization of credit risk under the adverse scenario would have decreased the banks' core capital by 2.2 pp compared to the baseline scenario. This is two times less than was estimated in the 2019 stress tests.

For the most part, the quality of the loan portfolios of the largest borrowers also raises no concerns. Proper provisioning and conservative lending standards have reduced credit risk. The exceptions are a few banks that continue to lend to nontransparent low-performing businesses despite negative results from previous stress tests.

Interest rate risk is the banking system's weakness

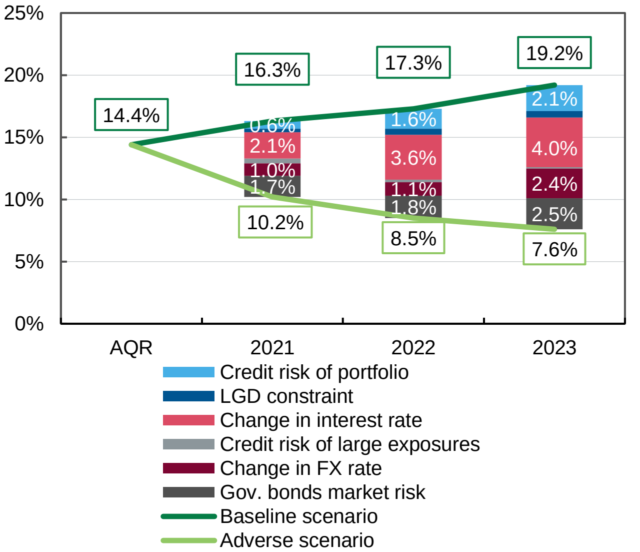
In the stress tests, interest rate risk arises from a narrowing in the spread between loan and deposit rates. To assess this risk, the stress tests assume that interest rates on deposits will rise, while those on loans will remain unchanged. Interest rates on shorter-term deposits increase more quickly. The materialization of interest rate risk would have decreased the banks' core capital by 4 pp under the adverse scenario compared to the baseline scenario. This means that interest rate risk is the main source of losses for the banks in the 2021 stress tests. It was further fueled by the banks' substantial portion of short-term funding. This risk could be reduced by longer deposit terms and lending at floating rates.

Another risk is the banks' low operational efficiency. Narrower interest margins under the adverse scenario could result in some banks not having enough income to cover their operating expenses. Those banks that in the base year had cost-to-income ratios (CIRs) of 61% or lower passed the stress tests successfully. Therefore, improving their operational efficiency is the banks' top priority, especially given the current narrowing in interest margins.

The volatility of government securities' value is the source of risk too

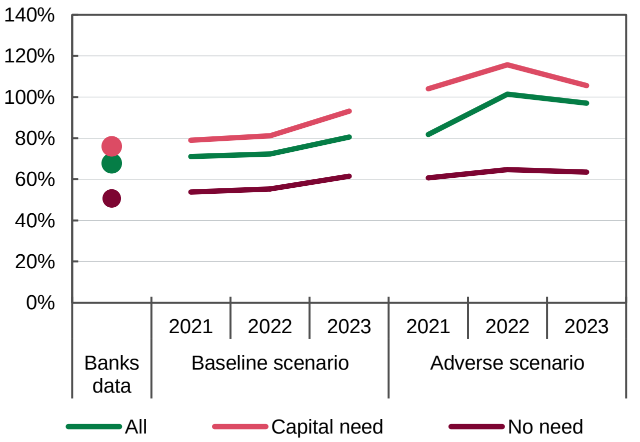
The adverse scenario assumed an increase in the expected yields of hryvnia government securities. In fact, risk premiums

Figure 3.2.6. Factors responsible for a change in a bank's core capital under the adverse scenario compared to the baseline scenario



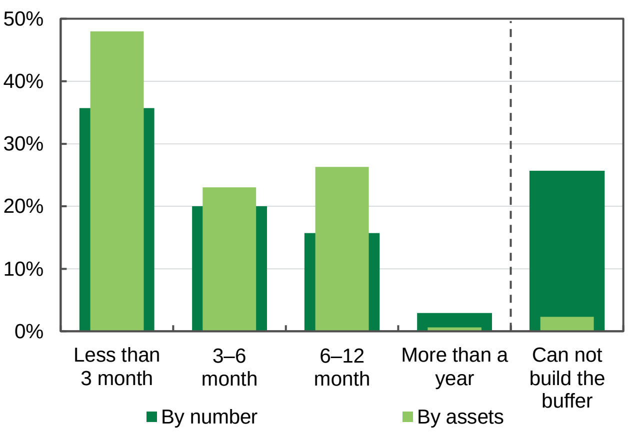
Source: NBU.

Figure 3.2.7. Changes in the banks' core-to-income ratios (CIRs) in the tress tests



Source: NBU.

Figure 3.2.8. Breakdown of banks by the time they need to build their capital conservation buffers



Source: NBU estimates.

rise during a crisis. Higher expected yields lead to the lower value of securities. The scenario also assumed an increase in the credit risk arising from FX domestic government debt securities. The negative effect of the risk from investing in government securities was estimated at 2.5 pp of core capital adequacy. Although the banks should factor in this risk when planning their capital, this year they were not required to cover this risk with capital.

Stress test findings: the banks are in a position to meet the new capital requirements

The 2021 stress tests confirmed that the banking system is healthy despite having come through a crisis. Most banks that took into account the findings of previous stress tests had no capital needs. Those banks that were found to require additional capital are implementing restructuring programs. Thanks to them, a number of identified risks have been mitigated already in 2021. This means that the banking system is ready for the introduction of further capital requirements, according to the approved schedule. Among other things, from 1 January 2022, the NBU will increase the risk weights for unsecured consumer loans and FX domestic government debt securities, while also requiring the banks to cover 50% of their operational risk with capital. The overall effect of the planned changes on the adequacy of the banks' core capital will total 2.5 pp. The banks have enough capital to meet the above requirements.

The banks are ready for the activation of capital buffers

Basel recommendations set forth that banks should hold two capital buffers at all times. These are the 2.5% capital conservation buffer and the systemic importance buffer of up to 2%. The NBU postponed the introduction of these buffers in early 2020 due to the unfolding crisis. Now that the crisis is over it is time for the requirements to be reintroduced. Despite a number of planned regulatory changes, almost all banks have sufficient capital to build the buffers, taking into account the profits they made in 2021.

Of course, capital requirements should not dampen the banks' lending activity. That is why the NBU calculated how much time the banks need to set aside enough capital to build their capital buffers while also expanding their loan portfolios by no less than 15% every year, given the current return on assets of 3.7%. Most banks, which account for 98% of the sector's assets, will not require more than one year to build their capital buffers in full. Only some small banks will be unable to build the buffers themselves due to incurring losses.

Therefore, given the banks' record-high profits, now is a good time to introduce the capital buffer requirements. These requirements will not put any undue pressure on the banks, while at the same time boosting their resilience. The buffer requirements will be introduced gradually – from 1 January 2023, the banks will be required to hold 50% of the capital conservation buffer and 100% of the systemic importance buffer. By 1 January 2024, the banks will be required to build their buffers in full.

Box 3. Amendments to the Law *On Banks and Banking*

In June 2021, the Verkhovna Rada passed amendments to banking laws, the most important being those to the Law of Ukraine *On Banks and Banking*. They bring Ukrainian banking legislation into close approximation with that of the EU, and implement global best practices in banking sector regulation. The NBU is currently developing regulations to implement these legislative changes. This will be done gradually over the next three years.

The amendments to banking legislation primarily affect the requirements for capital, liquidity, and corporate governance.

One of the legislative novelties is the introduction of a three-tier capital structure. Regulatory capital will be divided into Tier 1 core capital, Tier 1 additional capital, and Tier 2 capital, depending on the quality and ability to absorb losses. Tier 1 core capital will include only those components that can easily absorb the losses of financial institutions, so that they can continue to be a going concern. A financial institution will be able to use the components of Tier 2 capital to absorb losses in the case of it becoming a gone concern. Accordingly, there will also be three capital adequacy ratios: Tier 1 core capital, Tier 1 capital, and Regulatory capital. The new capital structure provides for the revision of deductions from capital. Capital at each level will be adjusted by the size of items that cannot absorb losses and do not make the bank more financially resilient. The new capital structure will be introduced in mid-2024. Relevant amendments to the regulations have already been provided to banks for review.

The concept of a combined capital buffer – the total amount of capital buffers set for a bank – is now part of the legal framework. Before that, regulations provided for the capital conservation buffer, the systemic importance buffer, and the countercyclical capital buffer. A recent addition now in effect is the systemic risk buffer. Banks should normally retain capital conservation and systemic importance buffers. These were set to zero after the COVID-19 crisis erupted. Current banking sector conditions are conducive to the rapid formation of these capital buffers. The relevant decision will be made in early 2022. The NBU anticipates that it should take banks no more than two years to meet the capital buffer requirements in full. Financial institutions will be required to hold countercyclical capital buffers and systemic risk buffers if cyclical or structural systemic risks intensify.

Another novelty will be the leverage ratio requirement. This ratio is calculated as Tier 1 capital relative to a bank's total assets and off-balance-sheet liabilities. Unlike capital adequacy ratios, the leverage ratio does not involve risk weighting of assets. As such, it will measure the capital adequacy involving those assets for which there are currently no requirements to hold capital to cover credit and market risks. These assets include hryvnia domestic government debt securities held to maturity.

One more novelty that comes with the legislative overhaul is empowering the regulator to set tighter capital and liquidity requirements for individual banks. Increased ratios will be set during the SREP, and will take into account the assessment of the bank's business model, operational risks, corporate governance quality, and internal control system.

Over time, the findings of the process internal adequacy assessment of capital (ICAAP, see Box 2 of the Financial Stability Report, June 2021) and the liquidity (ILAAP) will become the basis for the SREP. On top of the minimum requirements, banks will have to decide how much capital and liquidity they need to cover all significant risks inherent in their activities, and comply with regulatory requirements over a certain time horizon. A full implementation of the ICAAP and the ILAAP in bank's risk management systems will take place in mid-2024 and mid-2025, respectively. Until then, banks will be running these processes in test mode.

The performance of a risk management system goes hand in hand with the quality of corporate governance. New legislation has strengthened corporate governance in banks. The accountability of supervisory boards and boards of directors for decisions made has been increased, and requirements for their collective suitability have been established. The following now falls within the exclusive mandate of a bank's supervisory board: assessing the board of directors' activities, formulating the bank's remuneration policy, and approving and monitoring compliance with the code of conduct and policies to prevent, identify, and manage conflicts of interest at the bank. Supervisory boards of systemically important banks are required to establish three standing committees chaired by independent directors: an audit committee, a risk management committee, and a remuneration committee.

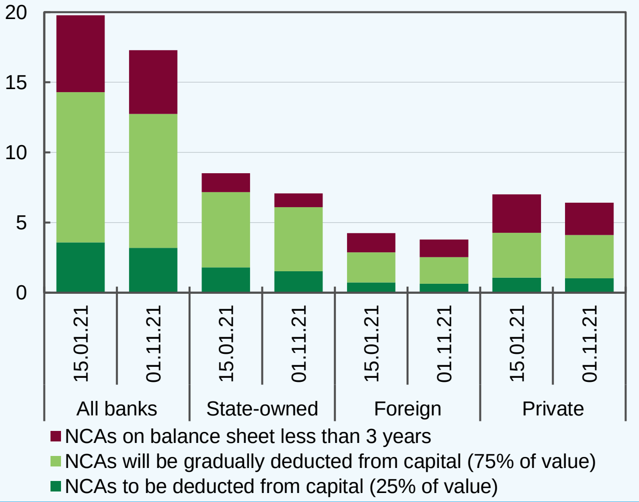
The law has also expanded the list of restrictions and supervisory actions against banks. For instance, financial institutions are restricted in their ability to pay dividends and distribute profits if such actions may lead to noncompliance with capital adequacy ratios. The regulator has the right to: require that a bank, its managers, and qualifying holders take measures to improve the bank's financial standing; and review the bank's remuneration policies. Legislation also empowers the regulator to mandate changes in the composition of the supervisory board or the board of directors if they are unable to ensure effective management and control over the bank's activities. The central bank can also request that a bank's chief risk officer, chief compliance officer, and head of internal audit be replaced if they are in breach of regulatory requirements for professional suitability or business reputation.

Box 4. The banks should speed up sales of their noncore assets

It has been almost a year since the phased procedure for deducting the value of noncore assets from the banks' core capital began. From 1 January 2022, the share of the value of noncore assets to be deducted from capital will be doubled, to 50%. This requirement mainly aims to encourage the banks to clear their balance sheets of nonliquid assets, which are mostly nonprofitable, and the value of which is often overestimated. In spite of that, financial institutions were slow to sell their noncore assets in 2021. The banks should speed up these sales to increase their return on assets and lower their risks.

The requirement that the banks deduct the value of noncore assets (NCAs) from their core capital came into effect in January 2021. Its aim was to encourage the banks to get rid of their noncore assets (read more in Box 4 of the December 2020 Financial Stability Report). A year ago, the banks had NCAs worth over UAH 22 billion on their balance sheets. In anticipation of such changes, the banks decreased those assets by UAH 2.4 billion over the two last months of 2020 alone. However, after that the pace of cleaning up bank balance sheets slowed noticeably. Since the beginning of 2021, total NCAs have shrunk by only UAH 2.5 billion. As of late October 2021, total NCAs stood at UAH 17.3 billion.

Figure B.4.1. Value of noncore assets (NCAs) by groups of banks, UAH billions

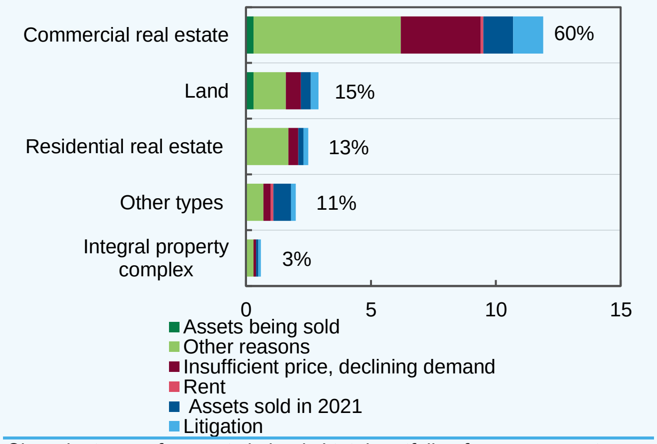


Source: NBU.

More active sales of NCAs are mainly hampered by their low liquidity and sometimes overestimated value. At the beginning of 2021, when conducting its annual resilience assessment, the NBU surveyed the banks' treatment of their NCAs. The survey revealed that the banks could not sell 23.4% of the assets because their declared value or profile were unattractive to investors. If the banks cannot sell their property at its declared value, they should correct it. This means that the banks will have to recognize additional losses. Sometimes, the banks reported a decline in demand for real estate on the back of the COVID-19 pandemic. In actual fact, most of the property was acquired long before the pandemic broke out, but still has not been sold. Moreover, commercial property prices have already recovered from last year's crisis.

Only assets worth about 10% of the total assets cannot be sold immediately, due to their being involved in legal proceedings, a ban having been imposed on their sale, or a bank losing control over the asset. Another 1.2% of NCAs have not been sold as they are being rented out or leased by the banks to compensate for their loss of income, in anticipation of stronger demand for commercial real estate. The actual share of assets that are being sold or were sold in 2021 stands at 16.8%.

Figure B.4.2. Noncore assets by property types and reasons for being held on bank balance sheets as of 1 January 2021, UAH billions



Share by types of property in banks' total portfolio of noncore assets.
Source: NBU.

The banks have not provided good reasons for holding some real estate assets on their balance sheets. This means that another reason for holding these assets is the banks' lack of motivation to divest themselves of these NCAs. After all, a substantial portion of this property comes from the foreclosed collateral on NPLs that were issued to the banks' related parties. Selling this real estate to third parties will result in the related parties permanently losing their property rights. Often, the ultimate beneficiaries of banks are unwilling to lose their property rights, but have no money to redeem their property from the banks.

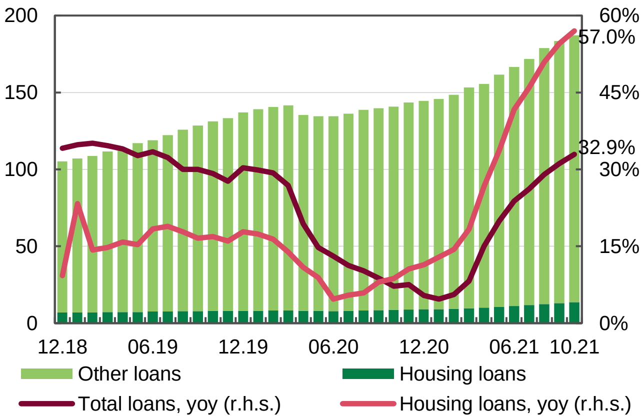
At the second stage, which will begin on 1 January 2022, the banks will be required to deduct another 25% of the value of their NCAs from their core capital. However, the impact of the deduction on the banks' capital adequacy ratio will be negligible, as the total value of NCAs accounts for only 0.9% of the banks' net assets. For most banks, the core capital adequacy ratio will drop by less than 0.1 pp. That said, the concentration of NCAs at some banks poses a threat. After all, two thirds of the total property is concentrated in seven banks. For some of these banks, these concentrations threaten their ability to meet the required ratios. The NCAs at four banks exceed their core capital.

The banks that are delaying sales of their NCAs are facing a number of problems. They have lower returns, as a result of which it is more difficult for them to generate capital, remain solvent, and ramp up lending. What is more, large concentrations of NCAs are eroding the banks' liquidity. Therefore, the banks' continued efforts to sell their NCAs are mostly important for the banks themselves.

3.3. Retail Lending Risk

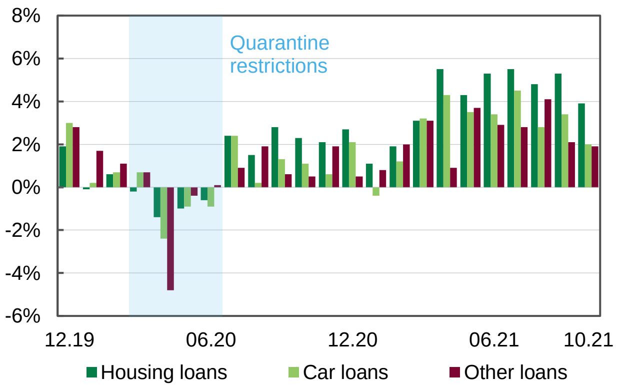
The growth in the retail loan portfolio exceeded its pre-crisis pace. Lending is driven by demand from households, and banks' pursuit of the segment's high profitability. However, the slowdown in consumer activity is set to restrain the increase in lending. The market remains segmented and concentrated, while competition erodes lending standards. Under favorable economic conditions, credit risks are offset by high returns. In adverse conditions, risks grow fast, and banks tend to underestimate these potential losses. Banks will become more resilient once the risk weights for unsecured consumer loans are raised to 150%, effective 1 January 2022.

Figure 3.3.1. Net hryvnia retail loans, UAH billions



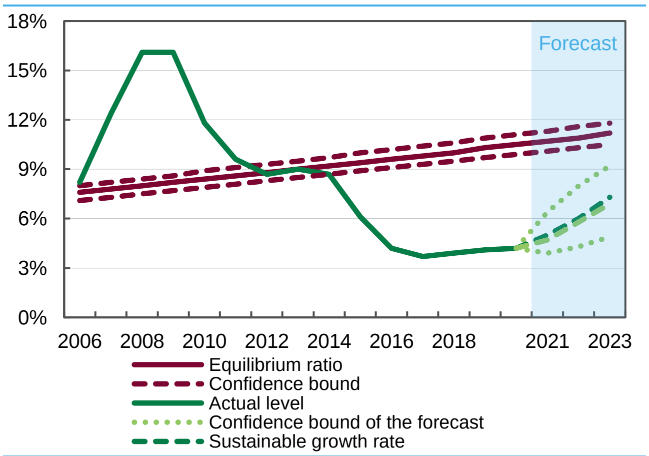
At banks that were solvent as of 1 November 2021.
Source: NBU.

Figure 3.3.2. Month-on-month change in net loans



Source: NBU.

Figure 3.3.3. Equilibrium level of consumer loans and changes in consumer loans/GDP ratio



Paper by Csajbok, A., Dadashova, P., Shykin, P., Vonnak, B. (2020). Consumer Lending in Ukraine: Estimation of the Equilibrium Level. Visnyk of the National Bank of Ukraine, 249, 4–12.
Source: NBU.

Growth in retail loan portfolio accelerates further

Banks resumed rapid rates of hryvnia retail lending, which had slowed during the crisis. The pace of this growth is currently 33% yoy. Mortgages are growing almost twice as fast. Unsecured consumer loans have been at the core of the retail loan portfolio in recent years. Slightly less than one-tenth of it is made up of car loans. Although mortgages have grown rapidly, their share is an even smaller 7%.

Lending is picking up thanks to strong demand for loans fueled by the rise in consumer spending. To some extent, the current high growth rate of the loan portfolio is due to the low base effect, as the growth was very low last year. In the midst of the crisis, banks scaled down lending and exercised more caution when taking on new borrowers. This year, however, financial institutions have already sought to expand their customer base. Over the course of the year, portfolio growth was primarily driven by the increase in the number of loans. At the same time, the average loan size was little changed, at about UAH 9,000.

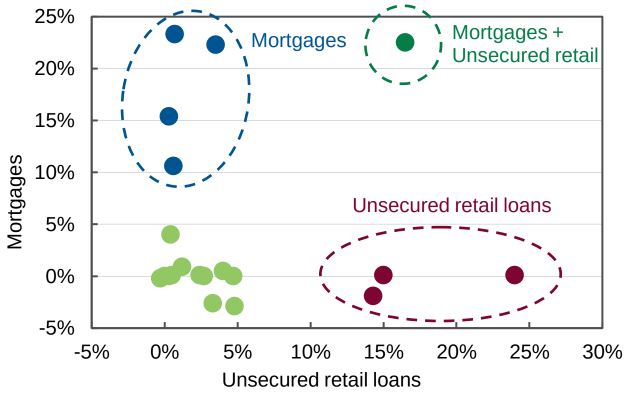
Banks are convinced that demand for retail loans will continue to grow, most rapidly for mortgages. Significant potential for further lending is confirmed by the still small loan-to-GDP ratio. However, the growth in the retail loan portfolio is approaching its equilibrium rate. The pace of increase in the loan portfolio will be reduced by decelerating growth in household incomes and consumer activity. In addition, the gradual saturation of the market is making it harder to attract new customers.

Retail lending market segmentation is intensifying

The high profitability of unsecured consumer lending is increasingly drawing the attention of banks. It is rather hard to compete in this segment. Almost two-thirds of the portfolio increase over the past year has come from four banks. They actively promoted their services by significantly improving lending terms, providing cashbacks, updating mobile apps, and launching large-scale advertising campaigns. Without making a significant investment, particularly in IT solutions, catching up with the segment's leaders is a formidable task. It would be impossible to compete for customers on the basis of interest rates alone. The interest rate elasticity of demand for unsecured loans is rather low. Monthly debt-servicing costs are moderate comparing to income despite high effective interest rates because the average loan is small (see the June 2021 Financial Stability Report, Box 3). The lending terms are therefore acceptable for most borrowers.

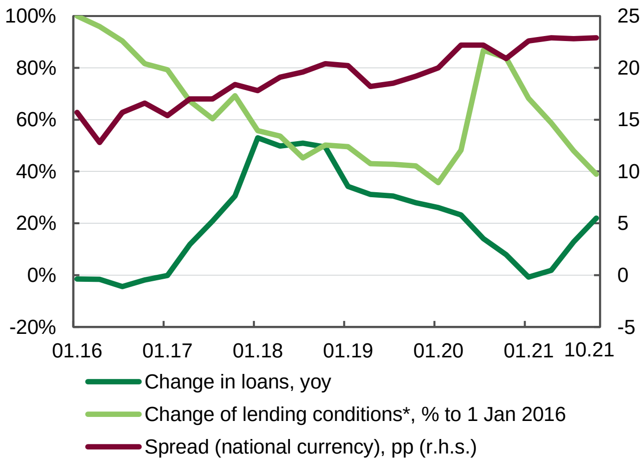
The dynamics of unsecured consumer lending attracts new investors to the market. Several multinational financial groups

Figure 3.3.4. Share of 20 largest banks in the growth of retail loan portfolio, by type of loans



Source: NBU.

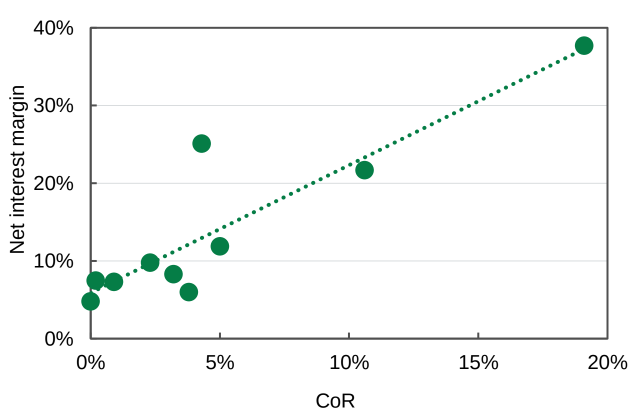
Figure 3.3.5. Lending standards and consumer lending growth



* The line reflects the cumulative change in the balances of responses to the quarterly lending survey question about how the criteria for approving household loan applications have changed during the current quarter.

Source: NBU.

Figure 3.3.6. Net Interest Margin and CoR of ten banks with retail loans making up more than 30% of portfolio



Source: NBU.

have taken interest in entering the Ukrainian market to tap this segment.

Lending for house purchases is no less concentrated. Several banks that were the first to expand in this segment are currently leading the way here. This is in part due to their active participation in the Affordable Mortgage program. The program attracts potential customers by offering low rates and thus expands banks' customer base. Overall, the program's role in mortgage recovery is not yet decisive, as only 14% of loans are provided under the program. The main reason for its limited effect is the rather conservative mortgaged property requirements, which have been eased only recently. Banks are generally interested in developing mortgage lending, as this portfolio can generate sustainable income in the long run. However, many of them are concerned about the high risks and low levels of creditor rights protection.

After all, car loans are the most concentrated segment. About 90% of car loans are issued by the top five creditors. It takes connections with car dealerships to operate in this segment. By combining retail car loans with lending to dealerships themselves, banks use dealerships as channels for selling loans and diversifying the loan portfolio. Mostly state-owned banks hold leading position in new lending across several types of loans at once.

Consumer lending profitability offsets higher risks

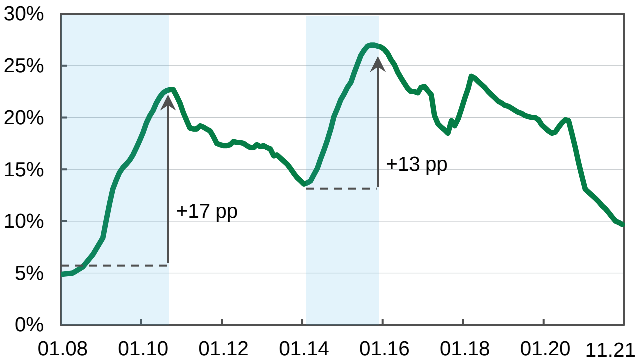
The current return on the portfolio more than makes up for the credit risk. The overall decline in market interest rates on loans has affected the rates on mortgages and car loans. At the same time, interest rates on unsecured consumer loans have remained high. These rates are virtually uncorrelated with changes in inflation or the key policy rate. The spread between interest rates on unsecured loans and the cost of funding is at an all-time high.

Banks are gradually lowering lending standards to expand the range of potential borrowers. This is prompted by tighter competition, especially in the unsecured loans segment, both between leaders and among new players. The weakening of lending standards inevitably leads to overlending. Under favorable macroeconomic conditions, when nominal wages are growing at double digits, this risk is sometimes difficult to identify. Banks take moderate losses from the nonrepayment of loans during periods of rapid growth in household incomes. However, the consequences of overlending rapidly manifest themselves when incomes fall and unemployment surges. The share of loans that cease to be serviced can reach 15%. This did not happen during the coronavirus crisis due to the rapid recovery of household incomes. However, banks need to be prepared for much worse scenarios when setting aside capital for unsecured consumer loans.

Credit risk assessments vary across banks

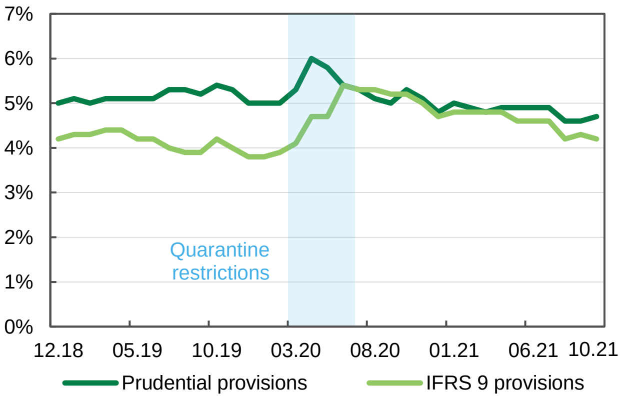
In general, banks have improved their loan portfolio quality assessments since the beginning of the year. The coverage ratio for performing unsecured loans is gradually declining, although it has yet to reach pre-crisis levels. However, these

Figure 3.3.7. Share of hryvnia retail NPLs



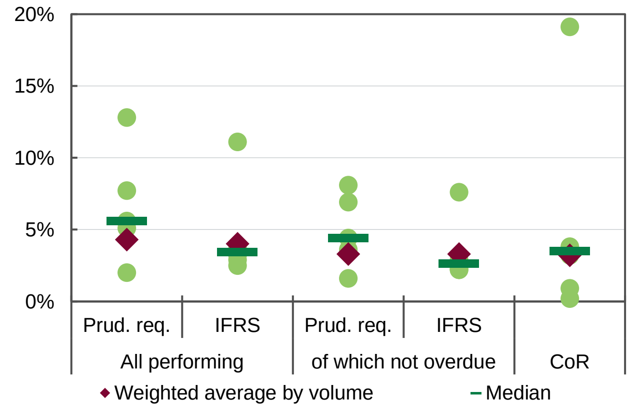
At banks that were solvent as of 1 November 2021.
Source: NBU.

Figure 3.3.8. Credit risk of the performing hryvnia retail loan portfolio



Source: NBU.

Figure 3.3.9. Credit risk of the performing hryvnia retail loan portfolio, by bank



Ten banks with retail loans making up over 30% of portfolio
Source: NBU.

estimates differ significantly from bank to bank. The cost-of-risk (CoR) ratio of banks that do most of consumer lending varies even more. The heterogeneity of estimates for relatively standardized products is a concern. Going forward, the NBU will focus on these differences.

Increased risk weights on unsecured consumer loans will make banks resilient

Effective 1 January, risk weights for unsecured consumer loans will be raised to 150%. Banks, especially those active in the segment, are ready for this change. They accumulated profits and raised additional capital in advance to expand the portfolio further. Increased risk weights are therefore unlikely to significantly slow the pace of lending in the near future. However, the NBU estimates that this change will:

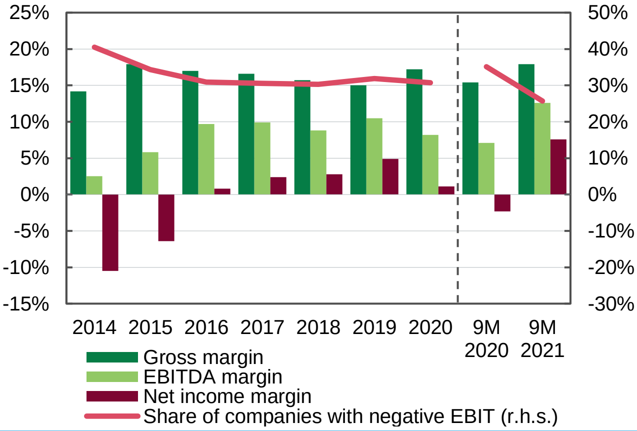
- prompt banks to set aside capital to cover potential unexpected losses in case the quality of unsecured consumer loans deteriorates. The risk of bank failures during crisis episodes will thus be significantly mitigated.
- incentivize banks to optimize their return on equity, make more prudent lending decisions, and analyze the solvency of borrowers more diligently. This will keep the loan application approval standards in this segment from easing further.

But higher risk weights will not eliminate the need to properly assess the risks associated with the segment. The NBU will therefore continue to pay close attention to this portfolio and apply additional prudential risk control instruments as required.

3.4. The Real Sector and the Quality of the Corporate Loan Portfolio

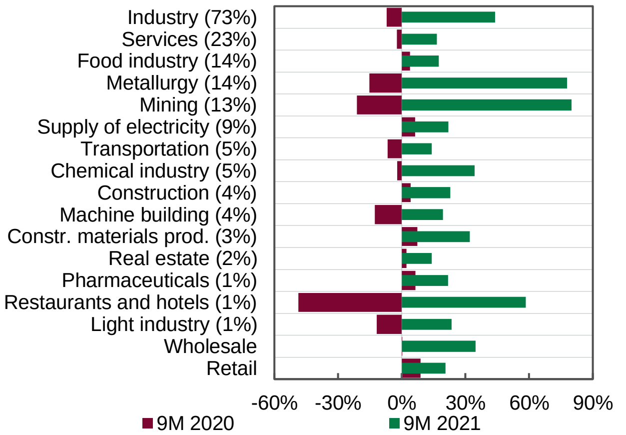
The revenues of real sector companies are rising, albeit unevenly and mainly on account of higher prices. Meanwhile, physical production volumes are increasing extremely slowly. Some sectors are operating at the top of their production capacity, therefore it will be difficult for them to achieve further growth without ramping up investment. High energy prices and global logistical challenges pose major risks to real sector profitability. Demand for corporate loans has risen noticeably, while the growth rate in net hryvnia loans is the highest since 2013. The demand for these loans is largely driven by lower loan rates and the need for working capital. Lending to small and medium businesses is increasing most rapidly. The quality of the corporate loan portfolio is improving – the banks are lending to reliable borrowers, while the NPL ratio is declining.

Figure 3.4.1. Real sector profitability and share of companies with operating losses



Source: SSSU, NBU estimates.

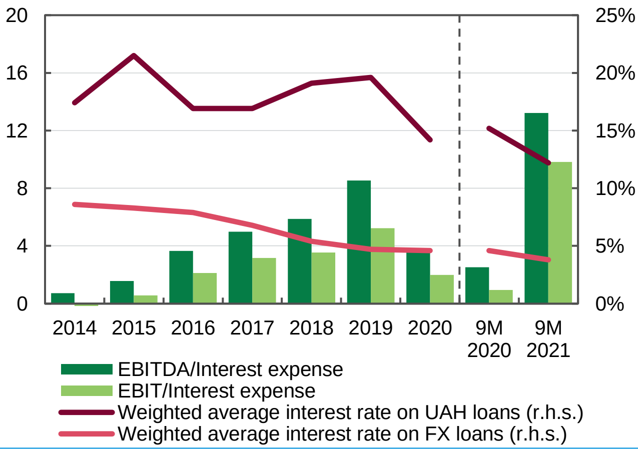
Figure 3.4.2. Sales of goods and services in key industries, yoy



The brackets indicate the shares in the sales of industrial products, services and construction products for the first nine months of 2021.

Source: SSSU, NBU estimates.

Figure 3.4.3. Non-financial corporations' interest coverage by operating profit and EBITDA



Source: SSSU, NBU, NBU estimates.

The revenues of companies are rising, albeit unevenly. Production volumes are rebounding slowly

The Ukrainian economy is gradually recovering from the pandemic. Companies' revenues grew by 39% in the three quarters of 2021 compared to the same period last year. Operating profits surged almost fivefold over that same period. The EBIT deteriorated only in the food industry and construction. The rest of industries during this period saw a notable increase in operating income.The sales of industrial goods were up by 44% yoy, exceeding pre-crisis levels. The growth was mainly fueled by high prices.

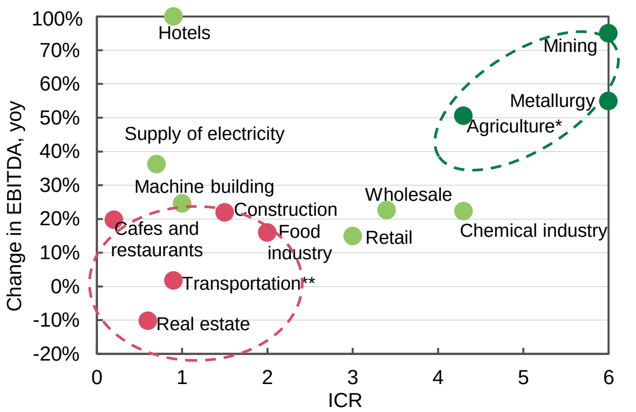
In real terms, the recovery occurred much more slowly. The Index of Key Sectors Output, which is calculated by the NBU, rose by only 3.2% over the first ten months of 2021. The growth was mainly driven by the bumper harvest in the agricultural sector. The output of the industrial sector increased by only 1.4% yoy, failing to offset last year's downturn. At the same time, the overall easing of quarantine restrictions, the adaptation of businesses to these restrictions and robust domestic consumer demand contributed to the rapid recovery of the sectors that were most affected by the coronavirus crisis. In particular, there was a rebound in the trade and services sectors, the hotel and catering businesses, and transportation. Meanwhile, freight turnover, light industry and the food industry revived at the slowest pace.

The financial performance of Ukraine's key exporting industries improved most of all, due, among other things, to reviving global demand and higher prices for their products. This year, prices for agricultural products grew on the back of the bumper grain harvest resulting from gains in crop productivity. This enabled agricultural producers to comfortably cover their higher spending on mineral fertilizers, fuel, and seeds. Record-high prices for metallurgy products encouraged companies to step up production. A drop in ferrous metal exports to China was offset by larger exports to other Asian and European countries. Favorable prices and sustained demand made it possible for companies to utilize their production capacity almost in full.

Companies have become more solvent

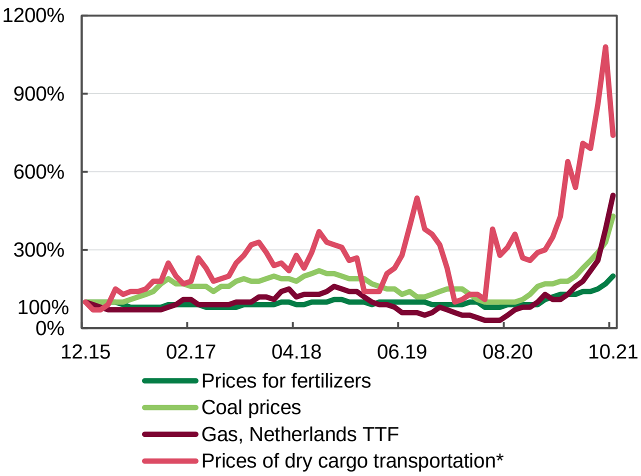
Large operating returns and lower interest rates on loans reduced the debt burden of businesses. For the first three quarters of 2021, the ratio of EBITDA to interest expenses hit a record-high of 13.2, increasing more than fourfold compared to 2020, or by six times compared to the first three quarters of 2020. Among other things, the increase resulted from the record-high revenues of export-oriented industries (the mining and metallurgy) and the recovery of the industries

Figure 3.4.4. Interest expense coverage (ICR) by operating income and change in EBITDA by industry for the 12 months ending September 2021



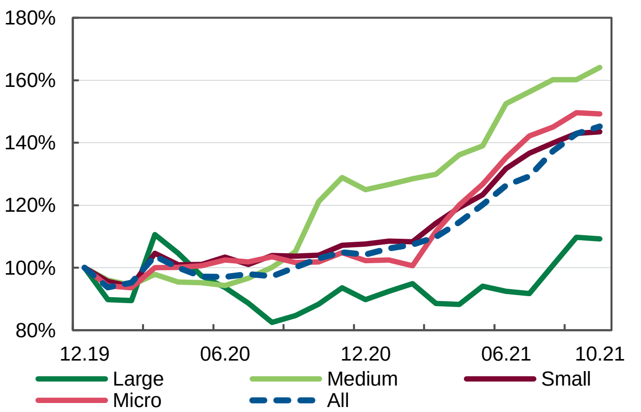
* Data for 2019 and 2020 were used.
** Excluding pipeline transportation.
Source: SSSU, NBU estimates.

Figure 3.4.5. Change in prices for energy, fertilizers, and the cost of dry sea freight, 12.2015 = 100%



* Baltic Dry Index.
Source: IMF, Bloomberg, NBU estimates.

Figure 3.4.6. Net corporate loans in UAH by size of enterprise, 12.2019 = 100%



Source: NBU.

that were affected by the crisis (the hotel industry). The estimates of the solvency of the construction and real estate sectors and the food industry are much more pessimistic, while their operating income grew slowly year-on-year.

The energy crisis will negatively affect the key economic sectors

Current high gas prices are expected to affect the performance of the most energy-intensive industries. The effect will be felt most strongly in H1 2022 – the overall negative impact of the energy crisis on GDP is estimated at 0.4 pp (read more in the October 2021 Inflation Report). Higher gas prices will adversely impact the chemical industry, in particular the production of mineral fertilizers, as gas prices account for 70% of their production costs. This will push up prices for agricultural products. Energy prices also account for more than half of the cost of sugar production and will be reflected in the cost of drying grain. The manufacturers of construction materials will see a significant negative impact from higher prices. High energy prices are also a challenge for the metallurgy, in which fuel and energy prices, taking into account the price of coking coal, account for about a third of production costs.

The production potential of export-oriented industries is reaching its maximum

The production potential of many industries is rather limited. After slightly upgrading their production facilities, metals producers are utilizing their production capacity almost in full. Without further investment, it will be increasingly difficult for producers to compete on the domestic and international markets. In recent years, agricultural producers have brought yields close to historic highs. An expected fall in prices for Ukraine's main exports, such as iron ore, corn, vegetable oil and steel, will negatively affect future earnings. This, coupled with higher production costs, will decrease companies' margins through the transmission of fuel prices.

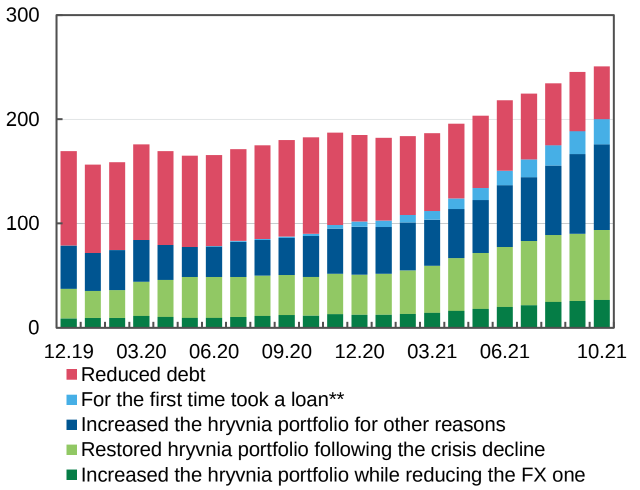
The global shipping crisis is making things more difficult. A shortage of ships and containers along with congestion in ports are increasing inter-sectoral competition for dry bulk freight services between the energy sector, the metallurgy, and agricultural and iron ore producers, as well as competition between exporting countries. Under such conditions, it is more likely that high shipping costs will persist, pushing production costs up further and possibly limiting sales channels for Ukrainian producers.

Corporate lending is expanding at a record pace

This year's higher production output and sales led to a pick-up in lending. After several years of sluggish lending, hryvnia lending to businesses sped up dramatically in 2021. By late October, net hryvnia loans had increased by over 40% yoy. This is a record high not seen since 2013. A significant part of the loans went to replenish companies' working capital. Companies still have no plans to take out loans for large-scale investment projects.

Falling interest rates boosted demand for loans. Banks indicated that in the latest lending survey. Interest rates on hryvnia corporate loans dropped on average by 6 pp in

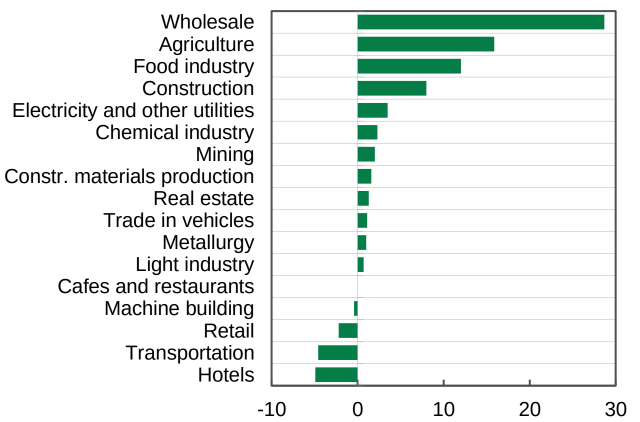
Figure 3.4.7. **Net loans in UAH to medium, small and micro enterprises by groups of borrowers*, UAH billions**



Loans with outstanding amount of over UAH 2 million in solvent banks as of 1 November 2021.
* For the purposes of this calculation, loans without an indication of the size of the enterprise were classified as large if they are joint stock companies and to SMEs if they have a different legal form.
** From 1 March, 2020.

Source: NBU.

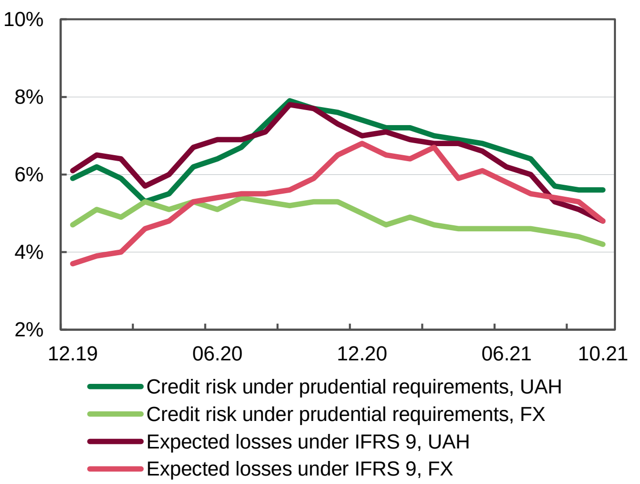
Figure 3.4.8. **Change in performing corporate loan portfolio* by industries for the year, UAH billions**



* Loans with outstanding amount of more than UAH 2 mln. In solvent banks as of 1 November 2021.

Source: NBU, NBU estimates.

Figure 3.4.9. **Provision coverage of corporate performing loans**



Source: NBU, NBU estimates.

October compared to late 2019. A decline in the interest rate differential between hryvnia and FX loans also encouraged some borrowers with FX loans to shift to hryvnia loans. As a result, there was practically no growth in FX lending.

Four sectors – the wholesale trade, agriculture, the food industry, and construction – were mainly driving the growth in the loan portfolio. In the construction sector, lending was mainly driven by public large-scale construction, as loans were mostly issued for road construction. The banks lent to profit-making companies with acceptable debt metrics. In spite of that, they required borrowers to provide collateral on average for over 60% of their debts.

Loans to micro, small, and medium enterprises (MSMEs) grew at the fastest pace. The banks find MSMEs attractive for lending because they have significantly smaller debt burdens compared to large businesses, and because while lending to MSMEs the banks can diversify their portfolios by sectors and regions. The Affordable Loans 5%–7%–9% program is an additional albeit not decisive factor in stimulating lending in the segment. About one fourth of all new net hryvnia loans were issued as part of the program.

The share of loans to state-owned companies is declining in the loan portfolio

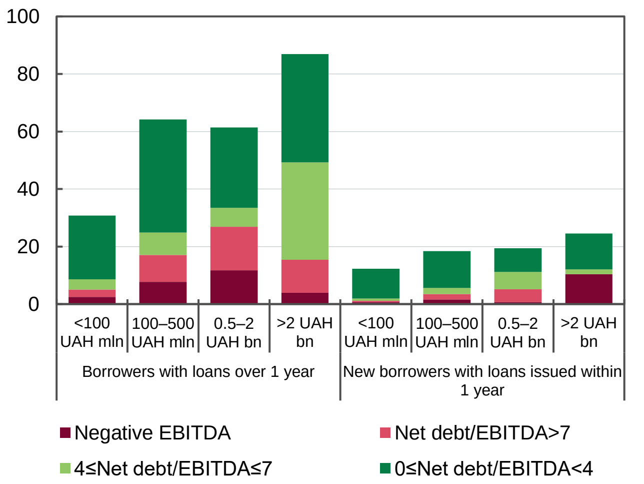
The debts of state-owned companies to the banks remain stable, at UAH 63 billion. The share of these loans dropped to 12% because of the overall increase in the corporate portfolio. In Q3, six Ukrainian banks injected additional financing into road construction by issuing a syndicated loan of UAH 13.7 billion to Ukravtodor. The loan was publicly guaranteed, while most of the banks that issued the loan were state-owned banks.

Although the largest borrowers among state-owned companies improved their financial performance in 2021, Ukrainian Railways and Naftogaz continued to post losses. The key tasks of Ukrenergo and Energoatom are to fulfill the special responsibilities assigned to electricity producers and to compensate their economically justified costs (read more in the Box 2. How Energy Crisis Affected Banks). Given their operating losses and lack of funds, the companies had to raise additional financing through borrowing.

The quality of the loan portfolio raises no concerns

The banks are optimistic about the quality of their loan portfolios, thus they reduced the parameters of their expected loan losses. This is reflected in a drop in the IFRS9-required provision coverage ratio for performing loans by 2–3 pp compared to the peak figures seen during the crisis. The 2021 asset quality review confirmed that most banks provide correct information about their credit risks. The review focused on the loans that were restructured during the crisis. During the crisis, the NBU allowed the banks not to recognize such loans as defaulted ones if the restructuring was caused by quarantine restrictions and the loans had lost no more than 10% of their value. In May 2021, the NBU rolled back these easing measures. At present, restructured loans account for less than 5% of total performing loans, and the banks provide correct information about their quality. Thus, the risk of the

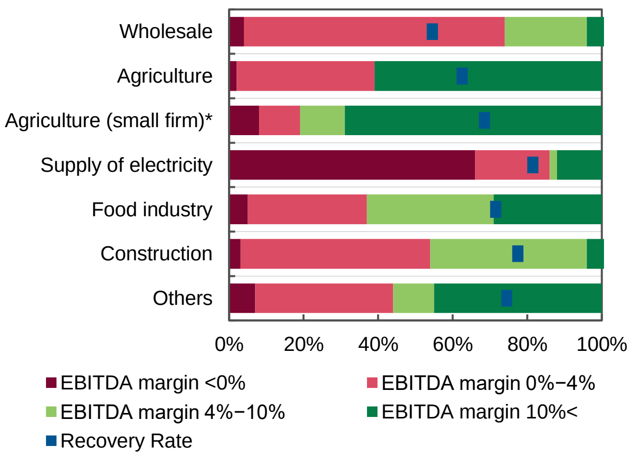
Figure 3.4.10. Breakdown of corporate borrowers* by debt burden and performing loan amount, UAH billions



* In solvent banks as of 1 November 2021. Loans to large and medium-sized enterprises with outstanding amount of over UAH 2 million.

Source: NBU, NBU estimates, data.gov.ua.

Figure 3.4.11. Profile of corporate borrowers with loans issued during the year



Loans with outstanding amount of over UAH 2 million in solvent banks as of 1 November 2021.
* EBT margin is calculated for small businesses of agriculture.

Source: NBU, NBU estimates, data.gov.ua.

deferred recognition of defaults on these loans is now immaterial.

The NPL ratio continues to decline. On the one hand, new loans are improving the quality of the portfolio. The default rate of new borrowers has been falling for several years in a row on the back of high lending standards. On the other hand, the NPL ratio is decreasing due to state-owned banks' active efforts to write off such loans. In late November, the NPL ratio for corporate loans stood at 40%.

Table 2. Corporate loan portfolios as of 1 November 2021

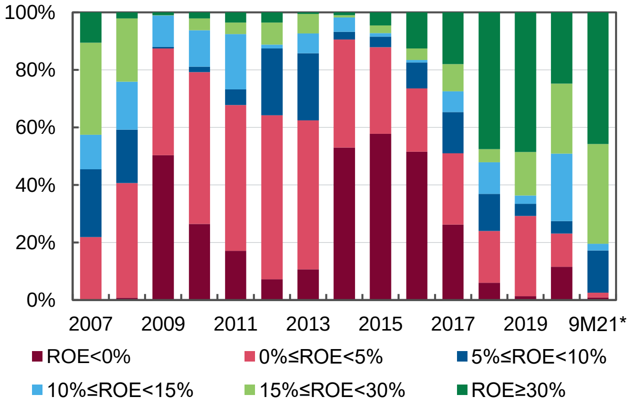
No	Sector	Performing loans*		Change of performing loans for 12 months		NPL ratio*, %	Change of NPL ratio, bp	Migration to NPL in 12 months*	
		UAH billions	number of borrowers	by loan amount, %	by quantity, %			by loan amount, %	by quantity, %
1	Agriculture	72	4 542	29	31	6	-5	0.8	2.5
2	Mining	10	62	25	22	29	-9	0.1	3.5
3	Food industry	51	845	31	29	26	-21	4.2	2.1
4	Light industry	2	89	48	33	5	-2	0.6	5.5
5	Chemical industry	9	349	36	34	33	-44	0.9	1.2
6	Constr. materials production	5	160	56	98	2	-35	0.6	3.9
7	Metallurgy	10	254	11	44	47	-10	0.3	2.2
8	Machine building	11	305	-3	34	71	-2	17.3	4.0
9	Electricity and other utilities	62	480	6	18	12	-4	2.1	3.0
10	Construction	16	555	103	75	45	-20	0.9	4.2
11	Trade in vehicles	5	317	30	44	19	-6	0.6	2.0
12	Wholesale	126	3 500	29	45	10	-9	1.8	2.5
13	Retail	18	347	-11	31	23	13	19.9	3.4
14	Transportation	19	515	-19	38	25	2	5.7	3.7
15	Hotels**	1.2	17	-81	21	82	77	84.7	16.0
16	Cafes and restaurants	0.3	16	8	-20	21	-11	0.0	9.3
17	Real estate	33	321	4	15	51	-3	10.8	3.6
18	Other	30	881	62	55	27	-12	1.6	3.9
	Total	**480**	**13 555**	**19**	**37**	**26**	**-10**	**5.3**	**2.9**

In solvent banks as as of 1 November 2021.
* Loans with outstanding amount of over UAH 2 million. The calculation of the NPL ratio does not include loans issued by PrivatBank to companies that belong to the bank's former shareholders' related or affiliated parties (factoring in such loans pushes the total NPL ratio up to 40%).
** The NPL ratio in the hotel industry increased mainly on account of one borrower that accounts for 90% of the total loans to the industry.

3.5. Profitability Risk

The banks are showing record profitability, as interest and commission income are growing rapidly. This growth has primarily been driven by the increase in the loan portfolio and transactions of banks. At the same time, the net interest margin continued to decline: the cost of funding remained almost unchanged, while interest rates on loans went down. Going forward, the cost of funding will only rise, but loan rates still have room to decline. The risks that interest rate margins may narrow are therefore increasing. Under such conditions, it is important that the banks optimize their operating costs in order to maintain high profitability.

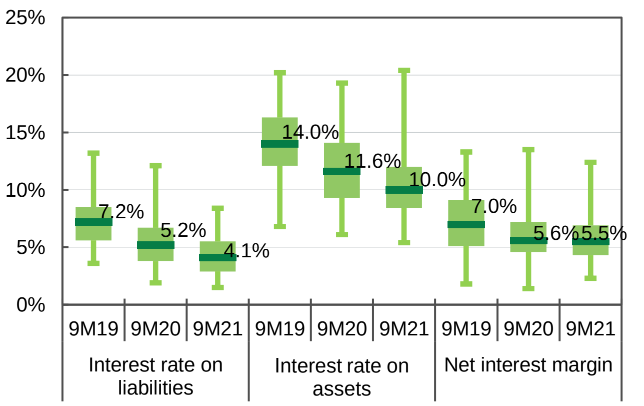
Figure 3.5.1. Distribution of banks by ROE



By asset volume. * For 9 months, it was converted to annualized values.

Source: NBU.

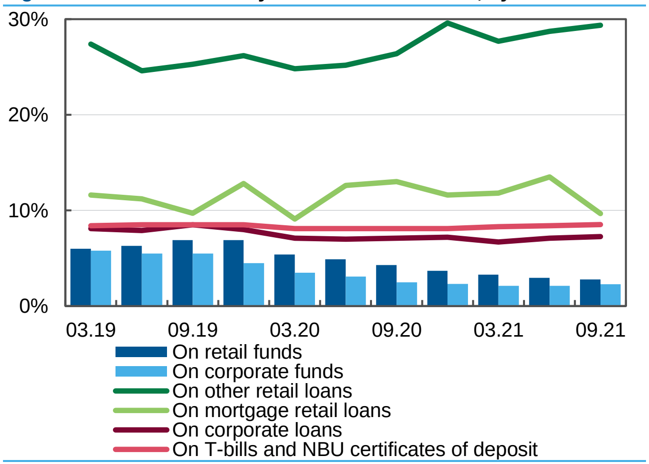
Figure 3.5.2. Interest rate by banks' assets and liabilities, and net interest margin, % per annum



* The faces of the rectangles correspond to the distribution's first and third quartiles. The lines inside the rectangles are medians. The lines above and below the rectangle indicate the maximum and the minimum.

Source: NBU.

Figure 3.5.3. Interest rate by assets and liabilities*, by item



* Interest rates on outstanding assets and liabilities, including non-interest-bearing ones.

Source: NBU.

Sector profitability at all-time high

The banks' profits now exceed the pre-crisis level of 2019 and have reached historical highs. In January–September 2021, 28 banks that owned 80% of the sector's assets had an ROE of more than 15%. They included three state-owned banks whose profitability improved over the course of the year. PrivatBank posted the highest profit, accounting for 41% of sector profits. Net interest and net commission incomes increased by one-third in year-on-year terms in the first nine months of 2021, and those of state-owned banks grew even faster. Operating income grew significantly faster than operating expenses, and so operating efficiency improved.

Effect of cheaper liabilities is fading

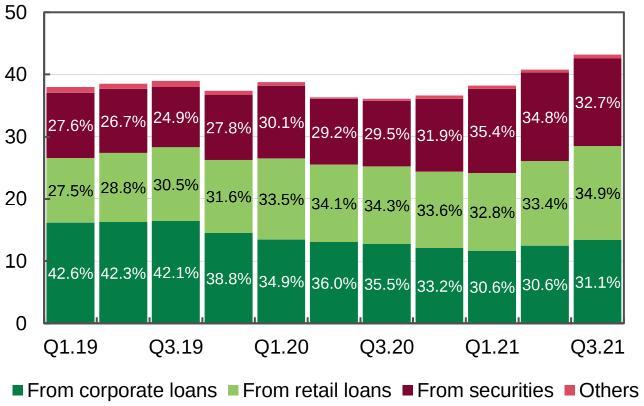
At the end of Q1, the NBU began a cycle of key policy rate hikes, thus ending the fall in interest rates on new deposits. However, the cost of funding continued to decline for some time, as maturing deposits were extended at still low rates. In H1 2021, the banks did not need to raise interest rates on deposits, having sufficient liquidity and deposit inflows. However, with the revival of consumption and the corresponding slowdown in deposit inflows, competition between banks for depositors intensified in Q3. Interest rates on new term deposits began to rise gradually as the banks' need for these deposits increased (see the Funding Risks section). Meanwhile, the NBU pressed forward with its cycle of key policy rate hikes. The cost of bank funding, especially that of term deposits, should therefore be expected to increase in future.

Share of income from retail lending is at historical maximum

Efforts to ramp up lending and the mixed interest rates dynamics in different segments reshaped the structure of the banks' interest income. Although the retail loan portfolio as a share of assets is insignificant – about 10% – it is the largest source of interest income for banks. Income from retail lending in Q3 reached 35% of banks' interest income. This increase was primarily driven by consistently high interest rates on unsecured consumer loans. Mortgage rates were falling, but the share of mortgages in the retail portfolio is low. The share of interest income on securities shrank even as the average yield on the portfolio of domestic government debt securities increased. Since the beginning of the year, the volume of domestic government debt securities held by banks, primarily state-owned ones, has been declining.

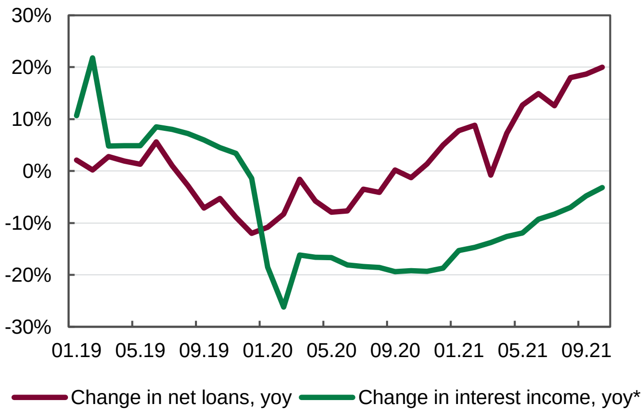
Interest rates on corporate loans were not changing in sync. The rates on ultra-short business loans, which are sensitive to the key policy rate, were the first to respond to its growth by edging higher. In contrast, rates on new SME loans

Figure 3.5.4. Interest income items, UAH billions



Source: NBU.

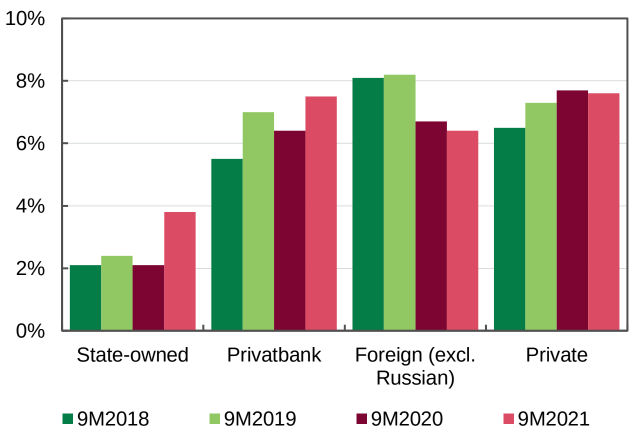
Figure 3.5.5. Change in and interest income from corporate loans



* For the period from the beginning of the year to the corresponding period of the previous year.

Source: NBU.

Figure 3.5.6. Net interest margin by groups of banks



Source: NBU.

continued to fall for a while. Rates on FX business loans also declined. However, as the portfolio grew in volume, income from business loans as a share of the banks' interest income began to grow for the first time since 2016. However, this income is still below pre-crisis levels.

Active lending drives growth in banks' interest margins

Banks that are active in the retail segment continue to post high net interest margins and profitability. The earnings of universal and corporate banks are lower. The sector's interest margin remained high thanks to the cost of funding still being low. The reduction in the cost of funding at the start of the year enabled state-owned banks to widen their net interest margins. However, these margins were still lower than those reported by other types of banks. The increase in securities investments worsened the interest margin of banks with private Ukrainian capital, although it brought them more income. As a result, the variation in interest margins across banks declined, as did the average margin.

The cost of funding began to grow gradually. But lending rates still have room to fall. This will put pressure on the net interest margin. The sector's net interest income can therefore increase further only if the entire portfolio grows. The total profitability of individual banks will be determined by the structure of their credit products. Growth in net interest income is possible both through an increase in the total loan portfolio and through an increase in the share of more profitable products.

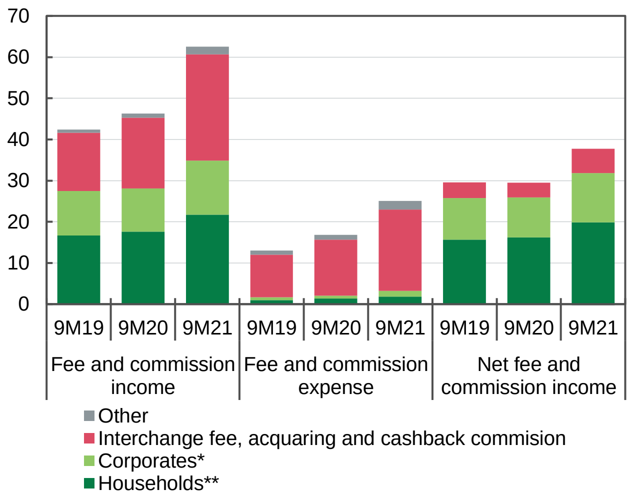
Commission income will grow more slowly

In the first nine months of this year, the growth in net commission income accelerated to 28% yoy. All major components of income from both cash and noncash transactions increased. Commission from customers' payment card transactions grew the fastest. Income from these transactions accounts for about 40% of total commission income. Acquiring commission makes up the largest share of this income. Acquiring commission increased by 60% yoy in the first nine months of 2021, according to the NBU's November 2021 survey[1].

Another dynamic component of income is the interchange fee, which is paid to the bank that issued the card used to make a payment. In 2021, this commission was concentrated among several issuing banks, for which it is a significant source of commission income. They aggressively ramped up their consumer lending volumes and thus the number of payment cards, but did not have a wide network of POS terminals. To encourage customers, these banks returned part of the commission earned to customers in the form of cashbacks, which have more than tripled over the past two years. Three banks concentrated 85% of all cashbacks and returned more than one-third of the interchange fees they received. The decision to taper the interchange fee taken by international payment systems will affect the work of precisely these financial institutions. As market participants adapt to

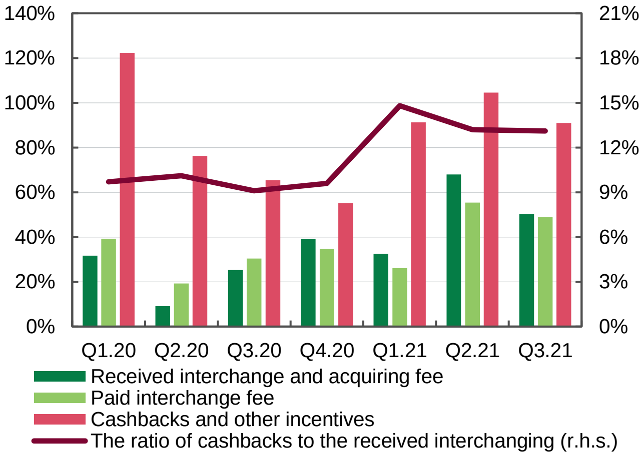
[1] In November 2021, the NBU surveyed 30 banks (which together earned some 96% of the sector's net commission income) about the amount and structure of commission income and expenses.

Figure 3.5.7. Commission income and expenses of the 30 banks with the largest net commission income, UAH billions



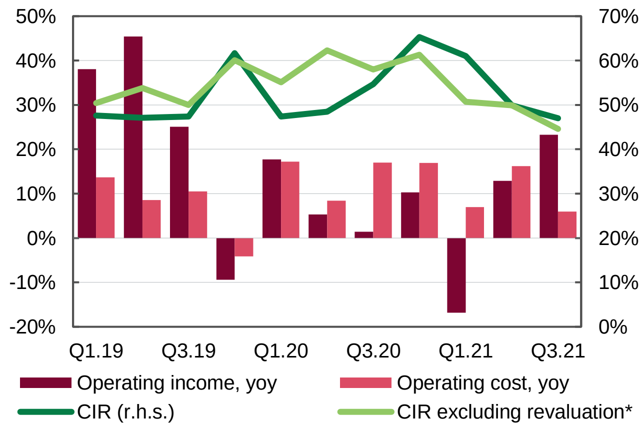
* Including international payment systems, sole proprietors, and NBFIs, and excluding interchange and acquiring fees.
** Excluding cashbacks and other incentivizing expenses on card-based transactions.
Source: Banks' survey data.

Figure 3.5.8. Change in the amount of card payments and the corresponding commission income of banks, yoy



Source: data from banks' survey, NBU estimates.

Figure 3.5.9. Banks' operational efficiency



* Pertaining to securities, currencies, and derivative financial instruments.
Source: NBU.

the new conditions, the structure of commission income will change, and its growth will slow temporarily.

However, net commission income will continue to grow. This will be facilitated by the growth of household income and expenditures in line with the volume of their transactions. Most of the banks' net commission income comes from households. Another factor is the growth in the number of users of banking services and the further penetration of financial services. In search of alternative sources of commission income, financial institutions may continue to pay increasingly more attention to acquiring. That includes technology aimed at online merchants. Larger transaction volumes will therefore offset most fee reductions. In addition, some banks in recent weeks have been compensating for the drop in the interchange fee by cutting back on cashbacks.

Sector operational efficiency has increased

Net interest and commission income in 2021 grew faster than operating expenses, which improved the operational efficiency of banks. The Cost-to-income (CIR) ratio, excluding revaluation[2], was 48%, down from 58% last year. On the one hand, the shift in customer preferences to online transactions is allowing the banks to optimize their branch networks. Network maintenance costs have grown much more slowly this year than a year ago. In contrast, the savings from shutting down some branches were partially spent on IT modernization, including software, salaries for IT personnel, and payment infrastructure expansion. However, in about one-third of banks, including one state-owned one, the CIR was over 80%. Such a high ratio poses additional risks for financial institutions, especially given the ongoing reduction in net interest margins.

Provisioning is lower than before crisis

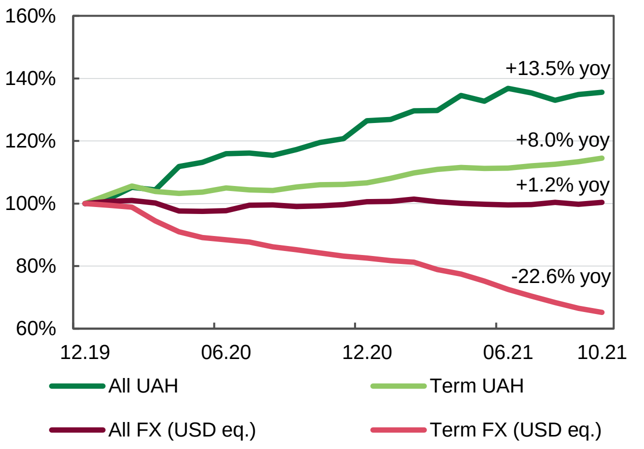
This year's rebound in economic activity has allowed the banks to improve their asset quality assessments, while some banks have actually been able to release some of their provisions. Loan loss provisions almost halved in the first nine months of 2021 in year-on-year terms. Their CoR stands at 1.2%, which is much lower than last year. In the absence of new macroeconomic shocks, provisioning will remain moderate and not critical to profitability in the near future.

[2] Currencies and securities, including derivatives.

3.6. Funding Risk

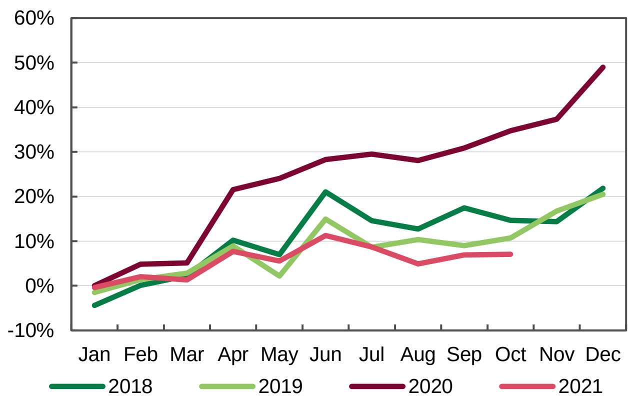
Bank deposits have been growing by around 10% per year. The share of retail hryvnia demand deposits reached a record high in mid-2021. The unusually rapid growth in demand deposits slowed only in H2 2021. Shorter funding maturities are not preventing the banks from actively issuing short-term loans. However, the financial institutions should also attract term deposits in order to provide long-term loans and create a stable client base. Hryvnia retail term deposits are growing mainly in banks that offer higher interest rates. Thus, the banks are gradually raising their rates on term deposits. The increase in the NBU's key policy rate also encourages them to do so.

Figure 3.6.1. Retail deposits, 2019 = 100%



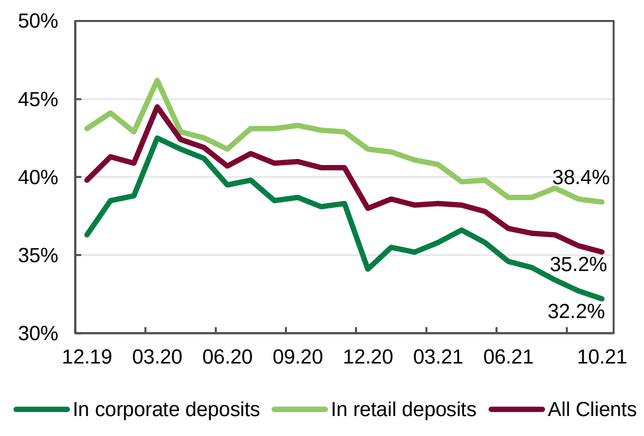
Source: NBU.

Figure 3.6.2. Hryvnia demand deposits, year-to-date change



Source: NBU.

Figure 3.6.3. Percentage of FX deposits



Source: NBU.

Demand deposits account for the largest share of bank funding

The structure of bank funding has remained almost unchanged over the year. Client deposits remain the main source of funding, accounting for 80% of total liabilities. Client deposits are almost evenly divided between the retail and corporate segments. Total funding from retail and corporate clients has been growing at a high and steady rate of 10% yoy. That said, hryvnia funding has increased twice as fast as that. The inflows of funds were driven mainly by macroeconomic factors: the economy recovered, and household income and businesses' earnings grew, and these accumulated in bank accounts. These factors will mostly remain in place in the future. There was no need to additionally stimulate deposit inflows by raising rates, which kept the cost of funding at a record low. Rising costs of external funding do not pose risks to financial institutions, as the share of external debt in their funding is low.

Inflows to hryvnia retail demand deposits have been slowing gradually

The share of retail hryvnia demand deposits have been rising rapidly over the past two years, reaching the record-high level of 57% in June 2021. Low interest rates discouraged retail clients from making longer-term deposits. However, in H2 2021, the dynamics of demand deposits slowed and returned to their pre-crisis levels. Households have been spending more on their consumer needs, leaving less money in their bank accounts. Hryvnia term deposits are growing more slowly. Thus, demand deposits will continue to dominate the hryvnia funding, but their share will not grow as fast. Overall, the growth in hryvnia retail deposits decelerated, to 13.5% yoy as of the end of October 2021.

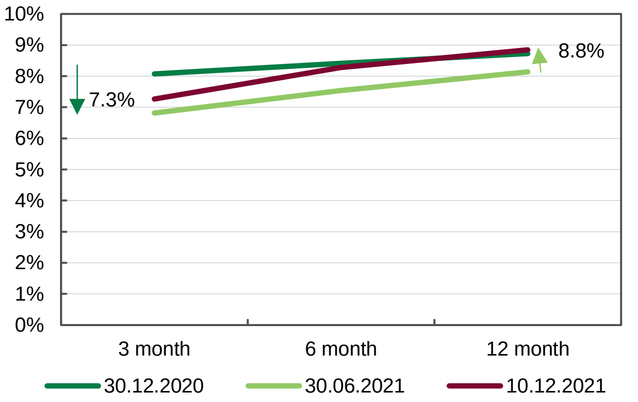
Deposit dollarization is the lowest in two decades

The rates on foreign-currency deposits, being close to zero, dampened growth in this segment. Foreign-currency deposits are hardly growing at all. As a result, the dollarization of deposits is decreasing – especially for term deposits. Depositors are keeping their matured FX term deposits on current accounts. Provided there are no major fluctuations in the hryvnia exchange rate, the growth in foreign-currency retail deposits will remain weak.

The current funding structure is not an obstacle to lending

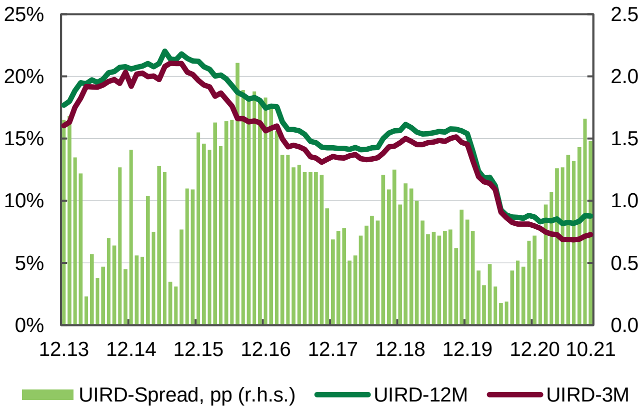
The loan-to-deposit ratio has risen this year for the first time since the start of the 2014 crisis. The growth in loan portfolio outpaced inflows of client deposits. At the same time, the banking system's liquidity remains high. Despite the large share of demand deposits, at the end of October all banks

Figure 3.6.4. Ukrainian Index of Retail Deposit Rates for hryvnia term deposits, % per annum



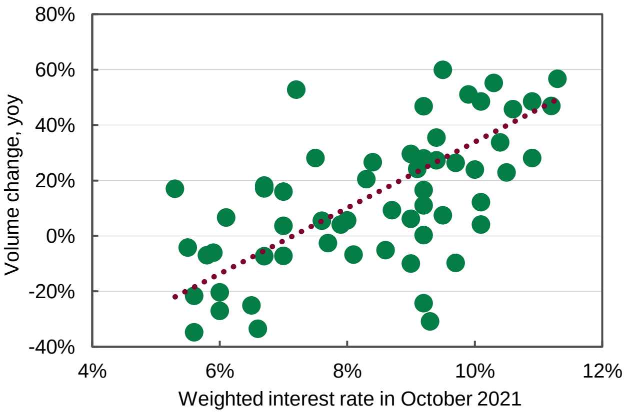
Source: NBU, based on Thomson Reuters data; 5-day moving average.

Figure 3.6.5. 12- and 3-month Ukrainian Index of Retail Deposit Rates rates in UAH, % per annum, and spread between them



Source: NBU, based on Thomson Reuters data; 5-day moving average.

Figure 3.6.6. Breakdown of banks by annual change in volumes of retail term deposits in hryvnia and interest rates on new hryvnia term deposits in October 2021



Source: NBU.

were maintaining their Net Stable Funding Ratio (NSFR) at above 90%, which is the current regulatory requirement.

The targeted funding structure depends on a bank's business model. Banks that provide consumer loans to households or working capital loans to businesses do not need a large buffer of term funding. It is more challenging for banks that are increasing their portfolios of mortgages and car loans, or that plan to issue long-term corporate loans. They need deposits with longer maturities to ensure proper liquidity risk management.

Banks apply different mechanisms to attract demand and term deposits. In order to promote inflows of demand deposits, the financial institutions offer their services in ways convenient for clients and provide a number of additional services, in particular lending services. Demand deposits are not sensitive to changes in price conditions. At the same time, banks can use interest rates to compete only for term deposits.

Price competition for term deposits is increasing

The higher NBU key policy rate and accelerating inflation are gradually prompting banks to raise their deposit rates. The increase in deposit rates is additionally motivated by the need of some financial institutions for term deposits, in particular for the development of long-term lending. The banks should now be forming a stable client base and developing mechanisms to attract term deposits, as inflows of deposits at low interest rates will not last forever.

The cost of term deposits has started to rise. The increase in interest rates on longer-term deposits was more pronounced. The spread between rates on one-year and three-month deposits has grown to its highest level since 2017. It is at a record high, considering the current low cost of funding.

Households react positively to higher yields on deposits, in particular by increasing hryvnia term deposits in banks that offer higher rates, and sometimes by splitting their deposits. As a proof of that, the number of deposits has grown by 3 million over the year. The rapid development of remote customer services has intensified the competition between banks, as the simplification of account opening has facilitated the redistribution of new deposits to banks that offer higher yields.

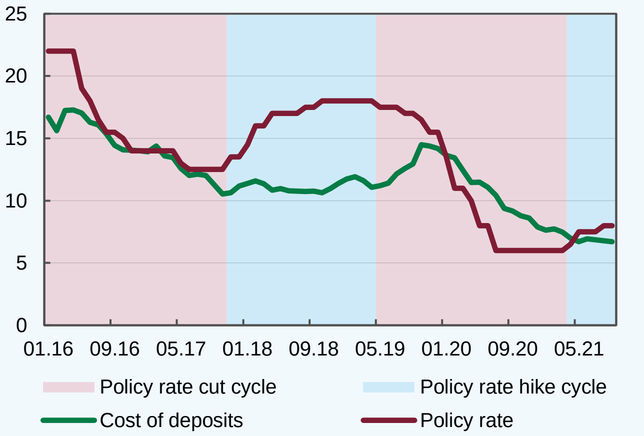
In the Q3 2021 Bank Funding Survey, banks noted that funding supply from households unrelated to banks' actions had decreased slightly. Going forward, the financial institutions expect a rise in the cost of retail funding and an increase the maturity of deposits. This indicates their readiness to raise rates on hryvnia retail deposits, especially on term deposits.

Box 5. Cost of Retail Term Deposits Is Sensitive to Changes in Key Policy Rate

After the shift to inflation targeting in 2016, the key policy rate became the NBU's main instrument to influence price dynamics. The central bank started a cycle of key policy rate hikes in March 2021. The increase in the key policy rate should entail greater cost of resources in the economy, i.e. higher interest rates on loans and deposits. To assess the relationship between the key policy rate and rates on hryvnia retail deposits, the NBU conducted a study using autoregressive distributed lag models. Its findings show that interest rates on retail term deposits generally respond to changes in the NBU's key policy rate, although the response is lagged.

In response to stronger inflation factors, the NBU began raising the key policy rate in 2021. Since March, it has been increased by a total of 3 pp, to 9%. In response to the key policy rate hikes, the cost of new retail deposits gradually stopped declining, and interest rates on longer-term deposits began to rise. Autoregressive distributed lag models were used to assess the long-term effect and the speed of deposit rates' response to changes in the NBU's key policy rate.

Figure B.6.1. Weighted average interest rates on new hryvnia retail deposits, % per annum



Source: NBU.

The results of the study indicate that there is a relationship between the NBU's key policy rate and interest rates on retail deposits. In particular, an increase of 1 pp in the key policy rate leads to an increase in deposit rates by around 0.6 pp. However, this effect does not fully materialize immediately. In the first month, only 7% of the change in the policy rate is passed through to bank deposit rates.

Interest rates on deposits of all maturities respond to changes in the key policy rate. The response is the strongest in deposits placed for up to six months and the weakest in deposits with maturity of more than one year. The latter account for only a tenth of total funding. Changes in the key policy rate have little impact on interest rates on interest-bearing demand deposits. They account for about a third of new deposits.

The sensitivity of deposit rates to changes in the key policy rate was reflected in a significant decrease in the cost of bank funding in 2020, when the key policy rate reached an all-time low of 6%. Lower rates allowed banks to reduce the cost of funding. However, the banks' response lagged considerably, even in the case of a reduction in the key policy rate a year ago. A similar delay should also be expected for the cycle of raising the key policy rate.

The current high liquidity is slowing the financial institutions' response to changes in monetary policy conditions. With liquidity buffers and significant inflows of deposits, banks are not interested in a fast increase in their funding costs. However, additional factors can spur their response: the growth in long-term lending requires longer-term funding. So the rates on longer-term deposits are now gradually rising.

Table 3. Results of calculations using ARDL models, by deposit maturity

	Share of total deposits	Correlation with the NBU's key policy rate	Overall transmission rate	Adjustment speed rate*	Transmission in one month, for a 100 bp change in the key policy rate
Weighted average interest rate on all retail deposits	100.0%	0.78	0.56***	0.11***	7 bp
By maturity:					
demand or overdraft	27.7%	0.05	0.28	-	–
overnight	1.5%	0.93	0.88***	0.34***	63 bp
up to 1 month	7.6%	0.89	0.61***	0.21***	28 bp
1 to 6 months	31.9%	0.88	0.80***	0.10***	14 bp
6 months to 1 year	20.1%	0.84	0.79***	0.17***	18 bp
1 to 5 years	11.2%	0.89	0.87***	0.08*	17 bp

* The adjustment speed rate reflects the proportion of deviations of deposit interest rates from the long-term level, in particular caused by changes in the key policy rate, which will be adjusted within one month.

The coefficients' level of significance is *** 99.9%, ** 99%, and * 95%, as estimated on the basis of T-statistic values.

The existence of a long-term effect is determined by a bounds test (Pesaran, Shin, and Smith, 2001). The test has not detected any long-term effects on demand deposit rates.

Source: NBU.

3.7. Changes in the Regulatory Environment

In H2 2021, the Ukrainian parliament passed laws aimed at improving bank and non-bank regulation and the mechanism of preserving the assets of banks that are being withdrawn from the market. The law on payment services was substantially updated, and a number of regulations were developed for the non-bank financial services market.

The mechanism for recovering insolvent banks' assets was improved

Law No. 1588-IX introduced amendments to a number of legislative acts, mainly to the Law of Ukraine *On the Household Deposit Guarantee System.* In particular, it entitled the Deposit Guarantee Fund to conclude agreements on voluntary indemnification of damages (losses) with a bank's related parties or any other parties whose actions or failure to act has inflicted damage on creditors, or on the bank.

Legal framework updated for payments

In June 2021, the parliament of Ukraine passed the Law *On Payment Services* (No. 1591-IX), which takes into account the norms of EU regulations, including the Second Payment Services Directive (PSD2) and the E-Money Directive (EMD). The new payment market regulation framework (effective from 1 August 2022) prescribes the following key changes:

- Non-bank payment service providers – such as payment institutions, e-money institutions, and postal operators – will be able to open payment accounts and issue payment cards and e-money (only banks can provide these services as of now).

- Non-bank financial institutions will be able to perform transactions without the need to be a participant in a payment system.
- The NBU will be entitled to issue its digital currency as well as to create a regulatory sandbox – a platform for testing innovative services, technologies and instruments.
- Terms and conditions for providing payment services will become more transparent, and customers will receive more information on such services.
- Liability will be tightened for illegal actions with payment instruments and access to bank and payment accounts, etc.
- Requirements for the security of payment transactions will become stricter. In particular, payment service providers will have to use enhanced user authentication in certain cases.

List of requirements for non-bank financial institutions widened

In November 2021, the NBU enlarged and detailed the scope of information to be disclosed by participants of the non-bank financial services market, while also improving the disclosure procedure (Resolution No. 114). On their websites and at the sites where the services are provided, financial services providers will disclose to their customers their registration data, the list of provided financial services, terms and procedures for providing the services, the list of their own websites, and their main performance indicators. Information about standalone units of financial service providers and the list of persons providing intermediary services will also be made public. The publication of annual financial statements and consolidated financial statements verified by an independent auditor and an auditor's report will be mandatory.

Approaches to consumer lending services made uniform

The NBU has set the same disclosure requirements on consumer loans for non-bank financial institutions as for banks (Resolution No. 100). The new requirements will also cover microloans. Non-bank financial institutions are obliged to disclose full information about their consumer lending services and prices of such services starting from October 2021. Non-bank financial institutions must meet these requirements by April 2022. After that, all lenders in Ukraine will apply a uniform approach when publishing information about their consumer lending services on their websites, when advertising these services, and when providing these services to customers. The uniform approach will ensure that the rights of financial services consumers are protected properly both at the pre-contractual and contractual stages of their relations with lenders.

This year, the NBU also decided to:

- **raise the limits on banks' long and short open currency positions from 10% to 15% of their regulatory capital, effective 1 December 2021.** The banks' capacity to enter transactions on their own behalf on the interbank FX market within their currency positions is estimated to grow by around USD 400 million. As a result, the banks will play a more important role in smoothing out excessive exchange rate fluctuations on the FX market, and liquidity and market depth will increase overall.
- **take into account the minimum amount of operational risk when calculating capital adequacy ratios using the coefficients:** 0.5 from 31 December 2021, and 1 from 30 December 2022**.** The NBU's 2021 resilience assessment of the banks and banking system of Ukraine confirmed the banking sector's capability to cover 50% of operational risk with capital.
- **set the frequency for banks to prepare and submit recovery plans starting from 2022:** systemically important banks and banks that are responsible entities of banking groups must submit recovery plans annually, and other banks must do so once every second year. Banks and banking groups will be better equipped for stabilization in times of crisis by preparing plans that contain realistic options for restoring financial resilience if they face a considerable deterioration in their financial standing or are under stress.

Box 6. A lack of legislation governing virtual assets poses increasingly more risks

The total value of virtual assets has surged globally by more than tenfold over the last two years. However, there is still not sufficient legislation governing such instruments. As a result, investors face operational and legal risks when owning such assets. Meanwhile, the considerable fluctuations of virtual assets' pricing pose the risk of financial losses. At the same time, countries are launching more and more initiatives to make investors less vulnerable to these risks.

Virtual assets (VAs) have become an important phenomenon on the global financial market. At the beginning of 2020, the capitalization of the global cryptocurrency market was estimated at USD 0.15–0.2 trillion, while in November 2021 it hit USD 2.9 trillion. This figure is the equivalent of over 2% of the total capitalization of the global stock market. It is also commensurate with the market capitalization of the largest global corporations such as Microsoft, Apple, Amazon, Google, and Saudi Aramco. This figure is also comparable with the GDP of France, which is the seventh largest economy worldwide. Bitcoins account for about 45% of the market capitalization of all cryptoassets.

The surge of interest in VAs in early 2020s results from:

- a rise in the types and the supply of such instruments, and the overall development of Internet of Services (IoS),
- investors' desire to prevent state officials from controlling their assets and the lack of legislation governing this market,
- large high-tech corporations supporting the circulation of VAs, including through the sale of their own goods or services for cryptocurrency,
- the unstable global economy due to the coronavirus pandemic, decreased trust in traditional assets, and a search for new alternatives, and
- the quantitative easing by central banks, which has sharply increased the money supply.

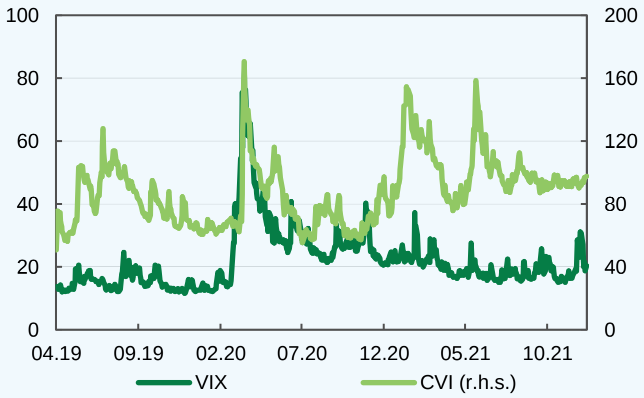
The rising demand has pushed up prices for digital assets, especially cryptocurrencies. At the same time, these assets have become more volatile. In particular, the Crypto Volatility Index (CVI)[3] over the last year have been significantly higher than the VIX "fear index", which gauges the volatility of classical assets.

Rising VA volumes and their high volatility are drawing increasingly more attention from financial market regulators. The ECB does not find potential risks from the rising turnover of VAs to be critical for monetary policy, financial stability, prudential supervision, and financial market infrastructure. However, these risks could rise in the absence of relevant information about VAs and instruments to control them.

The key sources of risks from VA market expansion are:

- the differing legal statuses of VAs in national legislations, or no acts regulating this status,
- the uncontrolled distribution of VAs, which may partly replace domestic currencies in circulation: this may pose risks to the effective implementation of monetary policy,
- the lack of a mechanism for protecting the rights of investors in VAs, as a result of which VA holders could sustain losses,
- the difficulties in establishing a change of residency, which complicates the forecasting of capital flows.

Figure B.7.1. Changes in volatility indices



Source: Cvi.finance, Finance.yahoo.

In response to the risks, the Financial Stability Board set up by G20 suggests creating regulated markets for global stablecoins, a type of VA. Stablecoins are cryptocurrencies that are pegged in price to fiat money or exchange-traded commodities. Regulators are recommended to require financial institutions to use conservative approaches when assessing VAs.

In Ukraine, draft law No. 3637 *On Virtual Assets* introduces an initiative to establish the status of VAs. The draft law, which was adopted in September 2021, defines the concepts and phenomena that exist on the global VA market, and which have no legal definition in Ukrainian law. A VA is proposed to qualify as an intangible good that is regulated by civil law, has value, and is represented by a set of electronic data.

However, the president vetoed this law. It is currently being revised to factor in proposals put forward by the president. According to these proposals, the NSSMC will be regulating the VA market, while the NBU will be charged only with regulating those VAs that derive their value from FX as an underlying asset. Once the said law has been adopted, the designated government authorities will start implementing regulatory approaches to VAs.

[3] The index is based on the Black-Scholes option pricing model. Higher values of the index indicate the higher volatility of VA prices. The theoretical index measures from 0 to 200 points. See details: https://cvi.finance/faq.

Recommendations

Achieving financial stability requires both smooth cooperation among all financial market participants – including banks, non-bank financial institutions, the NBU, and other market regulators – and active support from the state authorities. The NBU makes recommendations to the state authorities and financial institutions, and communicates its near-term goals and plans.

Recommendations to State Authorities

Ensure the full implementation of conditions for cooperation with international donors
IMF Executive Board has approved the first review of Ukraine's Stand-By Arrangement and allocated a tranche of around USD 700 million. Under the current program, Ukraine has committed itself to continuing with a sound fiscal policy to ensure debt sustainability and maintaining monetary policy aimed at 5% inflation target, as well as to proceeding with reforms of the energy sector and the state-owned segment of the banking system, and corporate governance at state-owned enterprises. It will also improve the process of recovering assets of banks withdrawn from the market, promote judicial reform, improve the capacity of the NBU's supervision, and step up the fight against corruption. The IMF has also approved Ukraine's request to extend the current program by six months, until June 2022. In order to secure future access to financial resources amid global capital market instability and Russian aggression, Ukraine needs to start negotiating a new program.

Pass and bring into effect legislation aimed at promoting financial sector development
To adopt the draft law ***On Credit Unions*** (No. 5125) (ready for the second reading) and implement the newly adopted law ***On Financial Services and Financial Companies***. The new legislation will update the regulation of nonbank institutions. This is intended to improve solvency, reinforce the risk management system, ensure transparent ownership structures and a risk-based approach to supervision, simplify licensing, enhance corporate governance requirements, and regulate the market conduct of market participants.

Resolve the Deposit Guarantee Fund's solvency problem
Restoring the solvency of the Deposit Guarantee Fund (DGF) will ensure the stability of the deposit guarantee system. To this end, the Financial Stability Council (FSC) has approved a mechanism for restructuring the DGF's debt – by converting its current liabilities to the government and future interest payments into contingent liabilities. A draft law that reflects the FSC's recommendations (No. 5542-1) has received a positive response from international financial institutions, and has already passed first reading. It also envisages a phased increase in the covered retail deposits to UAH 600,000, and Oschadbank joining the deposit guarantee system.

Focus state programs on supporting investment projects
Large-scale programs to support small and later medium-sized businesses were an emergency anti-crisis step that helped tens of thousands of entrepreneurs survive the period of uncertainty at the start of the pandemic. However, the primary goal of the 5–7–9% affordable loans program was to support the financing of investment projects, and its focus should gradually return to this goal. Economic recovery and better financial conditions of enterprises facilitate the access of the latter to bank loans. And limited budgetary funds should be channeled to financing programs that ensure the most efficient business promotion. The state should also launch partial guarantees for loans to small farmers for buying land and financing production. The recently approved law on the fund of partial loan guarantees in agriculture provides for such guarantees.

Strengthen the regulation of the primary real estate market and ensure its transparency
The market for newly-built property remains unregulated and opaque, thus posing risks for housing investors and their creditors. Draft law No. 5091, which proposes more reliable mechanisms for financing construction, could partially resolve the problems in the primary real estate market, in particular by introducing a guaranteed share of construction and state registration of rights to the property under construction. It is also important to increase the transparency of the market for new buildings through the full disclosure of information by construction participants.

Carry out judicial reform and restore confidence in the judiciary

Financial sector participants continue to view the activities of law enforcement and the judiciary as a key systemic risk. To ensure the legal rights of creditors, investors, and depositors, it is necessary to complete the reform of the judicial system in line with the recommendations of international experts and donors. All lenders are currently factoring legal risks into their loan interest rates, which makes them higher. Therefore, proper protection of creditors' rights would reduce the cost of bank loans.

Recommendations to the Banks

Most of the recommendations to the banks made in the previous issues of the Financial Stability Report remain relevant. In particular, the banks should continue to work on reducing their NPL portfolios and submit their recovery plans to the NBU in a timely manner. In addition, the NBU recommends that the banks do as follows:

Prepare for the imposition of new capital requirements

From the start of 2022, requirements will come into effect to cover 50% of the estimated amount of operational risk with capital, and risk weights will increase to 150% for unsecured consumer loans, and to 50% for FX domestic government debt securities. The banks had enough time to prepare for these changes, as they were announced in advance. Moreover, the banks will be required to build capital conservation buffers and systemic importance buffers in two years, by 1 January 2024. The current level of capital and profitability allow the banks to meet these requirements without reducing lending. The banks' capital planning will improve with the introduction of the ICAAP process, which will soon start in test mode.

Step up efforts to clean up balance sheets of legacy FX mortgages

The mechanism of compulsory restructuring on terms favorable for borrowers, which was introduced in spring under Law of Ukraine No. 1381-IX, has not solved the problem of outstanding foreign-currency mortgages on the banks' balance sheets. At the same time, as the moratorium on foreclosing foreign-currency mortgages has been lifted, the banks received the opportunity to recover problem debts by selling collateral. This should be done as soon as possible, as the value of collateral not recovered within two years will be gradually excluded from the calculation of prudential provisions. Loans for which recovery and the sale of collateral are unlikely should be written off without postponing the recognition of losses.

Take into account the LIBOR cessation

From 1 January 2022 onward, market participants (banks and nonbank financial institutions) will no longer be able to enter into new and maintain existing agreements benchmarked to LIBOR, as the rates will no longer be available. The volume of such agreements is currently insignificant. Nevertheless, financial institutions should inform their customers about the changes and switch to new benchmark rates.

Also, it is important that the banks:

- implement in a timely manner their restructuring and capitalization plans, as approved by the NBU based on this year's resilience assessment
- speed up the sale of noncore assets, as 50% of their value will be deducted from core capital starting from 1 January 2022
- continue to work on improving their operational efficiency, optimize their networks, and invest in IT infrastructure, in particular taking into account rising operational risks and the need for ensuring cybersecurity
- pay closer attention to anti-money laundering.

Recommendations to Nonbank Financial Institutions

Meet solvency requirements

The number of non-bank financial institutions that violate solvency requirements is decreasing. Many of the violators have had their licenses revoked and have been excluded from the State Register of Financial Institutions. Only some market players have managed to bring their activities in line with regulatory requirements. In order to continue their operations on the market, all financial institutions must strictly adhere to solvency requirements, especially in view of the plans to tighten these requirements with the adoption of laws regulating the market.

Meet disclosure requirements

The NBU enlarged and updated the scope of information to be disclosed by participants of the non-bank financial services market, while also improving the disclosure procedure. In particular, non-bank financial institutions must disclose all information about their consumer lending services and the full cost of credit for consumers. Information should be relevant, should not mislead customers, and should be easy to find. Agreements must not contain bad-faith terms.

Ensure completeness and proper timing of reporting

Some non-bank financial institutions, despite a long transition period, are still failing to meet deadlines and completeness requirements when submitting their reports to the NBU. Unified rules for compiling and submitting reports by non-bank financial services market participants will come into force on 1 January 2022, and will mostly clarify and standardize all effective requirements.

NBU's Plans and Intentions

Strengthen capital and liquidity requirements in line with international standards

From 1 January 2022, the NBU will:

- introduce the requirement for a minimum of 50% of the estimated amount of operational risk to be covered with capital, with this rising to 100% from 1 January 2023
- raise risk weights for unsecured consumer loans from 125% to 150%
- implement the next stage of raising risk weights for foreign-currency domestic government debt securities: the risk weights will first increase to 50% and then, effective 1 July 2022, to 100%
- raise the share of noncore assets value that is deducted from core capital to 50%.

In Q1 2022, the NBU will approve the schedule for implementing capital buffer requirements. By 1 January 2023, the banks will be required to build 50% of the capital conservation buffer and 100% of the systemic importance buffer. By 1 January 2024, the banks will have to build both buffers in full. The Net Stable Funding Ratio (NSFR) will be fully implemented from 1 April 2022 with its required value being set at 100%.

Hold the scheduled annual assessment of banks' resilience

On 1 January 2021, the NBU will start regular resilience assessments, which will include the stress testing of large banks. At the first stage, audit companies will perform the asset quality review. The NBU's stress testing methodology will be communicated to the banks in Q1 2022.

Continue preparing for the implementation of the deposit guarantee system for members of credit unions

The NBU is developing relevant draft laws together with the DGF. The introduction of the deposit guarantee system for credit union members will ensure more convenient working conditions for these credit institutions and strengthen the protection of depositors. However, the deposit guarantee system can be launched only after activities of the credit unions are brought into line with regulatory requirements.

Start implementing the sustainable finance development policy

The sustainable finance development policy envisages, among other things, the implementation of environmental, social, and governance (ESG) factors into the banks' corporate governance system from the start of 2022. The environmental and social risk management system (ESRM) is planned to be integrated into the general risk management system of banks from 2023.

Finalize and approve cybersecurity requirements for the banking system

The NBU has published a draft resolution on cybersecurity in the banking system of Ukraine. It will help regulate cybersecurity issues in Ukraine's banking system in accordance with European and global best practices, organize information exchanges on cyber threats, cyberattacks, and cyber incidents with banks operating in Ukraine, and develop communication and coordination between cybersecurity system participants in the banking system.

Special focus

Updated legislation for the non-bank financial services market

From 1 July 2020, supervision of a number of participants in the non-bank financial services market was transferred to the NBU as part of the Split project. As it took over the regulation of this market, the NBU was working to update non-bank legislation. At the end of 2021, the Verkhovna Rada passed two new laws: *On Financial Services and Finance Companies* and *On Insurance*. Consideration of the draft law *On Credit Unions* is expected early next year. The laws passed will contribute to the sector's further development, increase its transparency and sustainability, and provide a proper level of risk management and consumer protection.

Obsolete legislation in the non-bank financial services market needed to be updated

The legislation that until recently governed the non-bank financial services market had not been updated for more than twenty years. During this time, the world's financial infrastructure has changed. The main provisions of the Ukrainian laws did not meet modern needs and challenges. The weakest points in existing legislation were:

- complicated licensing, establishment, reorganization, and resolution procedures
- unresolved issues in corporate governance
- inefficient and disproportionate solvency requirements, especially for financial institutions that take retail deposits
- insufficient tools for the regulation and supervision of market participants.

The Laws *On Financial Services and Finance Companies*, *On Insurance*, and the Draft Law *On Credit Unions* are designed to structure and improve the requirements for participants of the non-bank financial market. The first is a framework law that specifies general financial market rules for all financial institutions. The other two laws are specialized, in that they stipulate procedures for the activities of insurers and credit unions, respectively.

Law *On Financial Services and Finance Companies*

The Verkhovna Rada passed this law on 17 December 2021. It will take effect on 1 January 2024. The new rules will make licensing easier: a license will be issued along with the company's automatic registration as a financial institution. Financial institutions will receive a single license, which will entitle them to provide a full list of financial services. This list can be supplemented or narrowed as required. The new legislation gives some financial institutions more opportunities to provide financial services, and even combine them with other economic activities. But such combinations will be limited to financial institutions that take retail deposits.

Acquiring a substantial stake in a finance company or a pawnshop will no longer require prior approval from the regulator. Information about the new owners will be submitted as part of the application to change the ownership structure of a financial services provider. At the same time, the ownership structure itself will remain transparent and public.

The requirements for the corporate governance of financial service providers have been updated, and the requirements for the internal control system have been established. These apply, in particular, to internal audits, risk management, and compliance. The requirements for building an internal control system will match the complexity of the financial services provided by market participants, and will be risk-based. At the same time, market participants will be able to outsource a number of these functions.

For finance companies and pawnshops, the main prudential requirement will be a minimum amount of equity. It will be proportional to the risk of the financial services: from UAH 1 million for pawnshops that provide only lending services, to UAH 10 million for finance companies that provide guarantee services. Liquidity requirements will also apply to the latter.

The law introduces the concept of a significant financial institution. Significant ones will include the largest insurers and credit unions with higher risks. Significance criteria will be set by the regulator in future. The intensity of supervision of financial institutions will depend on their size, type of activity, significance, and risks, meaning that supervision will be proportionate. Another innovation is the supervision of the market conduct of institutions. In particular, the observance by financial institutions of the requirements for consumer protection, the disclosure of information to customers, the transparency of ownership structures, and the proper business reputation of owners and managers will be monitored.

The updated legislation also introduces a system of three types of measures by the regulator: corrective measures, early intervention measures, and corrective actions. Unlike corrective actions, corrective measures and early intervention measures are applied to prevent a violation. Such measures take the form of recommendations or restrictions.

Law *On Insurance*

The Law *On Insurance* was passed on 18 November 2021. It will also take effect in two years, starting on 1 January 2024. The law foresees a transition period to allow market participants to bring their activities into line with the new requirements.

The new legislation significantly tightens licensing standards for companies. Licensing will be based on classes, not on types, of insurance: 5 classes of life insurance and 18 classes of nonlife insurance. The right to combine life insurance with nonlife insurance (except health insurance) is limited. This is in line with EU acquis and improves risk management. Existing licenses will also remain valid after the law takes effect. However, their format will be updated in accordance with the law. When applying for a license, insurers will provide a strategy and a plan of their activities.

The updated law sets requirements for an impeccable business reputation and a satisfactory financial standing of the qualifying holders of insurers. The NBU will inspect and approve these qualifying holders. Requirements are also set for the governing bodies of insurers. In a significant insurer, at least one-third of the board must consist of independent members. In addition, those responsible for the key functions of significant insurers will have to meet ”fit and proper” and business reputation requirements.

Solvency requirements are also being implemented in accordance with EU acquis. There will be two approaches: a simplified one, based on the EU’s Solvency I Directive, and a basic one, which corresponds to Solvency II. The difference in approaches lies in the method for calculating the requirements: under the simplified approach, they are more conservative, but are much easier to calculate. Under both approaches, the insurer must comply with Minimum Capital Requirements (MCRs) and Solvency Capital Requirements (SCRs). These values are calculated so that the insurer’s capital is sufficient to cover unexpected losses from the risks it assumes over the next 12 months, given the probability of their materialization. The MCRs reflects unexpected losses with a probability of more than 15%, and the SCRs those with a probability of more than 0.5%. However, under no circumstances can MCRs be less than UAH 32 million, while for insurers providing life, liability, and credit insurance, as well as surety and reinsurance services, MCRs are to be at least UAH 48 million. The eligible regulatory capital of insurers will be calculated as the difference between the amount of available liquid assets, which must meet asset structure requirements, and liabilities. The new capital requirements will be introduced in stages. For the first three years after the law takes effect, all insurers will take a simplified approach. Those insuring life, liability, and loans, and providing surety services, as well as significant insurers, will eventually be required to switch to the basic approach. Other insurers will also be able to take the basic approach at will.

The law specifies a list of grounds for the NBU to apply corrective measures, early intervention measures, corrective actions, and appropriate supervisory actions. The system of regulatory actions will allow the central bank to take appropriate measures in a timely manner and prevent situations in which an insurer is wound down without first meeting its commitments to policyholders. The law also introduces a new exit mechanism, both voluntary and mandatory at the regulator’s discretion. The law also provides for the introduction of a provisional administration at an insurer if it is declared insolvent. This tool is primarily necessary to preserve assets and protect the interests of customers.

Draft Law *On Credit Unions*

The Draft Law of Ukraine *On Credit Unions* passed first reading on 1 June 2021 and is currently pending second reading. A novelty of the document is that it divides credit unions into two types, depending on their ability to take deposits. The standard license will entitle credit unions to take deposits from and lend to their members. The simplified license reduces the list of services to lending. A credit union with a simplified license will be able to raise member funds only as share contributions. Credit unions will be able to change their license type. To protect the interests of depositors, credit unions with a standard license will have to meet much stricter requirements. At the same time, credit unions will be able to provide guarantee services, financial payment services, money transfer services, and even currency valuables trading services, subject to appropriate license extensions.

Like other financial institutions, credit unions will need to establish internal control systems. The general meeting of a credit union will perform an extended list of functions. Controls over member representation in the general meeting will also be improved. This will reduce the risk of credit unions being used by management to pursue their private needs.

Requirements for the components of the regulatory capital of credit unions will be tightened. Regulatory capital will be divided into two levels, depending on the ability to absorb losses. Credit unions will be obligated to set aside a significant part of their profits in the form of reserve capital. Regulatory capital will not include repayable contributions, except those paid for a period of at least five years. In addition to meeting minimum capital adequacy ratios, credit unions will have to maintain capital buffers. A credit union will be able to distribute profits or repay share contributions to members, in particular in the event of their withdrawal, only if it continues to meet all of the regulator’s requirements after making the said payments.

The draft law identifies the grounds for corrective measures, early intervention measures, and corrective actions. It also specifies the conditions for recognizing credit unions as insolvent, based on the updated requirements. The resolution procedure will become more transparent: credit unions will be able to cease operations only with their liquidation as a legal entity. Leaving the market can be voluntary or forced. In the latter case, credit unions will be resolved by court order as a result of their insolvency or the revocation of their license.

Abbreviations and terms

CCAR	Core capital adequacy ratio
CDS	Credit default swap
CIR	Cost-to-income ratio
CoR	Cost of risk
COVID-19, COVID	Coronavirus disease 2019
CPI	Consumer price index
DGF	Deposit guarantee fund
DSTI	Debt service to income ratio
EBA	European Banking Authority
EBIT	Earnings before interest and taxes
EBITDA	Earnings before interest, taxes, depreciation and amortization
ECB	European Central Bank
EM	Emerging markets
EU	European Union
Fed	US Federal Reserve System
FX	Foreign currency/exchange
GDP	Gross Domestic Product
ICAAP	Internal Capital Adequacy Assessment Process
IFI	International Financial Institutions
IFRS	International Financial Reporting Standards
ILAAP	Internal Liquidity Adequacy Assessment Process
ILO	International Labor Organization
IMF	International Monetary Fund
IT	Information technologies
LCR	Liquidity coverage ratio
LGD	Loss given default
LTV	Loan-to-value ratio
MoF	Ministry of Finance of Ukraine
MSMEs	Micro-, small, and medium-sized enterprises
Naftogaz	National Joint Stock Company Naftogaz of Ukraine
NBFI	Non-bank financial institution
NBU	National Bank of Ukraine
NCA	Noncore assets
NFC	Non-financial corporations
NSFR	Net stable funding ratio
NIM	Net interest margin
NPE/NPL	Non-performing exposure / loan
NSSMC	National Securities and Stock Market Commission
OECD	Organization for Economic Co-operation and Development
O/N	Overnight (rates)
OPEC	Organization of the Petroleum Exporting Countries
Parliament	Verkhovna Rada of Ukraine (Supreme Council)
PM	Primary (real estate) market
PrivatBank	Public Joint-Stock Company Commercial Bank “PrivatBank”
Regulation No 351	Regulation of the NBU of 30 June 2016 No 351 approving Regulation on credit risk calculation by Ukrainian banks
ROE	Return on equity
SREP	Supervisory Review and Evaluation Process
SSSU	State Statistics Service of Ukraine
STSU	State Treasury Service of Ukraine
T-bills&bonds	Domestic government debt securities
UIRD	Ukrainian Index of Retail Deposit Rates
US	United States of America
WTO	World Trade Organization

th	thousand
mln	million
bn	billion
sq. m	square meters
EUR	euro
UAH	Ukrainian hryvnia
USD	US dollar
USD eq.	US dollar equivalent
pp	percentage points
yoy	year-on-year
qoq	quarter-on-quarter
mom	month-on-month
bp	basis point
r.h.s.	right hand scale
Q	quarter
H	half-year
M	month